INSPQ
INSTITUT NATIONAL
DE SANTÉ PUBLIQUE
DU QUÉBEC

From Tiny Tot to Toddler

2025 | A practical guide for parents from pregnancy to age two

Québec

Using the guide

The content of the guide is not intended as medical advice
The content of the guide is for information purposes only. The information is not necessarily adapted to your specific situation.

This guide is not intended in any way to replace medical advice, diagnosis, or treatment, or a recommendation of preventive or curative treatment. If you are unsure, consult your health professional or Info-Santé (8-1-1). For emergencies, call 9-1-1.

Integrity of the information
The information in this guide is based on the knowledge available at the time of printing. Since knowledge is constantly evolving, it is possible that certain sections of the guide do not reflect the latest changes.

This guide is only intended for parents residing in Québec
The instructions in this guide may not be suitable for situations outside Québec.

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Links to other websites
Several websites are suggested in the guide as additional resources on the subjects discussed. The sites are managed by third parties, and the INSPQ is not responsible for their content.

From Tiny Tot to Toddler

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2025 | A practical guide for parents from pregnancy to age two

Institut national de santé publique Québec

First edition in English: 1988. Editions revised every year.

How to cite this book:

Doré, Nicole; Le Hénaff, Danielle. *From Tiny Tot to Toddler: A practical guide for parents from pregnancy to age two*. Québec, Institut national de santé publique du Québec, 2025. 816 pages.

Legal Deposit – 1st quarter 2025
© Gouvernement du Québec (2025)

Bibliothèque et Archives nationales du Québec
Library and Archives Canada

French version
ISSN: 1711-4128 (printed version)
ISSN: 1911-6012 (PDF)
ISBN: 978-2-550-98929-5 (printed version)
ISBN: 978-2-550-98930-1 (PDF)

English version
ISSN: 1711-411X (printed version)
ISSN: 1911-6004 (PDF)
ISBN: 978-2-550-98927-1 (printed version)
ISBN: 978-2-550-98928-8 (PDF)

This publication is made possible through the financial contribution of the Ministère de la Santé et des Services sociaux.

The guide is given free of charge as soon as pregnancy checkups begin. Depending on the region, the guide will be handed out at your doctor's office, CLSC, test center, birthing center, or ultrasound appointment. For those who plan to adopt, the guide is available at youth centres and certified international adoption agencies.

The guide is for sale for $22.95. You can buy *From Tiny Tot to Toddler* and *Mieux vivre avec notre enfant de la grossesse à deux ans* from Les Publications du Québec, in bookstores, by telephone at 418-643-5150 or 1-800-463-2100 or on their website **publicationsduquebec.gouv.qc.ca**.

Online English and French versions of the *Tiny tot* guide can be consulted or downloaded free of charge on the website of the Institut national de santé publique du Québec at: **inspq.qc.ca/en/tiny-tot**.

Printed on paper made of material from well-managed FSC®-certified forests and from recycled materials.

2025 Edition

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Nicole Doré and Danielle Le Hénaff, authors of the original text, wrote, updated, and developed *Mieux vivre avec son enfant de la naissance à deux ans* from 1977 to 2001.

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Mireille Lewis (C2),
Denis Demelin (C3) and
Jérôme-Nicolas LeBel (C4).

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Photo calibration

Atelier Photosynthèse

Printing

TC Imprimerie Transcontinental

Acknowledgements

The list of people and organizations that make this guide possible gets longer each year. Your individual contributions are vital to this collective work—thank you. Here's a look at everyone who's contributed to *From Tiny Tot to Toddler* over the past 5 years.

Individuals
Stephani Arulthas, Emilie Beaulieu, Pascal Bédard, Isabelle Bilodeau, Caroline Bouchard, Isabelle Boucoiran, Annick Boulais, Mélanie Boulet, Nicholas Brousseau, Guillaume Burigusa, Évelyne Cambron-Goulet, Catherine Caron, Christiane Charette, Elisabeth Codsi, Valérie Cortin, Dominique Cousineau, Gaston De Serres, Réjean Dion, Audrey Dion-Forest, Jean-Philippe Drolet, Mylène Francoeur, Léa Gamache, Anne Gosselin-Brisson, Catherine Gravel, Marie-Hélène Guay, Caroline Huot, Yun Jen, Yolaine Labbé, Caroline Laberge, Jessica Lara-Carrasco, Andréanne Lefort, Julie Maheu, Linda Massé, Manon Méthot, Annie Montreuil, Sébastien Morency, Anne-Sophie Morisset, Lina Perron, Nancy Pilote, Marie-Claude Quintal, Ghislaine Reid, Marie-Claude Roberge, Elizabeth Robinson, Élody Ross-Lévesque, Anne-Marie Rouillier, Claudia Savard, Stéphanie Thibault, Michèle Tremblay, Mylène Trottier, Nathalie Trottier, Gisèle Trudeau, Mathieu Valcke, Louise Valiquette, Isabelle Veilleux, Gäelle Vekemans, Nancy Wassef.

Groups
The regional coordinators in charge of distributing *From Tiny Tot to Toddler* at the Directions de santé publique of the CISSS and the CIUSSS: Thank you for your unconditional support; without you the guide would not make its way into the hands of Québec parents.

Organizations
Professionals from the following organizations contribute significantly to updating the content of the guide: Alima, Health Canada, Info-Santé, Lifesaving Society, Ministère de la Santé et des services sociaux, Ministère du Travail, de l'Emploi et de la Solidarité sociale, Québec Poison Control Centre, Société de l'assurance automobile du Québec.

Parents
Throughout the year, we get feedback from parents who take the time to write to us. Parents reread and comment on our texts and participate in our working groups. We'd like to thank each and every one of them for helping us improve the guide, meet the needs of parents, and stay up to date with their concerns.

Parent-photographers
We also wish to thank all the other parent-photographers whose pictures appear in the guide. Thank you for letting us into your day-to-day life by sending us your colourful pictures. We greatly appreciate your generosity.

Contact us!
If you have a few minutes, tells us what you think of the guide: mieuxvivre@inspq.qc.ca

Your comments are invaluable and help us improve!

Happy reading!

A word from the minister

Dear Parents,

You're reading the product of a longstanding Québec tradition, the *From Tiny Tot to Toddler* guide. It has served as a companion guide for families since 1977, evolving over the decades with changes in society and science. Published by the Institut national de santé publique du Québec (INSPQ) since 2000, it contains everything you need to know to be well prepared to welcome and support your child.

Available both online and in print, *From Tiny Tot to Toddler* walks you step by step through the journey of parenthood: a "profession" you may be entering for the first time. With each new edition, the guide is updated with the latest knowledge on pregnancy, childbirth, and child health from birth to age two.

The Ministère de la Santé et des Services sociaux of Québec commends the INSPQ on their diligent work. This guide reflects our commitment to improving the health of Quebecers. We often say that parenting doesn't come with an instruction manual, but in Québec, parents can count on the *From Tiny Tot to Toddler* guide for support.

We hope you find this guide useful and wish you good luck in this new chapter as a parent!

Lionel Carmant
Minister Responsible for Social Services

Foreword

The arrival of a baby is a delightful and transformative milestone for all parents. Whether it's your first child or not, you'll have questions to deal with, and decisions to make for the well-being of you and your baby.

From Tiny Tot to Toddler has been an invaluable source of information for over 40 years. It's provided free of charge in print and online to all new parents in Québec.

This guide reflects the reality of families like yours. It will help you develop a sense of competence, independence, and self-confidence. It contains clear, accurate information based on science and the experience of healthcare professionals. And since being a parent isn't always easy, you'll also find encouragement, examples, and helpful tips.

It's a privilege for Institut national de santé publique du Québec to produce this essential guide. We hope it will provide you with answers and reassurance as you embark on your new adventure.

Happy reading!

Pierre-Gerlier Forest
President and CEO, Institut national de santé publique du Québec

To support Québec parents, *From Tiny Tot to Toddler: A practical guide for parents from pregnancy to age two* is also offered free of charge to the following people:

- Prenatal workers of the CISSS and the CIUSSS
- Physicians and midwives providing health care to pregnant women and newborns
- Health care workers in community organizations serving young families
- Lactation consultants and volunteers supporting new mothers through breast-feeding support groups

Tips to make your reading easier

Text boxes to attract your attention

You will notice that information is presented in three types of boxes. The purpose of the boxes is to attract your attention to certain messages:

Essential information to remember.

Information to which you should pay special **attention**.

Information to comfort you and boost your **confidence**.

The table of contents to find your way

The Table of contents on page 8 lists the headings of the guide.

The glossary to help you understand

To make the guide easier to read, some definitions are provided as you go along. Words in bold and in colour are defined in the Glossary on page 14. Here is an example as it will appear in the guide:

> Women are born with all the **eggs** they will ever have.

The index to fine tune your search

The index is a great tool for finding information in the guide quickly. Think of a key word (e.g., twins) and look it up in the Index on page 793. There you'll find the page number(s) with the information you're seeking.

GLOSSARY

Acupressure
A method of applying pressure to a specific point on the body to reduce various symptoms.

Airway
Passages through which the air we breathe enters and leaves the body.

Allergic disorder
An allergy-related problem such as a food allergy, asthma, eczema, or allergic rhinitis.

Anemia
Condition that can lead to severe fatigue, often caused by a lack of iron in the blood.

Antibodies
Substances made by the body to fight off disease. Also called immunoglobulins.

Areola
Darker area of the breast around the nipple.

Birth defect
Abnormality existing at birth but that developped during pregnancy.

Contagious disease
An infectious disease that is transmitted from person to person.

Chromosomal abnormalities
Errors in the number or structure of one or more chromosomes. Chromosomes are found in all cells of the body and contain the genes transmitted by parents to their children.

Diaper rash
Skin irritation and redness in the area covered by the baby's diaper.

Ectopic or extra-uterine pregnancy
A pregnancy in which the embryo implants itself and develops outside the uterus (e.g., in a fallopian tube).

GLOSSARY

Egg
Reproductive cell produced by the ovary. When an egg and a sperm fuse, an embryo may form.

Embryo
Name given during the first full 10 weeks of pregnancy to the human being developing in the mother's abdomen.

Esophagus
Muscular tube that carries food from the mouth to the stomach.

Express
Pump or squeeze milk from the mother's breast.

Fertilization
Fusion of a sperm and egg.

Fetus
Developmental stage of a human being in its mother's womb, from 10 weeks of pregnancy until birth.

Genetic abnormalities
Error in the genes. Genes are located on the chromosomes of human cells. They pass along the traits of parents to their children.

Hemorrhage
Heavy bleeding.

Immune system
Organs and mechanisms that allow the body to fight against infections.

Inverted nipple
Nipple that is retracted into the breast.

Labour
Process by which the baby passes from the uterus to the outside world, primarily through contractions of the uterus.

Mastitis
Inflammation of the breast. May also be an infection.

GLOSSARY

Miscarriage
A spontaneous abortion, which can have a variety of causes (e.g., a deformity or disease).

Nutrients
Components of food, including vitamins, minerals, proteins, sugars, and fats.

Neural tube
Part of the embryo that develops into the brain and spinal cord (inside the spinal column).

Overproduction of milk
Milk production that exceeds baby's needs.

Oxytocin
A hormone produced by a gland within the brain. Oxytocin circulates in our blood, causing uterine contractions during childbirth and the expulsion of breast milk.

Perineum
The part of the body between the vagina and the anus.

Pupil
The black centre inside the coloured part of the eye.

Rhesus factor (Rh factor)
One of the characteristics of blood. You are either Rh positive or Rh negative.

Sexually transmitted infection (STI)
Infection caused by a bacteria or virus transmitted through sexual contact.

Sperm
Reproductive cell produced in the testicles. When a sperm and egg fuse, an embryo may form.

Spina bifida
Birth defect of the spinal column.

Sterile
Product that is free of microorganisms and germs.

Sodium
Component of table salt that is also found in most processed foods.

Sudden infant death syndrome
The unexplainable sudden death of an apparently healthy newborn under the age of one.

Thrombophlebitis
Inflammation of a vein associated with clot formation.

Trisomy
Chromosomal abnormality that occurs when a chromosome pair has an extra chromosome. In the case of trisomy 21, there are three chromosomes on the 21st pair instead of two.

Ultrasound
An examination using an ultrasound device that can see the embryo or fetus in the mother's womb.

Uterine rupture
Tearing of the uterine scar from a previous caesarean.

Urinary catheter
A flexible tube that allows urine to drain freely from the bladder. The catheter is inserted into the bladder through the urethra.

Vernix caseosa
A whitish substance coating the skin of a newborn baby.

Weaning
Gradual phasing out of breastfeeding.


Samuelle Simard photographie Lifestyle

The stages of pregnancy


Mélissa Martin

Of all the life-changing events we experience, pregnancy is certainly one of the most remarkable.

Pregnancy brings about a whole series of changes that prepare you to bring a new life—your baby—into the world. For mothers and fathers, it is a gratifying and uniquely human experience full of excitement and promise. It also comes with questions, doubts, and worries.

This section on pregnancy is rooted in the belief that having a baby is a highly personal experience for future parents. It is designed to answer your questions about pregnancy and serve as a companion throughout the weeks and months as you prepare to welcome your new baby. It's also meant to bolster your confidence and help ensure the experience lives up to your hopes and expectations.

Menstrual cycle

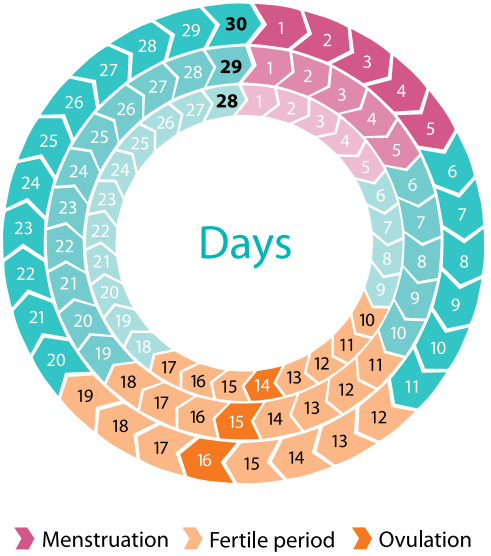


Illustration: Les Publications du Québec

Before pregnancy

Women

Menstrual cycle

Your body prepares for pregnancy during every menstrual cycle.

Menstruation is a stage of the menstrual cycle. Menstrual cycles begin at puberty around the age of 12 and continue until menopause, which typically occurs around age 51.

To determine the length of your menstrual cycle, count the number of days from the beginning of your period to the day before your next period starts. Menstrual cycles can last anywhere from 21 to 35 days, but are usually between 28 and 30 days long.

During a menstrual cycle, your body goes through a number of changes. Many interactions take place between your brain and your pituitary gland, a hormone-secreting organ. These interactions trigger the release of hormones that stimulate ovulation, which in turn prepares your body for **fertilization**.

Ovulation

Women are born with all the **eggs** they will ever have. They have about 400,000 eggs at puberty, and by menopause, all of them are gone.

Ovulation occurs when an ovary releases an egg. Once an egg is released, it is drawn into the fallopian tube. It may then come into contact with **sperm**, at which point fertilization may occur (see Fertilization, page 28).

To estimate when you will ovulate, count backwards 14 days from the end of your menstrual cycle. Women with regular 28-day cycles usually ovulate around the 14th day of their cycle. For women with irregular cycles, however, it is more difficult to predict the day or period of ovulation.

Female reproductive system

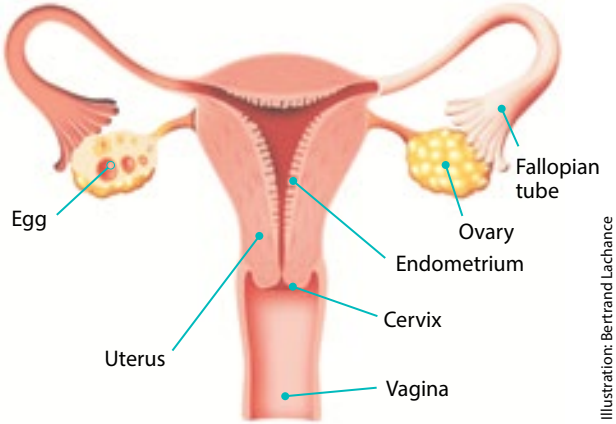


Illustration: Bertrand Lachance

Ovulation period (or fertile period)

Since ovulation does not always occur on the expected day, we use the term ovulation period or fertile period. This is when a woman is most likely to ovulate. If a man and a woman have intercourse during the fertile period, there is a one in four chance (at age 20) and a one in twenty chance (at age 40) that **fertilization** will occur.

An **egg** must be fertilized within 12 hours. If it doesn't come in contact with a **sperm** during this period, it disappears through vaginal discharge. At this point, the glands in the brain will stop producing hormones. This triggers menstruation, and the cycle starts all over again.

Men

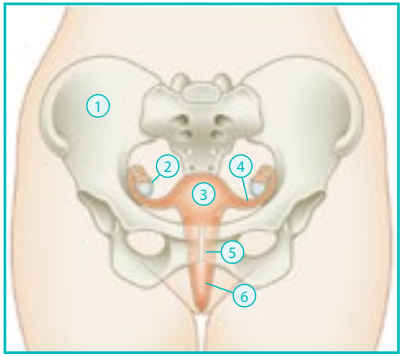
Throughout their lives, men produce **sperm**. Sperm production begins at puberty and continues until death.

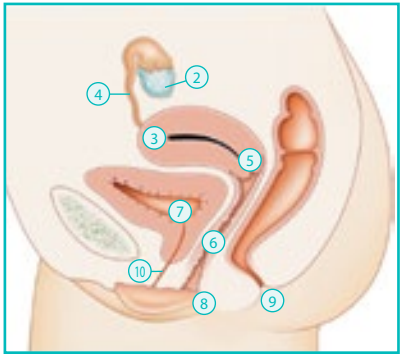
Sperm are produced in the testicles (see Male anatomy, page 27), where they go through a number of stages. It takes about two and a half months before they are ready for **fertilization**. Once they are ready, they are stored in the seminal vesicles.

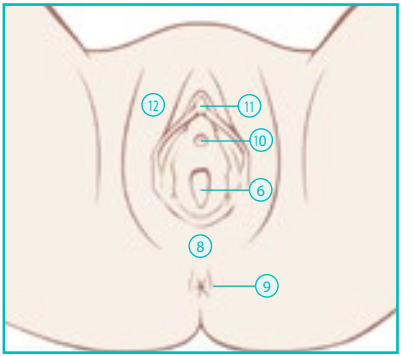
When a man ejaculates, sperm from the seminal vesicles are mixed with fluids from the prostate and other glands of the male reproductive organs. This is known as semen.

The semen from a single ejaculation usually contains between 20 million and 200 million sperm cells. Sperm can live 72 to 120 hours in a woman's genital tract, but only a few seconds outside it.

Female anatomy







① **Pelvis** Bone that supports the organs in the mother's abdomen.

② **Ovary** The two ovaries produce **eggs** and female hormones.

③ **Uterus** Muscular organ the size of a small pear that grows as the pregnancy progresses. This is where the **embryo** develops.

④ **Fallopian tube** The Fallopian tubes connect the uterus and the ovaries. They transport eggs and are necessary for fertilization.

⑤ **Cervix** Bottom part of the uterus connected to the vagina. During menstruation, blood flows from the cervix, which is almost closed. During **labour**, the cervix dilates to let the baby through.

⑥ **Vagina** A roughly 8 cm long passageway between the uterus and the vulva. The vagina is flexible and elastic so it can stretch during intercourse and delivery.

⑦ **Bladder** Organ that holds the urine produced by the kidneys.

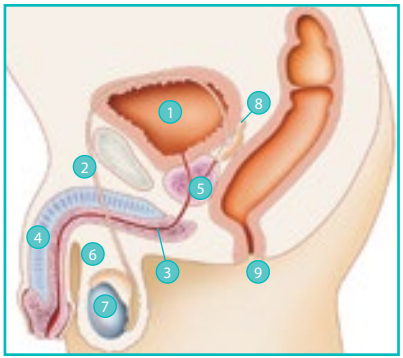
⑧ **Perineum** Viewed from the exterior, the region between the anus and the vulva. The muscles of the perineum form a sort of internal "hammock" that supports the genital organs and bladder.

9 **Anus** Opening through which feces are expelled.

10 **Urethra** Tube that carries urine from the bladder to the outside of the body. It is part of the perineum.

11 **Clitoris** Sensitive, erogenous organ that plays an important role in female sexual pleasure.

12 **Vulva** All external genitalia, including the labia and clitoris.



Illustrations: *The Pregnancy Book*
Adapted by Bertrand Lachance with the permission of the Department of Health, UK

Male anatomy

1 **Bladder** Organ that holds the urine produced by the kidneys.

2 **Vas deferens** Tube that carries sperm from the testicles to the prostate.

3 **Urethra** Tube that carries urine from the bladder and out the penis. It also carries semen from the prostate and out the penis.

4 **Penis** Male genital organ. Its sponge-like tissue swells with blood during erections.

5 **Prostate** Gland that secretes seminal fluid, one of the substances composing semen.

6 **Scrotum** Sac of skin that protects the testicles.

7 **Testicle** The testicles (or testes) are the organs that produce sperm.

8 **Seminal vesicle** Located above the prostate, the seminal vesicles are reservoirs that store sperm that are ready for fertilization.

9 **Anus** Opening through which feces are expelled.

Fertilization

Fertilization occurs when a **sperm** and an **egg** meet. For this to happen, the sperm must cross the outer layer of the egg. The egg and the sperm then fuse to form a single cell.

The fertilized egg starts to develop and slowly descends toward the uterus to form an **embryo**. It will implant itself in the lining of the uterus, which is called the endometrium. Implantation takes place about seven days after ovulation.

Most women take a pregnancy test when they realize their period is late. If the test is positive, it means that fertilization has occurred.

In about one out of every six pregnancies, the embryo will not develop or the baby's heart will stop beating relatively early on. The uterus will then stop growing and expel its contents, ending the pregnancy in **miscarriage** (see Miscarriage, page 160).

Length of pregnancy

The length of a pregnancy is calculated from the first day of a woman's last menstrual period because it's virtually impossible to know the exact moment of **fertilization**.

Health professionals will most likely refer to your pregnancy in terms of weeks. When they say you are "20 weeks pregnant," for example, it means 20 full weeks have gone by since the first day of your last menstrual period. The reason is simple: it is more accurate to talk about weeks than calendar months.

Your baby will be considered at term as of 37 weeks and could be born anytime between 37 and 42 weeks after your last menstrual period. Most babies are born between 39 and 41 weeks.

The 42 weeks of pregnancy (maximum length) are further divided into three trimesters of 14 weeks each. Each trimester corresponds to specific stages in the development of the **fetus** (see Development of the fetus, page 31).

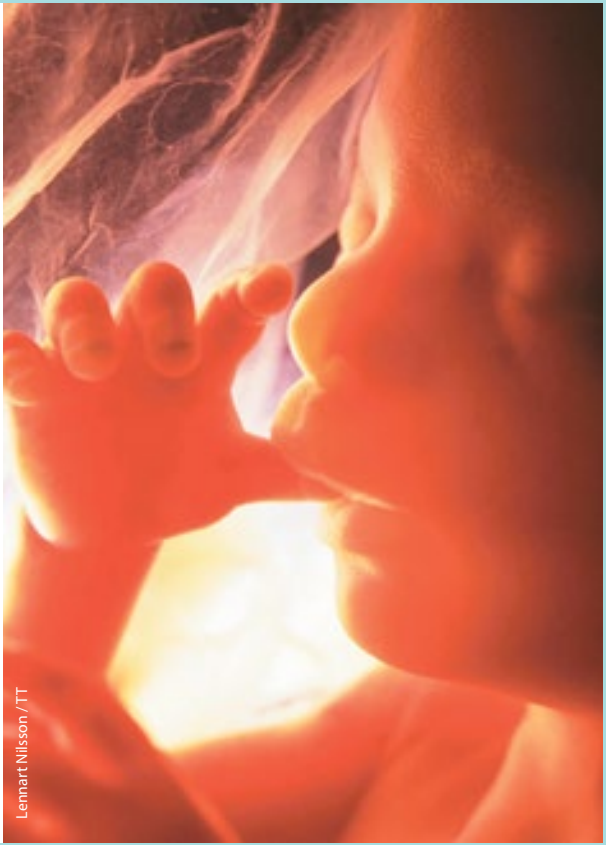
Due date

One of the first things you'll want to know on learning you are pregnant is when the baby is due. When will the big day be?

To estimate your due date, count 280 days, or 40 complete weeks, from the first day of your last period. The expected due date is therefore only an approximate date.

An **ultrasound** (see Ultrasound, page 128) performed before 20 weeks of pregnancy will give you a good idea of the due date, plus or minus 7 to 10 days.

The fetus



Lennart Nilsson / TT

Development of the fetus

Your baby is constantly growing and must go through several stages before he's ready to live outside the uterus. These stages, or key moments, are outlined below. The number of weeks associated with each stage (based on last menstrual period) is only an approximation and may differ from one woman to the next.

First trimester: from conception to 14 weeks

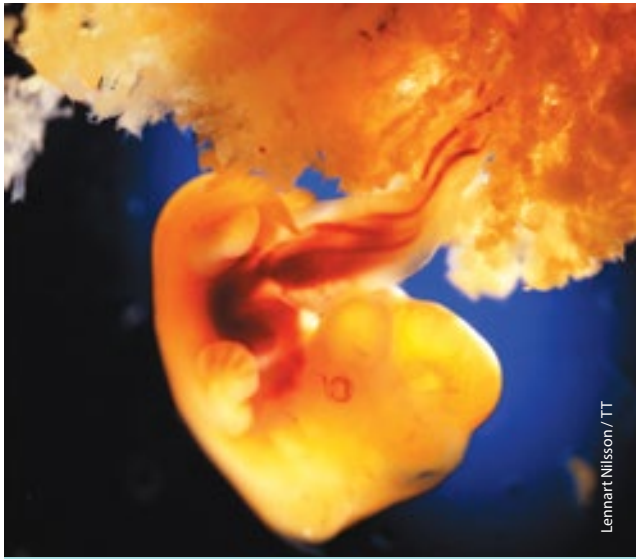
At 5 weeks, the embryo's heart begins to beat, although it cannot yet be heard during a medical exam.

At 6 weeks, the embryo measures 5 mm.

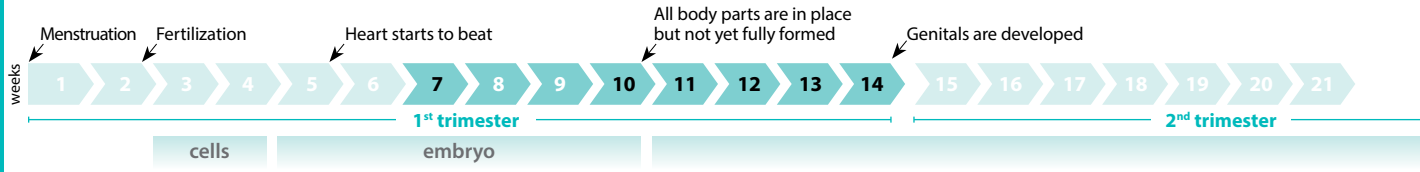
At 7 weeks, the **embryo**'s head is much bigger than the rest of its body. Its arms begin to form as the elbows and hands appear. The fingers are still fused together. The eyes are now quite visible.

At 10 weeks, the embryo already has a human appearance: its eyes, nose, and mouth are recognizable. Its eyelids are closed. The fingers have now separated and the toes are beginning to form. Your baby begins to move his limbs, but you won't feel any movement yet.

He has now progressed from embryo to **fetus**: all the body parts are in place, but are not yet fully formed. They will continue to grow and develop throughout the pregnancy.



Embryo at 40 days (7 weeks after the first day of the last menstrual period).



Fetus at the end of the first trimester.

Between 10 and 14 weeks, the fetus gets bigger and the skeletal bones begin to form.

At 14 weeks, the fetus measures around 8.5 cm. Your baby's genitals, while not yet fully formed, are developed enough to determine their sex. Usually you can find out the sex of your baby between 16 and 18 weeks when an **ultrasound** is performed.

Birth

22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 weeks

3rd trimester

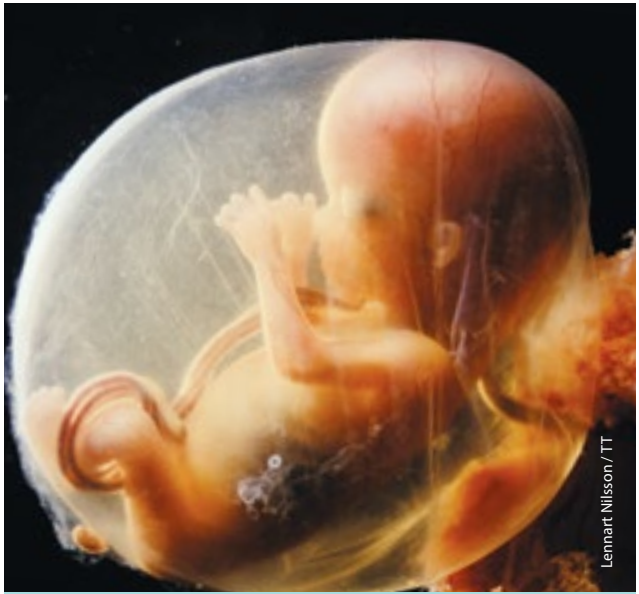
fetus

Second trimester: 15 to 28 weeks

At 16 weeks, the baby's head is still disproportionately large compared to the rest of his body, but his trunk, arms, and legs are beginning to lengthen.

Around 20 weeks, your uterus is level with your belly button. Your baby's movements are now strong enough that you can feel them. Some women feel these movements a little earlier or a little later in their pregnancy. Your baby is coated in a whitish cream known as ***vernix caseosa***, which protects his skin.

At 22 weeks, your baby measures around 19 cm. His hair begins to grow, and his body is covered in a fine downy fuzz known as lanugo.



Fetus at the beginning of the second trimester.

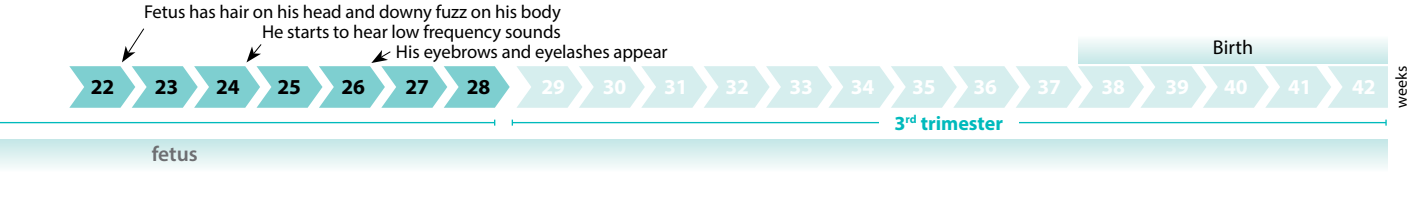
Fetus at the end of the second trimester.

Between 23 and 27 weeks, your baby puts on weight and his head becomes better proportioned to his body.

At 24 weeks, he can hear low frequency sounds from outside the uterus.

Around 26 weeks, his eyebrows and eyelashes are visible.

Around 28 weeks, your baby's eyes begin to open. They will become sensitive to light at around 32 weeks.

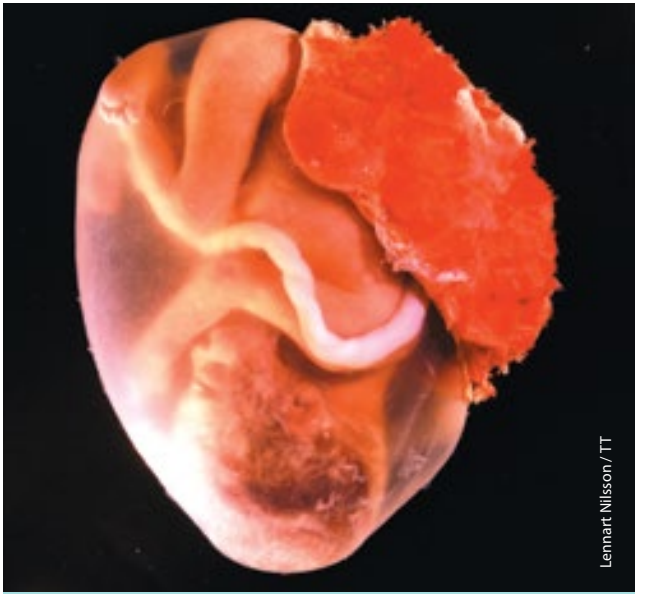


Third trimester: from 29 weeks to birth

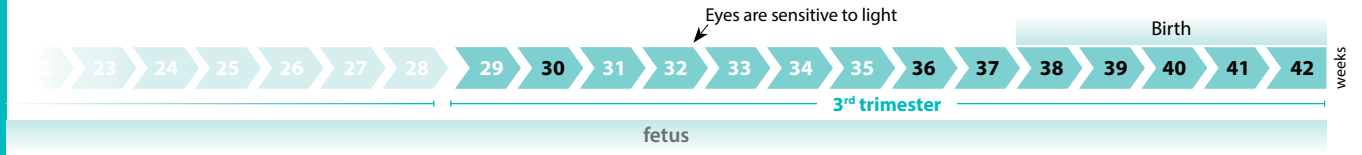
At 30 weeks, your baby measures around 28 cm.

At 36 weeks, your baby's skin is pinkish, and the downy hair on his body begins to disappear, although it can remain until after the birth. Your baby is bigger because of the fat reserves he is building up.

Between 37 and 41 weeks, he's ready for the big day!



Fetus at the end of the third trimester.



Fetus's environment

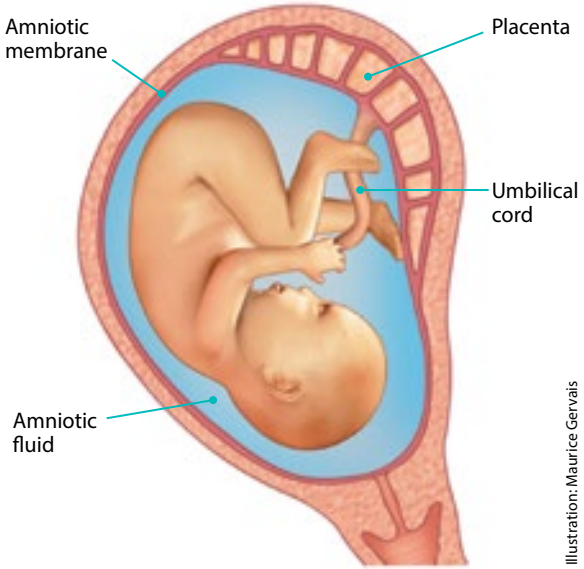


Illustration: Maurice Gervais

Amniotic fluid

The amniotic fluid surrounding your baby is essential to his growth and development. Among other things, it:

- Keeps your baby at the right temperature.
- Protects him against shocks from outside the womb.
- Provides space for him to move and develop his muscles and lungs.

The fluid is contained in a kind of pouch that surrounds the baby (amniotic sac or "membrane"). The membrane actually consists of two layers, which is why you will often hear it referred to as "the membranes."

Just before or during **labour**, the sac will break, causing the amniotic fluid to leak out. This is what's known as "breaking the water."

Placenta and umbilical cord

The placenta starts to grow as soon as the fertilized **egg** embeds itself in the uterus. It is connected to the baby by the umbilical cord.

At four weeks of pregnancy, blood begins to flow between you and the **embryo**.

The umbilical cord and placenta carry the oxygen and **nutrients** your baby needs to grow. They also help get rid of your baby's waste by returning it to your body, which then eliminates it.

The placenta secretes into the mother's blood the hormones required to maintain the pregnancy and help the **fetus** grow. It also acts as a barrier between the mother's blood and the blood of the fetus.

But the placenta does not filter everything. Certain substances that are harmful to the fetus can get through, including alcohol, certain drugs, and certain medications.


Liane Comeau

Everyday life during pregnancy

Physical changes

Pregnancy is a period of rapid changes in your body. Most of these changes are temporary and will gradually disappear after your baby is born. Some of them are pleasant, while others can cause a certain amount of discomfort.

Heart, blood vessels and lungs

During pregnancy, your heart rate can increase by up to 10 beats per minute. Your heart shifts slightly within your rib cage as the baby grows and your uterus expands. The volume of your blood increases to meet the needs of the **fetus**.

Pregnancy also brings about changes that can affect your breathing. Many women feel a little short of breath when they're pregnant. Shortness of breath comes on gradually and remains mild. It can start as early as the first months of pregnancy.

Hair

Head and body hair growth can change during pregnancy. Some women may experience increased hair growth on their bodies and have a thicker, fuller head of hair. A few months after the birth, it is not uncommon to experience more hair loss than usual.

Skin

Changes in hormone levels during pregnancy stimulate the skin and scalp, causing a noticeable effect in some women. Changes to your skin and scalp shouldn't be cause for concern, as most will diminish or disappear altogether in the months following the birth.

Hyperpigmentation

Most pregnant women will find that their skin darkens. This condition is known as hyperpigmentation. Hyperpigmentation tends to be localized, usually appearing as a thin dark line between the belly button and the pubis. It can also occur as a darkening of the **perineum**, anus, neck, armpits, the **areola** on your breasts, or the skin around the belly button.

The pregnancy mask some women get is a result of hyperpigmentation. It is characterized by the appearance of brown patches on the face.

Hyperpigmentation and pregnancy mask can be aggravated by sun exposure. To protect yourself, you can use sunscreen (see Sunscreen, page 58).

Hyperpigmentation and pregnancy mask clear up after the birth of the baby and generally disappear altogether within a year.

Stretch marks

Stretch marks can also develop during the second half of pregnancy. They are mainly visible on the tummy, breasts, and thighs, but also in the armpits or on the lower back, buttocks, and arms. Stretch marks form when a deeper layer of skin stretches as the body changes. They are initially a pinkish or purple colour, and gradually become less apparent over time.

There is no proven method for effectively preventing or treating stretch marks. The massaging motion used to apply moisturizing cream may help reduce them somewhat, although the ingredients of the cream themselves appear to have little effect.

Other changes

Some women develop acne, which usually disappears after the pregnancy.

Hormonal stimulation of the skin can result in the appearance of acrochordons (skin tags)—tiny benign skin growths that are most common in skin folds such as around the neck and armpits.

Some women may develop angiomas between the second and fifth months of pregnancy. Angiomas are little red patches on the skin formed by blood vessels. Most angiomas will disappear on their own within three months of giving birth.

Bladder and kidneys

Bladder function changes during pregnancy. The kidneys increase in volume and filter more liquid. This can trigger a more frequent or urgent need to urinate. Later in pregnancy, the uterus expands as the baby grows, putting pressure on the bladder. This increases the urge even more.

You will probably feel the need to urinate more often at night, too. During the day, your body tends to accumulate water in your tissues. When you go to bed, these water reserves are sent to your kidneys and you feel the urge to go—again!

The perineum and pelvic floor

During pregnancy, numerous changes (e.g., hormonal changes, weight gain) impact the perineum and pelvic floor. This can increase the risk of urine leakage.

Exercises to keep the pelvic floor in shape can help reduce the chance of leakage. In addition, certain pelvic floor muscle stretches can reduce the risk of tears and pain after childbirth. Talk to your prenatal care provider about it.

Reducing caffeine intake, staying well hydrated, exercising, and eating a high-fibre diet are all lifestyle habits that can help reduce the risk of urine leakage.

Stomach and intestines

Digestion often slows down during pregnancy due to hormonal changes. This can cause heartburn (see Heartburn and acid reflux, page 143) and constipation (see Constipation, page 144).

Breasts

Your breasts may become more sensitive and increase in size. The blue veins that crisscross their surface may become more visible.

Your nipples and **areolas** prepare for breastfeeding by growing slightly. They may also become darker. Little bumps form on the areolas. These bumps are glands. They produce oil that will help keep your skin moisturized and protected during breastfeeding.

Beginning at 16 weeks, the breasts start producing colostrum. Colostrum is the first milk produced for a newborn baby. Some women may leak colostrum during pregnancy. This is completely normal.

Uterus

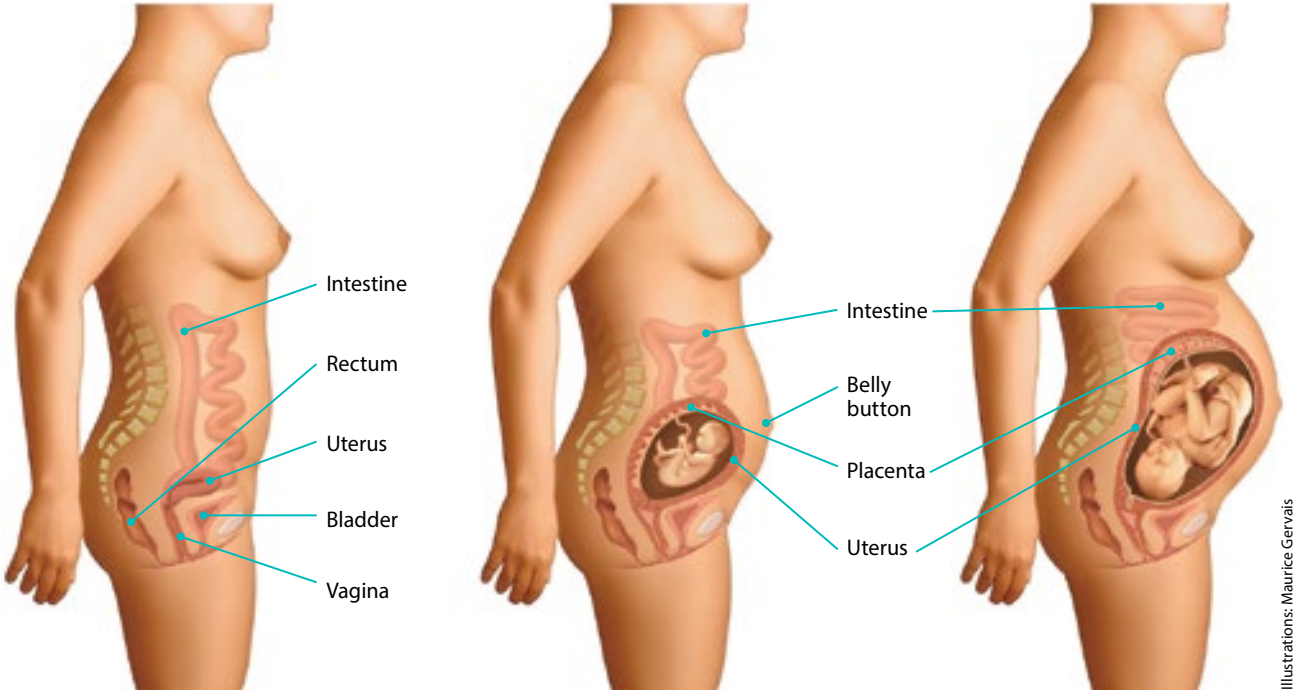
Before pregnancy, your uterus is the size of a small pear. As your pregnancy advances, it expands to meet the needs of the **fetus** and changes shape and position in your abdomen.

The increasing weight of the uterus moves your centre of gravity further forward. This can cause your posture to change. That's why some women walk differently than they did before becoming pregnant.

Vaginal discharge

Women often have more vaginal discharge during pregnancy due to hormonal changes. The discharge is usually whitish in colour, slick, and odorless.

Growth of the baby in the uterus



Before pregnancy

Around 20 weeks

Around 32 weeks

Illustrations: Maurice Gervais

Ligaments and joints

Pregnancy hormones tend to make the ligaments supporting your joints loosen up gradually, especially in the pelvic area. For some women, this can cause pain during physical activity, or even while resting.

Fat reserves

Women accumulate fat reserves throughout pregnancy, especially in the tummy, back and thighs. These reserves store energy and are necessary to ensure that the pregnancy and breastfeeding go well.

Weight gain

Women gain weight during pregnancy because their baby is growing and their bodies are changing.

The weight gain corresponds to the weight of the growing baby, but also the weight of the uterus, the placenta, and the amniotic fluid. The breasts, maternal fat reserves, blood, and extravascular fluids also contribute to weight gain (see Distribution of weight gain during pregnancy, page 47).

Weight gain during pregnancy is normal and allows you to lead a healthy pregnancy.

Adequate weight gain helps you lead a healthy pregnancy, but it's not the only factor. A healthy diet (see Eating well, page 77), and regular physical activity (see Physical activities, page 60) will also have a positive effect on you and your baby's health.

Distribution of weight gain during pregnancy

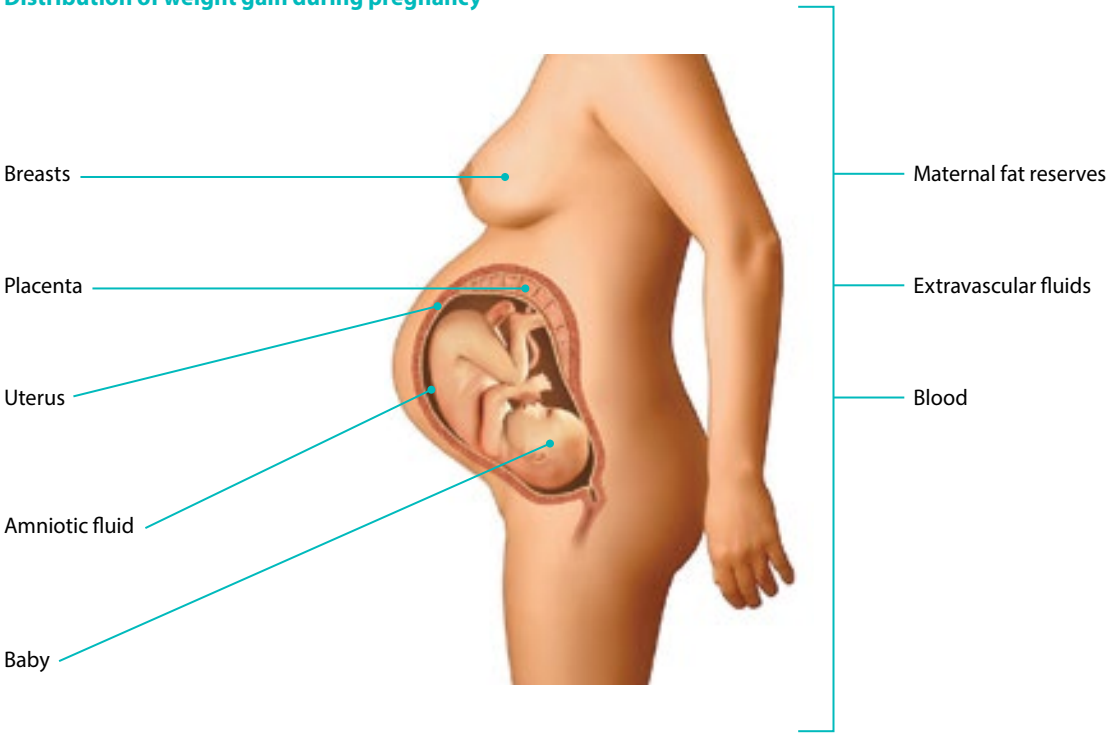


Illustration: Maurice Gervais

Changes in weight during pregnancy

You will put on weight gradually.

At the beginning of pregnancy, your appetite may vary depending on whether you have morning sickness (see Nausea and vomiting, page 141) or pregnancy cravings (see Appetite, cravings, and aversions, page 80). Some women gain more weight; others lose weight. Your weight will adjust as the months pass.

By the end of the first trimester, you can expect to have gained between 500 g and 2 kg (1 to 4.5 lb). Most weight gain occurs during the second and third trimesters, as your baby starts to grow faster. During these two trimesters, you can expect to gain between 225 and 500g (½ to 1 lb) per week, depending on your pre-pregnancy weight.

Weight gain can vary greatly from one woman—and one pregnancy—to another.

There's no need to weigh yourself at home. Your prenatal care provider will monitor your weight on a regular basis. If you're worried about your weight gain, don't hesitate to let your care provider know.

Women carrying more than one baby (e.g., twins, triplets) will gain more weight. If this is the case for you, your prenatal care provider will take this into account.

Living with the changes

Every woman experiences pregnancy differently, but the transformations affecting your body can have an impact on the way you see yourself.

Some women are comfortable with the physical changes. Like their growing belly, they may see them as signs of the baby developing inside of them and the future addition to the family.

Other women find it harder to accept their changing bodies and new image. The day-to-day symptoms and discomforts of pregnancy can make this even more difficult.

If you're experiencing discomfort or dissatisfaction, don't hesitate to express your feelings or talk it over with someone you trust.

Pregnancy transforms women's bodies. Give yourself time to adapt to the changes. They're proof of your body's amazing ability to give life!

Emotional changes

For the pregnant woman

Along with the physical changes, pregnancy can also trigger emotional, psychological, and social changes. Preparing for motherhood and the arrival of a baby can give rise to numerous questions and cause stress for some women. Take the time you need to adapt to these new realities (see Being a mother, page 738).

For many women, the changes associated with pregnancy can give rise to what may seem like conflicting emotions. For example, you may find yourself swinging between joy, worry, denial, excitement, and even sadness. The important thing is to acknowledge your emotions rather than fight them. Let your emotions come and let yourself feel them.

Talking about your emotions with those close to you can do you good and help you get the support you need.

You can also talk to other pregnant women or those who have recently given birth. This can help you realize that you are not alone in experiencing some of the changes and emotions you are going through. Most regions have places where pregnant moms-to-be can meet (see Prenatal activities, page 123).

You may also notice that you don't share the same emotions or concerns as others. Remember, every woman—and every pregnancy—is unique.

To adapt to these changes, some women prefer doing activities by themselves, such as meditating or walking. Try to find what is most helpful or does you the most good.

During pregnancy, it's important to find ways to support your emotional well-being. The online tool *You, Me, Baby* provides various strategies to help you take care of yourself. Visit toimoibebe.ca/en.

Pregnancy can be a very emotional time. Don't hesitate to share what you're feeling with people you trust. If you need more support, talk to your prenatal care provider.

During pregnancy, women may attract more attention. Family, friends, and even strangers will often make comments, sharing remarks on your weight or appearance or offering all sorts of advice.

Some women are comfortable with and appreciate the extra attention. Others may feel pressured and prefer to avoid the comments. If you feel this way, don't hesitate to say so and set your limits. You can always choose not to respond to questions and comments about your pregnancy.

Some women experience the changes and emotions of pregnancy more intensely and may be affected by depression during this period. About one in ten women will experience depression during pregnancy.

If you find yourself feeling sad or irritable most days or lose interest and enthusiasm for your daily activities over more than two weeks, or if you or your loved ones are worried, talk to your prenatal care provider.

For the future father or partner

Future fathers and partners also face their share of changes during a pregnancy. Some wonder if they will be able to live up to expectations. Others have questions about their new family situation or worry they won't agree with their partner about the level of involvement each will have with the child.

The simple fact of knowing that your partner is carrying a child may not be enough to make the pregnancy tangible for you. Attending prenatal checkups and **ultrasound** appointments, listening to the baby's heartbeat, and feeling his first movements are events that can help you start building a relationship with your baby.

Your relationship will become more real if you talk to and touch your baby through his mother's belly. Even so, some partners only become truly conscious of their new reality when the baby is born.

If you know other new or expectant fathers or parents, don't hesitate to ask them about their experiences. These conversations can provide answers and help you embrace your new role. Participating in prenatal sessions can also help make you more confident in your abilities.

For more information, see the section Being a father, page 730.

For the couple

Going from a two-person to a three-person relationship or expanding your family brings its share of changes and adjustments. You and your partner both have concerns but they won't necessarily be the same and may not come at the same time.

Your relationship as a couple is important because it's the foundation of your family to be.

You may wonder how your partner will react if you talk about your fears or share your doubts. Regardless of what you're feeling, it's important to communicate. Communicating allows you both to express your emotions and points of view so you can stay united on the path to parenthood. Your relationship as a couple is important as it forms the basis of your family-to-be.

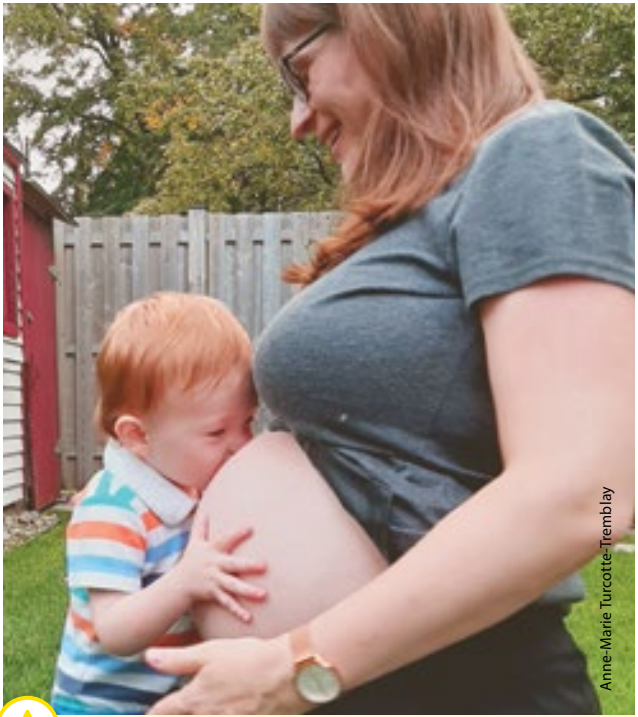
For the family

If you already have children, you may have the impression you are neglecting the older ones. Fatigue and the discomforts of pregnancy may change the way you look after them. You may feel guilty or wonder how you'll be able to love all your children and give each one the attention he or she deserves.

For your partner, family and friends, your pregnancy can be a special opportunity to build stronger ties with your older children.

Your other children, regardless of their age, may feel jealous or even angry at the idea of welcoming a new member into the family. They may be worried about where they will fit in during the pregnancy and after the birth of their brother or sister.

Reassure them and help them accept the baby on the way by talking to them about the upcoming birth. You can get them actively involved in preparations for baby's arrival—by helping decorate the baby's room or drawing baby a picture, for example. It's a good idea to tell them that you still love them and demonstrate it by showing your affection.



Have your children touch your belly when the baby is moving.

Kathy Poulliot, studio Lollipop photo

Sexual relations can continue throughout pregnancy without any problem, as long as you respect each other's needs, limits, and comfort zone.

Sexuality

Pregnancy can have an impact on an individual or couple's sex life. Sexual desire and the frequency of sexual relations may increase, decrease, or vary during pregnancy. The changes in the woman's body or the new perception you have of yourself and your partner as parents rather than lovers can create feelings that affect sexual desire.

Various factors, including medical contraindications, discomfort, personal limits, a greater desire for simple tenderness, or a growing belly, may lead you to set aside certain sexual practices or try new ones.

Pleasure, whether physical or psychological, may be experienced differently by each partner during pregnancy. For example, you and your partner may not have the same ability to reach orgasm, the same degree of sensitivity, or the same feeling of closeness.

You may have some concerns about sexual activity while pregnant, but you can have sex without worry: neither vaginal penetration nor orgasm cause **miscarriage** and they will not lead to premature labour or hurt your baby. The baby is well protected inside the amniotic sac in the uterus.

In some situations, however, you may be advised not to have sexual intercourse; for example, if you have bleeding, abdominal pain, or problems with the placenta, or if there is concern about premature **labour** or a rupture of the amniotic membranes. Your prenatal care provider will tell you if this is the case and advise you about what precautions you should take.

During pregnancy, it is important to protect yourself against **sexually transmitted infections (STIs)**. Use a condom if you have sexual relations where there is a risk of contracting an STI. This will prevent the infection from being transmitted and avoid the complications it can cause you and your baby.

Personal care

Cosmetics and creams

Most cosmetics (creams, makeup) can be used during pregnancy. Face cream and hand and body creams that do not contain any medicinal ingredients can be used safely. If you use a medicated cream, your doctor or pharmacist can check to see if you can continue using it while pregnant.

Hair products and treatments

Hair products and treatments including dyes, colouring shampoos, highlights, and perms are not dangerous to pregnant women or their **fetus**. However, if you use hair products as part of your work, discuss the matter with your health professional (see Health and safety at work, page 72).

Sunscreen

You are advised to use sunscreen when you go out in the sun. This is especially important during pregnancy because the sun can increase hyperpigmentation and pregnancy mask (see Hyperpigmentation, page 41). Use sunscreen with a sun protection factor (SPF) of at least 30 that protects against both UVA and UVB rays. Be especially careful to protect your face.

Insect repellent

If you are unable to avoid situations where you will be exposed to insects and you are obliged to use insect repellent, it is best to use one that contains DEET, icaridin, or soybean oil.

DEET- and icaridin-based products protect against both mosquitos and ticks, but soybean oil–based products do not protect against ticks.

If you are pregnant, do not use products containing more than 30% DEET, 20% icaridin, or 2% soybean oil. Be sure to read the label to know how long the protection will last. Reapply only as needed.

A few precautions
There is no scientific proof that the use of these insect repellents by pregnant women presents a risk to the health of the baby they are carrying. But it is important to apply the product to exposed skin only and to wash off any excess.

To limit your exposure to these products, you can apply them to your clothes rather than directly onto your skin. Wearing long pants and light colours is another way to help protect against insect bites.

The use of citronella oil or lavender oil–based products during pregnancy is not recommended. Their effect is short-term so you have to reapply often, thereby exposing yourself to the product in large amounts.

Laser hair removal and electrolysis

There have been no scientific studies done on the risk of electrolysis and laser hair removal for pregnant women and their unborn babies. As a precaution, it is recommended that you avoid these hair removal methods until after you give birth.

Tanning salons

Even though ultraviolet rays cannot reach the **fetus**, tanning salons are not recommended for pregnant women. The extreme heat you are exposed to during tanning sessions can significantly increase body temperature and harm your baby. Many tanning salons require pregnant customers to provide written authorization from a health professional.


Marie-Hélène Giguère

Physical activity is good for your pregnancy. If you're not used to being active in your everyday life, start slowly and gradually add more.

Physical activities

Being physically active during pregnancy is good for your physical and mental well-being. Women who are active during pregnancy cope better with the physical changes of pregnancy, have more energy, and are less short of breath.

Practicing regular and varied physical activities throughout pregnancy is beneficial and safe. It prevents and relieves constipation, eases back pain (see Discomforts of pregnancy, page 139), and prevents certain pregnancy complications, such as gestational diabetes (see Gestational diabetes, page 164). Better physical fitness may also help you recover more easily after giving birth.

Being active day to day

Physical activity, even in small quantities, is good for your pregnancy! If you're not used to being active in your everyday life, start slowly and gradually add more. Getting around on foot, going for walks, and playing with your kids are some of the activities you can work into your daily routine.

Pregnant women can aim for a total of 150 minutes of moderately intense physical activities per week, spread over several days. Moderate intensity means you can talk while exercising, but you can't sing.

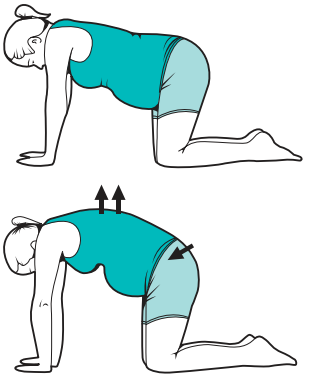
Choice of activities

Choose your activities based on your fitness level and what you feel like doing. You can continue many of the activities you enjoyed before becoming pregnant. However, you may have to adapt some of them depending on your stage of pregnancy. For example, you can reduce the intensity, or change certain movements.

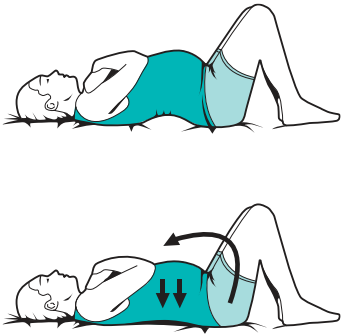
Sports like power walking, swimming, aquafitness, stationary biking, and snowshoeing are examples of activities you can do. You can also add strength and mobility exercises (see Examples of mobility exercises, page 62), yoga, and gentle stretching to your daily routine.

Examples of mobility exercises

Round back stretch



Pelvic tilts



Illustrations: Luz Design + Communications

Fatigue and some discomforts of pregnancy may prevent you from being as active as you like, especially at the beginning and end of your pregnancy. Listen to your body, exercise less intensely, or get some rest, then resume physical activity when it's comfortable for you.

A few precautions

Don't worry—exercise doesn't increase the risk of **miscarriage** or of problems for your baby. Your prenatal care provider will tell you if your health situation prevents you from doing physical activities.

However, scuba diving, sports and activities that can expose you to falls, physical contact, impacts, or injury are not recommended during pregnancy. It is also best to avoid sit-ups and other similar movements, as well as activities in hot, humid environments or at high altitudes (> 2,500 m).

Listen to your body and respect your limits.

If you feel discomfort during physical activity such as shortness of breath, urinary leakage from effort, or a sensation of heaviness in the vagina, don't hesitate to change activities or ease off on intensity. You can also ask your prenatal care provider for advice in these situations, or if you don't feel capable of participating in physical activity.

Good to know...

Exercise raises your body temperature and makes you lose water by sweating. It's important to hydrate properly before and during physical activity (see Drinks, page 97).

Women athletes who wish to continue training intensively during pregnancy should do so under the supervision of a physician.

Tobacco and electronic cigarette

Tobacco

Pregnancy is a good time to quit smoking. The dangers of tobacco for the **fetus**, baby, and mother are real. The more cigarettes smoked, the greater the risks for the baby, but there's no safe level of cigarette use during pregnancy.

Pregnant women are advised not to smoke cigarettes or expose themselves to second-hand smoke (from other smokers).

During your pregnancy, your prenatal care provider will ask you some questions about whether you smoke, drink alcohol, or use drugs. You may feel guilty or uncomfortable or worry about being judged if you use any of these products. Rest assured, however, that the purpose of these questions is to give you an opportunity to get the information you need, talk about your concerns, receive prenatal care that takes your situation into account, and seek help if you want to quit.

Smoking harms the development of the fetus and can impact the pregnancy and the period after the birth in the following ways:

- It increases the risk of placental abruption (detachment of the placenta), premature rupture of the amniotic sac, and premature birth.
- It can slow fetal growth and result in lower birth weight.
- It increases the risk of having a stillborn baby or a baby who dies in the days following birth.
- It also increases the risk of **sudden infant death syndrome**.

If you have friends and family who smoke, ask them to smoke outdoors so that you and your baby won't be exposed to tobacco smoke.

It's never too late to quit smoking. Your baby will benefit, regardless of when during your pregnancy you actually quit.

For most smokers, smoking is an addiction that can be hard to kick. Reducing the number of cigarettes can be a first step before quitting smoking altogether. Talk to your health professional, he can help.

A telephone helpline, website, and numerous quit-smoking centres offer their services free of charge to the public. To access the helpline service and find the centre nearest you:

iQuitnow
1-866-527-7383
tobaccofreequebec.ca/iquitnow

Electronic cigarette

The use of electronic cigarettes (aka e-cigarettes, vapes, or vaping products) during pregnancy is not recommended, as very few studies have been conducted to assess their effects on pregnant women and the fetus.

For pregnant women who want to quit tobacco cigarettes, there are effective options that are safer than electronic cigarettes. Don't hesitate to talk to a health professional.

Alcohol

Pregnant women are advised not to drink alcohol throughout their pregnancy.

Pregnant women are advised not to drink alcohol during their pregnancy. Even a small amount of alcohol can have adverse effects. And the more alcohol consumed, the greater the potential harm to the baby. Binge drinking and regular consumption of alcohol are especially harmful.

The effect of alcohol on the baby is the same, regardless of the type of drink—beer, wine, or spirits.

Alcohol can have numerous harmful effects during pregnancy: it can result in miscarriage and cause hypertension (see High blood pressure (hypertension) during pregnancy, page 164) and placental abnormalities.

Alcohol can also negatively affect organ development in the fetus and cause birth defects and health problems. The brain is the organ most sensitive to fetal alcohol exposure. Alcohol can cause damage to the baby's brain, leading to learning and behavioural disorders. These disorders can have a significant impact throughout a child's life. Since the brain develops throughout pregnancy, it is recommended not to drink alcohol, regardless of the trimester.

The placenta does not filter alcohol: it lets alcohol through to the baby.

If you do drink alcohol while pregnant or did so before you knew you were pregnant, don't hesitate to talk to your health professional.

A few tips
Explain to your partner, family and friends that it's important for you to not drink alcohol. This will help them support you better.

Use your pregnancy as an opportunity to try out non-alcoholic drinks and mocktails:

- Sparkling water flavoured with sliced fruit or cucumber, fresh herbs, syrup (e.g., grenadine, ginger, grapefruit), or juice
- Homemade iced tea or chilled fruit infusions
- Virgin (alcohol-free) versions of your favourite cocktails (mocktails)

Most bars and restaurants offer a selection of mocktails. Ask your server.

For more information on the risks of using alcohol during pregnancy and a list of resources, visit the FASD – Alcohol-Free Pregnancy website at fasd-alcoholfreepregnancy.ca.

Take advantage of your pregnancy to try different non-alcoholic drinks and cocktails.

Cannabis and other drugs

Cannabis

Pregnant women are advised not to use cannabis or expose themselves to second-hand smoke.

Cannabis can interfere with the growth of the **fetus**, which can result in lower birth weight. It may also affect brain development in the baby, leading to problems later during childhood and adolescence.

Cannabis affects the baby regardless of how it is used: smoked, vaped, eaten, or consumed in some other form.

Even though cannabis may relieve nausea in some patients, it is not a safe solution for pregnant women. You will find advice on relieving pregnancy nausea in the table Nausea and vomiting, page 141.

It isn't always easy to stop using. Ask for advice or help from a health professional.

Other drugs

Pregnant women are advised not to use any drugs.

The effects of drugs on an unborn baby depend on a number of factors: the type of drugs used, the amount consumed, their potency, and the moment and way the drugs are taken.

What's more, there is no way of knowing the exact composition of drugs sold on the black market. They are sometimes cut with other substances that can increase the risks associated with their use.

Cocaine, for example, can cause bleeding or placental detachment in pregnant women, which can, in turn, lead to the death of the fetus or premature birth. Babies whose mothers took drugs during pregnancy may develop drug withdrawal symptoms at birth.

If you have questions or concerns about your use of cannabis or other drugs or you need help to quit, talk to your health professional or contact:

Drugs, Help and Referral
514-527-2626
1-800-265-2626
aidedrogue.ca/en

Household products

Cleaning products

Pregnant women can safely use common household cleaning products like dishwasher detergent, laundry detergent, window cleaner, and all-purpose cleaning products.

Corrosive products such as bleach and oven cleaners can irritate (and even burn) the respiratory tract, but do not harm your baby if inhaled in low concentrations.

Heavy-duty cleaning products and air fresheners that contain solvents release toxic substances. As a precaution, you should only use such products when absolutely necessary.

It is important to always read and follow product instructions.

Paint and paint remover

Most interior paints are latex based, which means they are thinned with water. Latex paints are considered safe during pregnancy if you are only exposed to them on an occasional basis.

Avoid using oil-based paints as they contain solvents that are harmful to the **fetus**. It is unlikely, however, that you will harm your baby by spending a short period of time (up to a few hours) in a room that has been freshly painted, especially if the room has been well ventilated.

Avoid stripping paint using a sander or paint remover. You could expose yourself to lead contained in old paint or to the toxic chemical products contained in paint remover.

Cats

Got a cat at home? That's not a problem, except that your four-legged friend could be carrying the toxoplasma parasite. Cats can contract this parasite by eating contaminated meat like mice or uncooked meat. The parasite then ends up in the cat's feces.

To reduce the risk of being infected while pregnant, have someone else clean the cat's litter box. If no one else is available to clean it, wear plastic gloves and wash them after use before removing them. Wash your hands thoroughly after taking off the gloves.

You can also reduce the risk of transmission if the litter box is cleaned at least once a day, since parasites present in cat feces take 1 to 5 days before becoming infectious.

Keep pets away when preparing food. Don't let your cat climb up on kitchen counters or the dining table. Other precautions are listed in Preventing food-borne infections, page 104.

Gardening

Cats and other animals may have buried their feces in your garden. Keep animals out of your garden. To avoid contact with the toxoplasma parasite or other germs, wear gloves when gardening and when handling soil and sand. Wash your hands well after gardening and thoroughly wash all vegetables and fruit that may have been in contact with soil. Other precautions are listed in Preventing food-borne infections, page 104.

Health and safety at work

If you are pregnant or breastfeeding and your working conditions are potentially dangerous to your health or that of your baby, or if you simply have concerns about this matter, discuss it with your prenatal care provider. Depending on your work situation, certain measures may be available.

For example, most workers in Québec are eligible for the *For a Safe Maternity Experience (PMSD)* program from Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST). An occupational health team in your area will assess your situation and submit their findings to your prenatal care provider. CNESST will then determine whether you are eligible for the program. If so, your employer may have to adapt your position or working conditions, or you may be reassigned or removed you from the workplace with financial compensation.

Workers employed by companies under federal jurisdiction have slightly different provisions that may be included in their employment contract. In such cases, the rules of the *Canada Labour Code* apply. You can ask your employer or union for more information.

For information about the *For a Safe Maternity Experience* program, visit cnesst.gouv.qc.ca/en/life-events/i-am-expecting-child.

For information about the *Canada Labour Code*, visit canada.ca/en/services/jobs/workplace/federally-regulated-industries/canada-labour-code-parts-overview.html.

Travel and trips

Car safety

The *Highway Safety Code* stipulates that all occupants of a vehicle must wear a seat belt.

A properly-worn seat belt can prevent injury in the event of an accident. It protects the mom-to-be and is the best protection for the **fetus**.

Air travel

Pregnant women can travel by air. There are no international regulations preventing them from being on board a plane. However, each airline has its own rules, so it's a good idea to check with the airline you wish to fly with before buying your ticket.

You must wear your seat belt throughout your pregnancy. The lap belt should be worn snug around your hips, below your belly.

Bring a signed note from your health professional with you to the airport indicating your due date and a brief overview of your health and pregnancy status, as the airline may require you to present it.

Overseas travel

Before planning a trip abroad, you should talk to your prenatal care provider about your destination, how long you plan to stay, and any vaccines that may be required. Your prenatal care can be adjusted as needed.

Your health professional may also refer you to a travel health specialist.

For more information on safe travel and destination specific advice visit: travel.gc.ca/travelling/advisories.

Before planning a trip abroad, you should talk to your prenatal care provider.

Zika

Before traveling abroad, get information on the risk of infection by the Zika virus. It is recommended for pregnant women to postpone travel to Zika-affected areas.

The Zika virus is transmitted through bites from infected mosquitoes. It can also be transmitted between sexual partners via the sperm or vaginal fluid of an infected individual. Most people who are infected don't realize it because they don't have any symptoms.

Zika infection during pregnancy poses a serious threat to the baby. It can cause birth defects like microcephaly (abnormally small head), resulting in serious mental retardation.

Women who are pregnant or planning to become pregnant and their sexual partners must take precautions if they are staying in a Zika-affected area. That means using a condom, for instance, or abstaining from sexual contact until the risk of transmission has passed.

For information on the duration of the transmission period and recommendations on the Zika virus, consult your health professional and the following websites: quebec.ca/en/health/health-issues/a-z/zikavirus and canada.ca/en/public-health/services/diseases/zika-virus.html.

Check back often because these sites are updated regularly to keep up with the latest scientific research.

Insurances

Check that your insurance policy covers your medical costs in the event you have to be hospitalized or give birth in another country. Also check before you leave that your baby is insured too.

This coverage is even more essential in the event of a premature birth, as a stay in intensive care can be very expensive.

Régie de l'assurance maladie du Québec reimburses an amount equivalent to the cost of the care you would have received in Québec. Since such care can be more expensive outside of Canada, you (if you and your baby are not insured) or your insurer could end up with a large bill to pay.

Nutrition during pregnancy


Valerie Audy

Eating well

Eating well means opting for meals and snacks made up of vegetables and fruits, whole grain foods, and protein-rich foods, especially plant-based ones.

Trying new flavours, varying your dishes and cooking methods, and sharing meals with others are all ways to make eating well a pleasure.

General advice on eating well applies to every stage of life and to all members of the family. But during pregnancy, women have special nutritional requirements.

Eating well during pregnancy

To eat well and meet your and your baby's needs during pregnancy, it is recommended that you:

- Eat a variety of foods and add lots of colour to your plate.
- Plan meals to include vegetables and fruits, whole grain foods, and protein foods.
- Take a daily multivitamin with folic acid and iron.
- Eat regularly (i.e., at least three times a day) according to your appetite.
- Add one or two snacks between meals according to your appetite.
- Drink mostly water when you're thirsty, supplemented by nutritious drinks such as milk or fortified soy milk.
- Avoid restrictive diets.
- Take the necessary precautions to avoid food-borne infections.

The following pages will help you better understand your nutritional needs during pregnancy and adjust your diet to meet them.

The general advice presented here may not apply to you if you have a health problem, food intolerances, allergies, or other special needs. Talk to your health professional. He or she can evaluate your situation and adapt the advice, or refer you to a nutritionist.

Advice for women with gestational diabetes or multiple pregnancies can be found in section Special needs, page 100.

Nutritional needs of pregnant women

The foods you eat during pregnancy contribute to your baby's health by providing the **nutrients** she needs to develop and get a good start in life.

Your baby relies on you for nourishment. The food you eat provides the nutrients she needs to develop and get a healthy start in life.

Eating well also ensures that you meet your own needs during pregnancy. The physical changes you undergo (see Physical changes, page 41) increase your body's need for liquids and many **nutrients**. What's more, a proper diet helps you build the energy reserves you need for pregnancy and breastfeeding.

Starting in the second trimester of pregnancy, your baby will develop faster and you will need to eat a little more. An extra snack or light meal during the day will usually be enough to meet your and your baby's growing requirements.

Eating regularly

To eat regularly, you can have three meals a day plus a few snacks, or five or six smaller meals. Try different options to find what works best for your day-to-day routine and your appetite.

Eating regularly during pregnancy helps keep you energized throughout the day and prevents or reduces some of the discomforts of pregnancy, including nausea (see Nausea and vomiting, page 141) and heartburn (see Heartburn and acid reflux, page 143).

Appetite, cravings, and aversions

Appetite may vary from one woman or pregnancy to another, and even from day to day.

The physical changes you undergo can affect your appetite. Early in the pregnancy, hormonal changes can increase your appetite, even if your needs haven't changed. As the pregnancy progresses, your uterus will compress your stomach, slowing digestion and reducing appetite.

Some of the discomforts of pregnancy (see Discomforts of pregnancy, page 139) may also increase or reduce your appetite, especially during the first few months.

Cravings

During pregnancy, most women have cravings—a strong desire for a particular food. You may find yourself longing for chocolate, salty snacks, ice cream, or candy. Sometimes, cravings are for more nutritious foods, such as fruit or dairy products.

Eating regularly can help reduce cravings. But regardless of what kind of foods you hunger for, the important thing is to eat well overall.

Aversions

During pregnancy, you may also find yourself avoiding foods you enjoyed before you became pregnant. Even if you stop eating a particular food, you can still get the **nutrients** you need from other sources. For example, if you don't feel like eating meat or poultry, you can opt for other protein foods like legumes, eggs, or fish.

Aversions are most common in the first trimester of pregnancy. If you stop eating certain foods, you can always try them again later in your pregnancy.

If your cravings and/or aversions happen very frequently, bother you, or make eating complicated, don't hesitate to raise the issue with your prenatal care provider or a nutritionist.

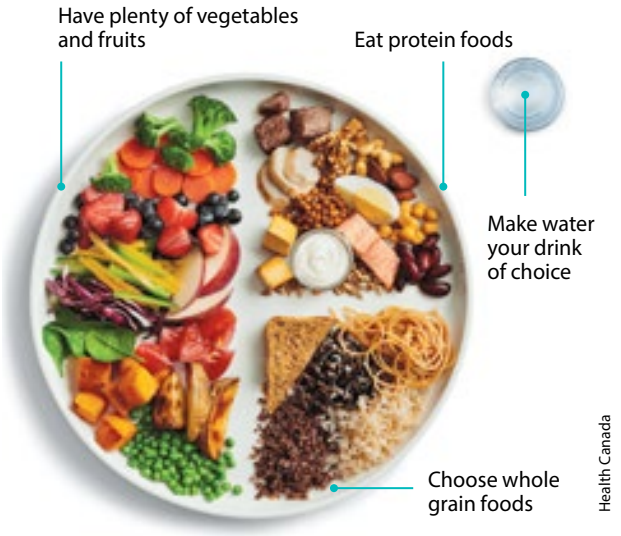
On the menu: variety, colours, and flavours

Enjoy filling your plate with a variety of colourful and flavourful foods.

Vegetables, fruits, whole grain foods, and protein foods are all important parts of a healthy diet during pregnancy. Each of these food groups provides different nutritional benefits, providing you with energy, helping your baby develop, or keeping you healthy throughout your pregnancy.

The *Food Guide Snapshot* can serve as an example when you're preparing your meals. The food groups in the guide are presented in the following pages. For more information, go to food-guide.canada.ca/en/food-guide-snapshot.

Food Guide Snapshot



Vegetables and fruits

Colourful vegetables and fruits make a crunchy and flavourful addition to your meals. It's recommended that you incorporate them into all your meals and snacks.

You can get your veggies and fruits in different forms: fresh, frozen, canned, dried, or in sauces and compotes. They're easy to steam, stir-fry, or cook in the oven, and they go great in soups, cooked dishes, smoothies, and desserts.

Veggies and fruits are also rich in **nutrients**, including fibre (see Fibre, page 96), folic acid (see Folic acid, page 93), and vitamin C. Their colour indicates what kind of nutrients they contain. That's why it is recommended to eat a variety of different coloured veggies and fruits.

To make the most of their benefits, try to eat one dark green and one orange vegetable every day: e.g., broccoli, spinach, romaine lettuce, carrots, sweet potatoes, and winter squash.

A few tips

- If you're not used to eating veggies and fruits at every meal, start by adding them in small quantities. Choose the ones you like the most first, then try new ones and find different ways to cook them.
- Some veggies and fruits may be more affordable to purchase frozen or canned, especially in winter. Choose the ones that have less salt and sugar.
- Vegetable and fruit juices often contain a lot of salt and sugar, and no fibre. It's better to get your veggies and fruit in other forms.

Good to know...

Most of the fibre, vitamins, and minerals in potatoes are found in the skin. Brush them clean with a vegetable brush, cook them, and eat them with the skin on!

Choose vegetables and fruits in a variety of colours, as they are rich in different nutrients.

iStockphoto

Whole grain foods supply the energy you need to stay on your toes throughout the day.

Whole grain foods

Whole grain foods are one of the main sources of food energy. That's why they're recommended with every meal.

Whole grain foods include whole grain bread, pasta and breakfast cereal; oatmeal; brown rice; and any food made from whole grain flour. There are all kinds of whole grains you can try that can add variety to your meals, such as hulled barley, buckwheat, rye, millet, quinoa, wild rice, spelt, and kamut.

Whole grain foods are rich in **nutrients**, including carbohydrates, fibre (see Fibre, page 96) and many vitamins and minerals.

A few tips

- If you're not used to eating whole grain foods, add them gradually to your diet. To start, you can aim to make half of the grain products you eat whole grain.

When you choose whole grain foods, check the ingredients. The first item on the list must include the words “whole” or “whole grain.”

Protein foods

During pregnancy, proteins help the baby’s organs and muscles develop. Protein foods also help to keep you energized between meals and throughout the day. That’s why it’s important to include them in every meal and snack.

Many foods contain proteins. These foods are described in the following pages. Choose plant-based protein foods on a regular basis, including legumes, nuts, seeds, and soy products like tofu.

Dairy products

In addition to proteins, dairy products like milk, cheese, and yogurt contain calcium and phosphorus, which are vital to building your baby’s bones and teeth.

Milk also contains vitamin D, which helps your body absorb and use calcium.

Milk and dairy products are easy to add to meals and snacks. For example, you can:

- Supplement meals and snacks with milk, yogurt, or cheese, based on what you like best.
- Enjoy milk or yogurt in your cold cereal at breakfast or at snack time.
- Replace water with milk when preparing hot cereals such as oatmeal or cream of wheat.
- Use milk and dairy products in cream soups, gratins, salads, blancmange, béchamel sauce, omelettes, puddings, tapioca, and smoothies.

Opt for dairy products with less fat, sugar, and salt.

Dairy products and fortified soy beverages help make bones strong.

Are you lactose intolerant?

Lactose-free milk, yogurt, and cheese are available in most grocery stores. You can also find tablets and drops that help digest dairy products. Ask your pharmacist for advice. You can also opt for fortified soy beverage, which doesn't contain lactose.

Fortified soy beverages, tofu, and other soy products

Fortified soy beverages contain calcium and vitamin D, and just as much protein as milk. Opt for plain or unsweetened fortified soy beverages.

Most other plant-based beverages (e.g., almond, hemp, or rice beverage) contain little or no protein.

Soy products like soybeans (edamame) and tofu are a good way to add variety to your diet. For example, you can use tofu like meat or poultry in most recipes.

Legumes, nuts, and seeds

Legumes, nuts and seeds are nutritious foods that are appealing for their flavour and variety. These plant-based protein foods are also rich in fibre.

Legumes such as lentils, chickpeas and beans are both environmentally friendly and inexpensive, and can be regularly included in your diet. They make an easy addition to soups, salads and stewed dishes, for example.

Legumes like lentils, chickpeas, and beans are affordable and nutritious foods.

Eggs

Eggs are nutritious, practical, and inexpensive. In addition to protein, they also contain choline, which helps develop your baby's brain and tissues, and vitamin D.

Meat, game, and poultry

In addition to protein, meat, game and poultry are a good source of iron, which contributes to blood formation and the growth of the baby and placenta.

A few precautions

- While liver is an excellent source of iron, it is not recommended for pregnant women because it is too high in vitamin A.
- If you eat wild game, it's preferable to eat meat from game killed with lead-free ammunition. Lead can negatively affect children's development.

Fish and seafood

Eating fish and seafood during pregnancy provides important nutrients, including protein, vitamin D, magnesium, and iron. Oily fish such as fresh, frozen, or canned salmon, mackerel, herring, sardines and lake whitefish are also high in omega-3 fatty acids, which contribute to the development of your baby's brain and eyes.

Good to know...

Two meals of oily fish per week provide you with all the omega-3s you need to meet you and your baby's needs.

A few precautions

Some species of fish contain contaminants such as mercury. Women who are pregnant or plan to become pregnant, women who are breastfeeding, and young children can still enjoy fish if it is chosen carefully.

To limit exposure to contaminants:

- Opt for fish and seafood that are low in mercury and other contaminants: shad, smelt, trout (except lake trout), Arctic char, Atlantic tomcod, salmon, lake white fish, haddock, anchovies, capelin, halibut, pollock (Boston bluefish), herring, mackerel, hake, flounder, sole, sardines, redfish, canned light tuna, tilapia, oysters, mussels, clams, scallops, crab, shrimp, and lobster.
- Limit your consumption of
  - Certain marine fish (fresh or frozen tuna, shark, swordfish, marlin, and orange roughy) to 150 grams of cooked fish per month (75 grams per month for children 1 to 4 years old).
  - Canned white tuna to 300 grams per week (about two normal-sized cans). Canned light tuna is a better choice. For children, see Fish, page 551.
- Avoid regular consumption of fish most vulnerable to contamination: bass, pike, walleye, muskellunge, and lake trout.

Protein foods are nutritious and help keep you energized throughout the day. Vary them from meal to meal, and don't hesitate to give new ones a try.

Nutritious snack ideas

Eating snacks between meals can help you get all the **nutrients** you need. When you choose a snack, try to combine different foods, like in these examples:

- Veggies or fruits with cottage cheese or a piece of cheese
- Greek yogurt with fruits, granola, or nuts
- A slice of bread with peanut butter and banana
- Whole-wheat pita with hummus (chickpea spread)
- A bowl of cereal with milk, a fortified soy beverage, or yogurt
- Vegetable and soybean (edamame) salad
- Mixed nuts, seeds, and dried fruits
- Crackers with salmon spread
- A fruit smoothie
- A hardboiled egg with bell pepper slices and crackers

For more snack ideas, go to food-guide.canada.ca/en/tips-for-healthy-eating/healthy-snacks.

Marie-Ève Caplette

Essential nutrients

Vitamin and mineral supplements

Pregnancy significantly increases your requirements for **nutrients** such as iron and folic acid.

Food is by far the best source of nutrients, even during pregnancy. But since it's hard to meet all of your requirements for iron and folic acid through diet alone, it is recommended that you take a prenatal multivitamin supplement.

It is recommended that you start taking a multivitamin containing folic acid two or three months before getting pregnant, and that you continue throughout pregnancy and after giving birth. The prenatal multivitamin should contain at least:

- 0.4 mg of folic acid

AND

- 16 to 20 mg of iron.

Some women's needs may differ. Your health professional will suggest an appropriate multivitamin for you.

A few tips

- Talk to your pharmacist or health professional before taking any vitamin or mineral supplements other than those that have been recommended to you.
- Some women may find it easier to take chewable or gummy prenatal multivitamins. Make sure they contain the recommended quantities of folic acid and iron.

Folic acid

Folic acid is an important vitamin for all pregnant women, especially at the beginning of pregnancy. It helps your baby's brain develop and reduces the risk of a **neural tube** defect such as **spina bifida** and other **birth defects**.

Foods containing folic acid include:

- Legumes: lentils, Roman and white beans, soybeans (edamame), chickpeas
- Dark green vegetables: asparagus, spinach, broccoli, romaine lettuce, Brussels sprouts, okra, avocados
- Orange fruits: papaya, oranges
- Sunflower seeds
- Enriched pasta
- Enriched flour and bread made from enriched wheat flour

Even if you regularly eat foods that contain folic acid, it is recommended that you take a supplement containing at least 0.4 mg of folic acid throughout your pregnancy (see Vitamin and mineral supplements, page 92).

Iron

Iron is necessary for increasing blood volume and for the growth of the baby and placenta. Iron intake during pregnancy also allows your baby to build up important reserves for the first months of life. That's why you need more iron during pregnancy than at any other stage of life.

Iron deficiency can cause health problems for the baby and lead to **anemia** in the mother.

Here are some foods that contain iron:

Animal-based foods

- Meat: beef, lamb, pork, veal, game
- Poultry: chicken, turkey, ptarmigan
- Fish: sardines, salmon, trout (except lake trout), halibut, haddock
- Seafood: shrimp, oysters, mussels, clams
- Seal and other marine mammals, wild duck, moose, caribou
- Blood sausage

While liver is an excellent source of iron, it is not recommended for pregnant women because it is too high in vitamin A.

Even if you regularly eat foods that contain iron, it is recommended that you take a supplement containing at least 16 to 20 mg of iron throughout your pregnancy (see Vitamin and mineral supplements, page 92).

Plant-based foods

- Legumes: dried beans, lentils, chickpeas
- Medium or firm tofu
- Iron-fortified breakfast cereals
- Certain vegetables: pumpkin, green peas, potatoes, spinach, and other leafy greens
- Cashews, almonds, pistachios, and their butters
- Sesame seeds, sunflower seeds, pumpkin seeds, and their butters
- Iron-fortified pasta and bread

Iron from animal sources is absorbed better than iron from plant sources.

To more effectively absorb the iron contained in plant-based foods, add foods rich in vitamin C to the same meal: e.g. kiwi, citrus fruits, peppers, cloudberry, broccoli, strawberry, pineapple, Brussel sprouts, snow peas, mango, or cantaloupe. Also, avoid drinking coffee or tea with meals and in the hour that precedes or follows a meal.

Calcium and vitamin D

Calcium plays an essential role in building baby's bones and teeth and keeping them healthy. To effectively absorb calcium from food, you also need vitamin D.

Here are some good dietary sources of calcium, vitamin D, or both:

Calcium and vitamin D

- Milk
- Fortified soy beverages
- Yogurts fortified with vitamin D

Calcium

- Yogurt and cheese
- Tofu with calcium sulphate
- Canned fish with bones: sardines, salmon
- Calcium-fortified foods

Most legumes and dark green vegetables also contain small amounts of calcium, as do almonds and certain nuts and seeds.

Vitamin D

- Oily fish like fresh, frozen, or canned salmon, mackerel, herring, sardines, and lake whitefish
- Eggs
- Margarine

If you don't consume a lot of dairy products or fortified soy beverages, make sure your multivitamin also contains calcium and vitamin D.

Omega-3s

Omega-3 fatty acids contribute to the development of your baby's brain, nervous system and visual system. That's why it's important to make them a regular part of your diet during pregnancy.

Fish are the best source of omega-3s. Opt for oily fish like fresh, frozen, or canned salmon, mackerel, herring, sardines, and lake whitefish (see also Fish and seafood, page 88).

You will also find small quantities of omega-3s in other foods such as:

- Canola, flaxseed, and nut oils, and vinaigrettes and soft margarine (non hydrogenated) made with these oils
- Ground flaxseed, chia seeds, walnuts
- Foods fortified with omega-3s (e.g., some milks and eggs)

By regularly eating foods containing omega-3s, you can usually meet your requirements through your diet. However, if you decide to take an omega-3 supplement, consult a pharmacist or other health professional (see Natural health products, page 139).

Fibre

Fibre is necessary to ensure your intestines work properly. It helps regulate digestion and prevent constipation (see Constipation, page 144).

Fibre is found in various categories of foods:

- Whole grain foods
- Vegetables and fruits
- Legumes, nuts, and seeds

Try to make these foods a regular part of your diet. It is also important to stay well hydrated when you increase your intake of high-fibre foods.

Drinks

During pregnancy, your fluid needs increase by about 50%. Drink often, especially water, to stay well hydrated. Proper hydration helps your intestines do their job and reduces the risk of constipation, fatigue, and headaches.

Water and nutritious drinks

Water is the ideal drink when you're thirsty. It's easier to make it your drink of choice when you have it close at hand, e.g., in a water bottle you always carry with you. For an original touch, feel free to add some fruit, herbs or cucumber slices to give it some flavour.

If you drink water from a private well, read section Private well water, on page 514.

You can also opt for nutritious beverages such as milk or fortified soy beverages. Not only do they help you stay hydrated, they also provide **nutrients** like protein, calcium, and vitamin D.

Nutritious drinks like these are practical when you're not feeling very hungry. You can also use them to make smoothies. Just add yogurt and some fruit.

Drink often, especially water, to stay well hydrated. For an original touch, feel free to add some flavouring.

Coffee and caffeinated beverages

During pregnancy, you are advised not to exceed 300 mg of caffeine per day. That's equivalent to two 237 ml (8 oz) cups of coffee or three 30 ml (1 oz) espressos per day. Caffeine is also found in tea, iced coffee and tea, chocolate, and some soft drinks and medications.

Energy drinks are not recommended during pregnancy. They can contain as much caffeine as coffee, and sometimes a lot more.

They also contain products such as ginseng and taurine, which have not been proven safe for pregnant women.

Decaffeinated products are safe for consumption during pregnancy.

For more information on products containing caffeine, see *Your Guide to a Healthy Pregnancy* at canada.ca/en/public-health/services/health-promotion/healthy-pregnancy/healthy-pregnancy-guide.html.

Herbal teas

Certain plant-based products can have a negative effect on pregnant women, by triggering contractions, for example. For others, there isn't enough scientific evidence to determine whether they are safe for pregnant women.

According to Health Canada, the following herbal teas are generally safe when consumed in moderation (no more than two or three cups a day): orange or other citrus peel, ginger and rosehip.

To learn more, see *Your Guide to a Healthy Pregnancy* at canada.ca/en/public-health/services/health-promotion/healthy-pregnancy/healthy-pregnancy-guide.html.

Vary your herbal teas rather than drinking the same kind every day. Another tasty option is to add lemon juice or ginger slices to hot water.

Some mixed teas and herbal teas contain ingredients that are not recommended during pregnancy. Ask your pharmacist for more information.

Artificial sweeteners

To reduce their sugar intake, some people prefer to use artificial sweeteners or opt for "diet" foods and drinks containing artificial sweeteners, such as certain yogurts, beverages, jams, and chewing gum.

Sweeteners (e.g. aspartame, sucralose, sorbitol) found in processed foods or used for cooking are considered safe by Health Canada, even during pregnancy.

Cyclamate (e.g. Sugar Twin brand), a sweetener sold only in individual packets, should not be used unless recommended by a doctor.

Special needs

During pregnancy, you may find yourself in a situation where you have special dietary needs (e.g., a health problem related or unrelated to the pregnancy). If you have any questions, don't hesitate to raise them with a nutritionist or your prenatal care provider.

Gestational diabetes

Women with gestational diabetes should eat vegetables and fruits, whole grain foods, and protein foods, just like other pregnant women.

Eliminating any of these food groups is not recommended, because you and your baby might not get all the **nutrients** you need.

However, it is advisable to avoid sugar-rich products (e.g., juice, soft drinks, cakes, ice cream, sugar added to your food like in coffee or milk) or to consume them only in small quantities.

To help stabilize your blood sugar level (blood glucose), it's important to eat regularly (see Eating regularly, page 79). The *Food Guide Snapshot* presented on page 82 can help guide you with meal preparation. Eating foods high in fibre (see Fibre, page 96) and protein (see Protein foods, page 85) will also help you control your blood sugar.

For more information on gestational diabetes, Gestational diabetes, page 164.

Twin or multiple pregnancies

Women carrying more than one baby need to eat a little more than women carrying a single child.

If you have a multiple pregnancy, adding a few extra snacks or light meals to your usual diet may help you meet your needs (see Nutritious snack ideas, page 90). Your health professional may also recommend special vitamin and mineral supplements.

Discomforts of pregnancy such as morning sickness pressure on the stomach from the uterus, slower digestion, and physical discomfort are often greater for women with multiple pregnancies. These problems can really affect your appetite.

You can adapt what you eat by opting for more nutrient-rich foods or drinking nutritious beverages like smoothies, fortified soy beverages, and milk more often.

For more information on twin or multiple pregnancies, see Multiple pregnancies (twins, triplets, etc.), page 166.

Diets

Vegetarianism and veganism

If you're a vegetarian, it's entirely possible for you to lead a healthy pregnancy. Be aware, however, that some **nutrients**, such as iron and omega-3s, are harder to get from a vegetarian diet. Pay special attention to these nutrients and let your prenatal care provider know about your dietary preferences.

If you're a vegan, it's also possible for you to lead a healthy pregnancy, but you're at greater risk of developing deficiencies in several nutrients. Iron, calcium, vitamin D, zinc, vitamin B_{12}, iodine, choline and omega-3 are more difficult to obtain with a vegan diet. Talk to your prenatal care provider about your dietary preferences.

Dieting

Going on a diet during pregnancy is not advisable, unless recommended by your health professional. Starting a new diet could put you and your baby at risk, because you may not get all the nutrients necessary for your baby's development and your health. Talk to your prenatal care provider if you want to go on a diet or are already on one.

Preventing allergies

Excluding foods from your diet doesn't reduce the risk of food allergies in your newborn. By eliminating certain foods, you run the risk of depriving yourself of some of the nutrients you and your baby need. If you are worried about allergies, discuss the matter with your health professional.

Preventing food-borne infections

There's no such thing as a world without germs. They are in the air, water, and soil, in animals, and in fertilizers and gardens. Therefore, they can also be found in the food and water we consume. Germs can cause food-borne infections.

However, your digestive system and **immune system** can defend you against these germs. What's more, basic hygiene habits can help protect you against food-borne infections.

Prevention tips for the whole family

On the following pages, you'll find advice on how to choose, store, handle, and cook food to prevent food-borne infections. These measures are applicable at all times by everyone involved in food and beverage preparation.

Some foods pose a greater risk to pregnant women. You'll find specific advice related to pregnancy in section Prevention tips for pregnant women, page 110.

Cleanliness

- Wash your hands thoroughly with soap before and after handling food (see How to do a good hand washing, page 640).
- Use hot soapy water to wash all plates, utensils, cutting boards, surfaces, and sinks used to prepare food.
- Disinfect everything that has been in contact with raw meat, poultry or fish using a commercial kitchen disinfectant or a solution containing 5 ml (1 tsp.) of bleach in 750 ml (3 cups) of water. Rinse well. Material can also be disinfected by washing it in the dishwasher.
- Clean inside your refrigerator and wash your reusable grocery bags and boxes regularly. Use a separate bag for meat and poultry.
- Change or wash your kitchen towels several times a week. When scrubbing dishes, opt for a washable sponge or cloth.

Storage, and preservation

- Make sure that your fridge is set at 4°C (40°F) or colder, and the freezer at -18°C (0°F) or colder.
- Do not leave foods that should normally be kept cold or hot at room temperature for more than two hours. In very hot weather, the maximum time should be one hour.
- Store raw meat, poultry, and fish on the bottom shelves of the fridge to prevent their juices from leaking onto other foods.
- Use refrigerated perishable foods by the best-before date, which applies before the package or container is opened. After opening, refer to the *Thermoguide* for information on how long you can safely store the product. The *Thermoguide* is available at media.mapaq.gouv.qc.ca/thermoguideplus/#/ (in French only).
- Refrigerate leftovers without delay. Don't keep them any longer than four days in the fridge, or freeze them right away.

Handling

- Wash all fruits and vegetables (including leafy greens sold in unsealed packages) under running potable water, whether they are to be eaten raw or cooked, and with or without the peel. A vegetable brush can be used for fruits and vegetables with a firm peel, such as carrots, potatoes, melons, cantaloupe and squash.
- Cut away and discard any damaged or bruised parts of fruits and vegetables, because bacteria may develop there. Cut products must be refrigerated, frozen or used right away.

- Don't defrost foods at room temperature. Instead, put them in the fridge or microwave, or defrost them in the oven while cooking.
  - Items that are too big to be defrosted in the refrigerator (e.g., turkey) can be immersed in cold water in their original wrapping. Change the water every 30 minutes, to ensure it stays cold.
- Cook food right away after thawing in the microwave.
- Do not refreeze foods, unless you cooked them after thawing.
- Don't let raw foods like meat, poultry and fish come into contact with cooked or ready-to-eat foods. For example, make sure ready-to-eat foods don't come into contact with dishes or utensils previously used for raw meat.
- Follow food label instructions on food preparation and storage.

Cooking and serving

- To make sure food has been cooked safely, you can use a digital food thermometer to check their internal temperature. The table on page 108 shows the minimum safe temperatures for destroying germs by food category.
- Frozen vegetables must be cooked, even if they are eaten cold. Cool the vegetables in cold water if necessary.
- Follow the cooking instructions on frozen food packages (e.g., frozen products containing precooked meat, poultry and fish).
- Serve food hot (above 60°C) or cold (4°C or less).
- Heat leftovers until they reach an internal temperature of 74°C (165°F).

Safe internal cooking temperature

	Minimum safe temperature	Characteristics	
Beef, veal, lamb • Whole cuts (e.g., roasts) or pieces (e.g., steaks, chops)	63°C (145°F)	Medium rare	Mechanically tenderized beef and veal must be turned at least twice during cooking.
	71°C (160°F)	Medium	
	77°C (170°F)	Well done	
Ground meat or meat mixtures (beef, veal, pork, lamb) • E.g., hamburgers, sausages, meatballs, meatloaf, casseroles	71°C (160°F)	The centre of the meat and the juice that flows from it must not be pink.	
Pork • Whole cuts or pieces (e.g., ham, loin, ribs)	71°C (160°F)		
Poultry (chicken, turkey, duck, and game birds) • Ground or in pieces (e.g., legs, breasts, drumsticks)	74°C (165°F)		
• Whole bird	82°C (180°F)	Juice should run clear, and meat should easily separate from the bone.	

	Minimum safe temperature	Characteristics
Wild or farmed game meat (deer, rabbit, boar) • Whole cuts, pieces, or ground	74°C (165°F)	
Fish	70°C (158°F)	
Seafood	74°C (165°F)	The shells of shellfish (e.g., oysters, mussels, clams) must open during cooking.
Smoked sausages (hot dogs)	74°C (165°F)	Make sure that liquid from sausage packages doesn't leak onto other foods or cooking equipment.
Egg and cheese-based dishes, stuffing	74°C (165°F)	It is preferable to cook stuffing separately from poultry.
Leftovers	74°C (165°F)	Soups, sauces, and dishes with sauce must be reheated to the boiling point. Never reheat leftovers more than once.

Prevention tips for pregnant women

A woman's **immune system** changes during pregnancy. As a result, pregnant women are more vulnerable to certain infections, such as listeriosis.

Infections like listeriosis and toxoplasmosis can also be more severe in pregnant women, and cause serious problems for the **fetus** or newborn.

Toxoplasmosis

Toxoplasmosis is an infection caused by a parasite. It can be found in raw or undercooked meat, but also in cat feces. You will find more information on this infection in sections Cats, page 71 and Gardening, page 71.

Listeriosis

Listeriosis is caused by a bacteria called *Listeria monocytogenes*. It is a rare disease, and often relatively harmless for healthy adults. During pregnancy, however, the risk of contracting the disease is higher, and it can have serious consequences.

In pregnant women, the symptoms of listeriosis are often similar to those caused by the flu: fever, shivering, fatigue, headache, and muscle or joint pain. More rarely, listeriosis causes digestive problems (eg., vomiting, nausea, cramps, diarrhea, headaches, and constipation).

However, the bacteria that causes listeriosis can pass through the placenta and trigger a **miscarriage** in the first trimester. If contracted later on in pregnancy, it can cause premature delivery, stillborn birth, or serious infections in the baby (e.g., blood poisoning, meningitis).

Listeriosis and foods

The bacteria that causes listeriosis is present in the environment and can also be found in facilities where food is processed. It survives and can develop in cold temperatures, for example in household refrigerators or the refrigerated section at the grocery store.

The bacteria can contaminate certain raw foods, but it can also contaminate cooked or pasteurized foods through cross contamination due to contact with raw food or a contaminated surface. Foods and beverages contaminated by the *Listeria monocytogenes* bacteria usually look, smell, and taste normal.

To destroy the bacteria that causes listeriosis, food must be cooked or reheated to a safe temperature (see Safe internal cooking temperature, page 108).

Foods most likely to transmit listeriosis are low-acid foods containing a lot of water and not very much salt that:

- Have not been cooked or industrially processed to destroy the bacteria.

or

- Are already cooked or pasteurized, but:
  - Are at high risk of being contaminated during handling or storage after cooking or pasteurization.
  - Are ready-to-eat foods kept for a long time in the refrigerator.
  - Are eaten without being cooked again.

The table on page 112 presents Safer choices and choices to avoid for pregnant women.

Safer choices and choices to avoid for pregnant women

	Safer choices	Choices to avoid during pregnancy
Meat, game, poultry	• Meat, game, and poultry cooked or reheated to a safe internal temperature (see page 108)	• Raw or undercooked cooked meat, game or poultry (e.g., tartare, carpaccio, rare ground meat)
	• Pâtés and meat spreads that do not need to be refrigerated until they are opened (e.g., canned products) • Homemade pâtés and meat spreads that are properly cooked and stored (see page 104)	• Refrigerated pâtés and meat spreads (e.g., country-style pâté, cretons)
	• Dried and salted deli meats that don't need to be refrigerated, like some salamis and pepperonis • Refrigerated deli meats (e.g., ham, turkey, sliced roast beef, bologna) reheated until steaming hot or used in a dish cooked to a safe internal temperature	• Refrigerated deli meats (e.g., ham, turkey, sliced roast beef, bologna) that are not reheated
	• Smoked sausages (hot dogs) reheated to a safe internal temperature or until steaming hot (see page 108)	• Smoked sausages (hot dogs) taken straight from the package and that have not been reheated

	Safer choices	Choices to avoid during pregnancy
Fish and seafood	• Fish and seafood cooked or reheated to a safe internal temperature (see page 109) • Fish and seafood that do not need to be refrigerated until they are opened (e.g., canned products)	• Raw or undercooked fish and seafood (e.g., tartare, sushi, ceviche, raw oysters)
	• Smoked fish and seafood that do not need to be refrigerated until they are opened (e.g., canned products) • Smoked fish and seafood (e.g., smoked salmon or trout) that is sold refrigerated or frozen and cooked or reheated to a safe internal temperature (see page 109)	• Smoked fish and seafood that is sold refrigerated or frozen (e.g., smoked salmon or trout) and is not cooked or reheated to a safe internal temperature

	Safer choices	Choices to avoid during pregnancy
Eggs and egg-based products	• Eggs that are well-cooked, with firm yolks and whites (e.g., omelet, boiled, scrambled)	• Raw or runny eggs (e.g., sunny side up, soft-boiled, poached, runny omelette or runny scrambled eggs)
	• Pasteurized vinaigrettes, mayonnaise, and salad dressing • Pasteurized eggs and egg whites for raw egg–based recipes • Egg-based dishes cooked to a safe internal temperature, like quiche (see page 109) • Homemade eggnog heated to 71°C (160°F)	• Recipes made with raw or undercooked eggs (e.g., unpasteurized mayonnaise or Caesar salad dressing, homemade eggnog, mousse, cookie or cake dough eaten raw, some sauces)
Vegetables and fruits	• Pasteurized fruit juice • Unpasteurized fruit juice that is brought to a boil, then cooled	• Unpasteurized fruit juice
	• Fresh fruits and vegetables that have been thoroughly washed	• Unwashed fruits and vegetables
	• Frozen vegetables cooked according to the instructions on the package	• Raw frozen vegetables
	• Cooked or canned sprouts	• Raw sprouts (e.g., alfalfa, clover, radish, mung bean, and bean sprouts)

	Safer choices	Choices to avoid during pregnancy
Milk and dairy products (excluding cheeses)	• Pasteurized milk and dairy products made from pasteurized milk	• Unpasteurized (raw) milk and dairy products made from unpasteurized milk
Cheeses	• Any cheese used in cooked dishes that is brought to a safe internal temperature (e.g., sauces, casseroles, or au gratin) • All hard cheeses (e.g., Parmesan and Romano) • The following cheeses, made from pasteurized milk: – Firm cheese (e.g., cheddar, Gouda, Swiss) – Cheese curds – Cottage cheese or ricotta – Cream cheese – Processed spreadable cheese (in jars, wedges, or blocks) – Processed cheese slices	• All of the following cheeses, whether made from pasteurized or unpasteurized (raw) milk – Soft cheeses (e.g., Brie, bocconcini, Camembert, feta) – Semi-soft cheeses (e.g., Saint-Paulin, Havarti) – Blue cheeses • Firm cheeses made from unpasteurized (raw) milk

For more information

For more information on how to prevent food-borne infections, see canada.ca/content/dam/canada/health-canada/migration/healthy-canadians/alt/pdf/eating-nutrition/healthy-eating-saine-alimentation/safety-salubrite/vulnerable-populations/pregnant-enceintes-eng.pdf.

For more information on safe food preparation and preventing food-borne infections, go to mapaq.gouv.qc.ca/fr/Consommation (in French only).

You can keep track of food recalls by checking the following pages:

Canadian Food Inspection Agency
ecalls-rappels.canada.ca/en. Click "Advanced Search" and select the "Food recall warning" category.

Ministère de l'Agriculture, des Pêcheries et de l'Alimentation
quebec.ca/sante/alimentation/rappels-aliments, section "Consultez les avis de rappels d'aliments" (in French only).

Resources

To find out more about nutrition during pregnancy, you can go to canada.ca/en/public-health/services/pregnancy/healthy-eating-pregnancy.html.

During your pregnancy, it is usually possible to meet with a nutritionist who can guide you on changing your eating habits. Ask your CLSC or prenatal care provider about the services available in your region.

Olo support program

If you have a low income, you may be eligible for the OLO program. This program offers personalized support beginning at 12 weeks of pregnancy. It gives expectant mothers access to prenatal multivitamins and redeemable food vouchers. Support is usually provided by a nutritionist or nurse, and includes advice on nutrition and healthy eating.

Olo support services are offered in almost every part of Québec by CLSC staff and by certain community organizations. Contact your CLSC to find out if you're eligible for Olo support.

Other support programs may be available in your region, for example, if you live in Nunavik region or in the Cree Territory of James Bay. Ask your CLSC or your health professional for more information.

To find the CLSC in your area
Go to sante.gouv.qc.ca/en/repertoire-ressources/clsc

Fondation Olo
fondationolo.ca/en

Food banks and other resources

You can find a food bank or community kitchen in most regions in Québec.

To find the food banks in your area
Go to banquesalimentaires.org/en

To find the community kitchens in your area
Go to rccq.org/en

Prenatal care


Boken Piqué

Professionals and services

Health professionals

Throughout your pregnancy, you have access to a variety of health professionals who will help care for you and your baby. There is also a whole range of services available that can help you through this important period of your life.

Where to find information about services

Access to health professionals, hospitals and birthing centres, doulas, as well as prenatal classes and activities varies by region. For information about the services available in your area, contact a health professional at a local hospital, clinic, or CLSC.

Health professionals who can provide prenatal care include midwives, obstetrician/gynaecologists, some family doctors, and primary health care nurse practitioners. With the exception of primary health care nurse practitioners, these professionals can also attend deliveries.

In addition, you will be in contact with nurses at your prenatal classes and your CLSC, in medical clinics or hospital high-risk pregnancy clinics (GARE clinics), and during your **labour** and delivery.

If you're thinking about giving birth with a midwife at home, at a birthing centre, or in hospital, contact your local CLSC at the start of your pregnancy to find out if midwife services are available in your area.

Many health professionals work as a team. You can ask your health professional how his or her team works and who will be there for the birth of your baby. It is important that you trust and feel supported by your health professional. Feel free to ask even the most basic questions.

You can change healthcare professionals at any time during your pregnancy. If you do so, make sure to have your file transferred so you and your baby receive seamless, quality care.

Other health professionals who are not directly involved in providing prenatal care may also be of help, such as nutritionists, pharmacists, psychologists, social workers, and physiotherapists.

Doulas

Doulas help future parents during pregnancy and delivery. They can provide additional support and information, even if they are not technically health professionals. They can also provide assistance after your baby is born.

If you would like to have a doula, it is important to choose someone you and your partner trust and feel comfortable expressing your needs to during your pregnancy and delivery.

It is best to inform your health professional if you intend to have support from a doula. Keep in mind that doulas often charge for their services. Fees vary by organization and may also depend on your financial resources.

CLSCs

CLSCs (Centres locaux de services communautaires) are a gateway to health and social services for everyone. They offer a wide range of services to pregnant women and parents. Services may vary by region.

CLSCs can also inform you about the services available in your region. If you have questions regarding your health and well-being, your CLSC can provide answers or refer you to the appropriate service. A few days after the birth, a CLSC nurse may contact you to make sure everything is going well for you and your baby.

Your CLSC works in collaboration with childcare centres known as centres de la petite enfance (CPEs) to provide any help you may need. It also works with community organizations that support families. It can refer you to resources in your community as required.

To find the CLSC in your area
Visit sante.gouv.qc.ca/en/repertoire-ressources/clsc.

CLSCs offer a variety of services and can also refer you to other organizations.

After your baby has arrived, your CLSC can also help you adjust to parenthood by providing access to various services. Contact your CLSC for information on the services available in your area.

Info-Santé and Info-Social

Info-Santé and Info-Social are available in most regions throughout Québec. These free, confidential hotline services are provided through the health system. You can talk with a professional specializing in health or psychosocial support at any time of day and night, 7 days a week.

Info-Santé can respond to concerns you may have about your health or that of your baby and give you advice.

Info-Social can respond to your concerns about psychological and social problems and provide support for you or your family (e.g., anxiety, parental roles, couples issues, financial difficulties).

Simply dial 8-1-1 to access these two services.

Info Santé and Info-Social are confidential services. They are available throughout Québec, except in certain remote regions. In these areas, your prenatal care provider will tell you the local number to call.

Prenatal classes

Prenatal classes are designed to answer your questions about things like pregnancy, **labour**, delivery, breastfeeding, and newborn care. This information is generally provided during group meetings, and fathers or partners are encouraged to attend. Classes are also an opportunity to talk with people who are going through the same things you are.

To find out what is available in your area, ask your health professional or contact your CLSC.

Prenatal activities

Yoga, aerobics, aquafitness, and other classes are great opportunities to have fun, get moving, meet other parents-to-be, and obtain useful information during your pregnancy. Many CLSCs and community and private organizations offer activities for expectant mothers.

Approaches, start dates, length, the number of participants, and costs vary from one organization to the next. Some activities are for pregnant women only, while others are open to couples.

To find out what is available in your area, ask your health professional or contact your CLSC.

For more resources, see Resources for parents, page 782.

Prenatal care

Prenatal care includes:

- Regular appointments with your health professional (see Regular appointments, page 125)
- Blood tests, urine analyses, and vaginal swabs (see Blood tests and urine analyses, page 127 and Vaginal swabs, page 128)
- **Ultrasounds** (see Ultrasound, page 128)
- Genetic screening tests, in some cases (see Screening tests, page 129)

Regular appointments allow you to check that your pregnancy is going well and to get screened for potential problems. These appointments also give you the opportunity to get answers to your questions and help you prepare for delivery and the arrival of your newborn.

How often?

The frequency of prenatal appointments may vary. If you have a specific health problem, more frequent appointments may be necessary, but generally appointments will be scheduled as follows:

- During the first 11 weeks of pregnancy: first appointment
- Between 12 and 30 weeks: one appointment every 4 to 6 weeks
- Between 31 and 36 weeks: one appointment every 2 to 3 weeks
- From 37 weeks until the baby is born: one appointment per week

To prepare for your next appointment, you can write down questions you want to ask your health professional as you think of them so you don't forget.

If you have questions at any time, you can call Info-Santé by dialing 8-1-1.

Starting at 20 weeks of pregnancy, it is often possible to contact your hospital or birthing centre if you have questions about your pregnancy.

Pregnancy checkups are a good opportunity to ask any questions you might have.

Good to know...

At prenatal appointments, you can at any time:

- Ask for an explanation of any tests or examinations your health professional wants to perform.
- Seek a second opinion from another health professional if you have any concerns.
- View your file.

Regular appointments

First appointment

Usually the first prenatal appointment will take place between 8 and 11 weeks of pregnancy.

This first appointment is generally longer than subsequent appointments. Your health professional will take the time to ask questions about your health history and will also offer to perform a physical exam.

Type of questions to expect
At your first prenatal appointment, your health professional will probably ask about the following:

- The date of your last menstrual period and the length of your cycle in order to determine how many weeks pregnant you are and estimate your due date.
- Your health before and since the start of your pregnancy. For example, you may be asked about health problems, medication, allergies, operations, problems related to anaesthesia, and depression.
- If you have ever been pregnant before, including any **miscarriages** or abortions you may have had.
- Your family history and the family history of the baby's father, i.e., any diseases that run in your family and the father's family.
- If you have ever had gynecological problems, such as cervical surgery, or if you or your partner have herpes.
- Your living conditions (sources of income, family situation, support network).
- Your lifestyle (diet, physical activity, tobacco, alcohol, drugs).
- Your religious beliefs and practices.
- If there are any sources of stress in your life, and if so, what kind.
- What type of work you do in order to determine if it poses any risks during pregnancy.

Do you have questions? Are you hesitant to have some tests done? Do you think other tests might be helpful? Now is the time to talk these things over with your health professional so you can make informed decisions.

Some exams, such as genetic screening, for example, should ideally be performed between 11 and 13 weeks of pregnancy (see Screening tests, page 129). If you want to have these exams, your first prenatal appointment is a good time to talk about it.

Physical exam

Your health professional will offer to perform a full physical exam, which may include a gynecological exam.

He or she will check your weight and blood pressure and may listen to your baby's heartbeat.

A PAP test to screen for cervical cancer will be suggested. This exam can also be performed later during the pregnancy, or after the birth.

You may notice light bleeding within 24 hours of the gynecological examination. Don't worry, the bleeding is from the cervix, which is more sensitive during pregnancy.

Subsequent appointments

Subsequent appointments are usually shorter.

During the appointments, your health professional will ask how your pregnancy is going and check:

- Your weight
- Your blood pressure
- The height of your uterus (starting around 20 weeks)
- The baby's heartbeat

Your baby's heart starts to beat five weeks after the start of your last menstrual period. Usually, it cannot be heard until 10 to 12 weeks into the pregnancy.

Blood tests and urine analyses

During your appointments, your health professional may prescribe blood tests and urine analyses to determine:

- If you are **anaemic**.
- If your blood sugar level (blood glucose) is normal:
  - Between 24 and 28 weeks of pregnancy, your health professional will suggest a screening test for gestational diabetes (see Gestational diabetes, page 164). This test measures your blood sugar after you drink a sugary liquid.
- If you have a disease that you could transmit to your baby (such as syphilis, HIV/AIDS, or hepatitis B).
- Your blood type and **rhesus factor (Rh factor)**:
  - If you are Rh negative, some precautions must be taken. You may be given anti-Rh immunoglobulin (also called WinRho®) at 28 weeks of pregnancy, and sometimes after the delivery. You may also be given WinRho® if you have a **miscarriage**, undergo amniocentesis, or you have bleeding.
- If you have anti-rubella **antibodies**.
- If you have bacteria in your urine, even if you don't have any symptoms.
- If you have protein in your urine.

Depending on your condition, additional tests may be suggested at different times during your pregnancy.

Vaginal swabs

It is also recommended that pregnant women be tested for certain **sexually transmitted infections (STIs)** like chlamydia and gonorrhoea. Many of these diseases can go undetected and affect your health and that of your baby. STI screening is completely confidential.

If you think you may have had contact putting you at risk for an STI after your initial screening, don't hesitate to talk to your health professional about repeating the tests.

Your health professional will suggest a vaginal and anal swab to check for Group B Streptococcus at around 36 weeks. This type of bacteria poses no problems for the mother, but can in rare cases harm the baby if it is not treated. If it is present, you will be treated with antibiotics during **labour**.

Ultrasound

Ultrasound is a type of exam that will be offered by your health professional. Ultrasound enables your health professional to:

- Determine how far along you are and when your due date is.
- Check that your baby is the right size for his/her age.
- See most of your baby's organs (heart, liver, kidneys, stomach, bladder, brain, etc.) and limbs.
- Confirm how many babies there are.
- Determine the location of the placenta.

At the time of the ultrasound, it is often (but not always) possible to determine your baby's sex, although there is a slight risk of error. If you want to keep the baby's sex a surprise, tell the technician and your doctor to avoid any misunderstanding.

Screening tests

Screening tests for **chromosomal anomalies** may be offered to you as part of your prenatal care.

Prenatal Screening Program of Québec

At your first prenatal appointment, your health professional will ask if you want to take part in the Prenatal Screening Program of Québec. This program screens for **trisomy** 21 but may also detect trisomy 18 or 13.

Prenatal screening is not mandatory. It is up to you to choose whether or not to do the screening tests and whether or not to use their results. The decision is yours at every step. The steps are:

1. Biochemical test, with or without **ultrasound** (see page 130)

2. A genomic test (fetal DNA test) or a diagnostic test (see page 131) if the biochemical test shows the probability is high

The genomic test may also be offered right away if you meet one of the following criteria:

- You will be over 40 years old at the time of the birth.
- You have already had a pregnancy with trisomy 21, 18, or 13.
- You are pregnant with twins.
- You recently had a prenatal genetic consultation where the test was recommended to you.

In Québec, most of the tests under the screening program are free for women who choose to participate.

These tests are described on the following pages.

Before you have these tests, think about the decision you will have to make if you find out the baby has a trisomy.

Biochemical test
The biochemical test involves testing your blood during pregnancy.

The test takes into account your age and the blood test results to determine whether your probability of having a baby with **trisomy** 21 is low or high. Depending on the results, the test may also indicate a high probability of your baby having trisomy 18. At this stage, it isn't possible to distinguish between trisomy 18 and trisomy 13.

If your probability of having a baby with trisomy 21 or 18 is high, you will be offered the genomic test (fetal DNA test). In certain specific situations, you may be offered a diagnostic test right away.

Good to know...

If the results of the biochemical test, with or without ultrasound, show a high probability, this does not necessarily meant that your baby will have trisomy 21 or trisomy 18.

Ultrasound
Along with the biochemical test, you may be offered an **ultrasound** between weeks 11 and 13 of your pregnancy. There may be a fee charged for this test.

This ultrasound is used to measure nuchal translucency, i.e. the space between the skin of the neck and the spine of the **fetus**. A higher than normal measure of nuchal translucency may indicate a high risk of trisomy 21, other **chromosomal abnormalities**, or fetal malformations.

Genomic test
The genomic test is designed to screen for trisomy 21, 18 and 13. If the biochemical test shows a high risk of trisomy 21 or 18, the genomic test can also be used to better determine the risk level before offering a diagnostic test.

This test is offered because it is reliable and safe. It is done by a blood test on the pregnant woman.

Diagnostic test
If the genomic test shows that the risk is high, a diagnostic test will be offered to you.

The diagnostic test is a reliable way to determine whether the baby has a **chromosomal anomaly**, but it does carry some risk of complication, including **miscarriage**.

If you are faced with the difficult choice of continuing or terminating your pregnancy after completing these tests, you may need help. Don't hesitate to discuss this with your loved ones or the healthcare professional who is monitoring your pregnancy.

It is normal for you and your partner to feel anxious if you choose to have these tests done. Be sure to ask for all the information you need and take your time to decide.

You may also want to contact **trisomy** parent groups. They can help you better understand their reality and make the decision that is best for you. To find groups in your area, contact your CLSC.

For information about the program, visit quebec.ca/en/health/advice-and-prevention/screening-and-carrier-testing-offer and click on "Québec Prenatal Screening Program".

Other screening tests

After the birth, you will be given the option of testing your baby's blood and urine for diseases that are rare, but require early monitoring or treatment (see Neonatal screening, page 244).

Other types of care

Dental care

You can see a dentist during pregnancy, but be sure to let him or her know you're expecting.

Generally speaking, there is no problem with receiving dental care during pregnancy. However, your dentist may suggest that non-emergency treatments be postponed until after delivery.

Eye care

Hormonal changes during pregnancy can make your eyes dry and cause discomfort. Your optometrist can recommend the appropriate treatment.

Your vision can also fluctuate while you are pregnant, which means your glasses or contact lenses may no longer be suitable for your vision. If this is inconvenient, you can consult an optometrist to obtain a temporary prescription.

Your vision will stabilize in the months after the birth. It is advisable to wait six to nine months after delivery or until you stop breastfeeding before obtaining a new prescription.

However, if you experience sudden vision loss, or if your vision suddenly becomes double or blurry, you should see a doctor promptly (see Severe headaches, upper abdominal pain, or sudden changes in vision, page 154).

X-rays

You may occasionally require x-rays during pregnancy. If you need to have an x-ray, be sure to tell your doctor or dentist that you are pregnant. He or she will be able to determine whether the benefits of the x-ray outweigh the risks for you and your **fetus**. If you do have an x-ray, tell the medical technician that you are pregnant so that he or she takes all possible safety precautions, like having you wear a lead apron, for example.

At your first prenatal appointment, let your health professional know if you had any x-rays before learning you were pregnant.

Vaccines

Certain vaccines are recommended during pregnancy. You can visit quebec.ca/vaccinespregnancy for more information.

Flu (influenza) vaccine

Pregnant women in the second and third trimester are more likely to suffer flu complications or be hospitalized. They may also transmit the flu to their baby. That is why it is recommended that you get the flu vaccine if you are 13 weeks pregnant or more. If you have a chronic health condition, you should get the flu vaccine as soon as possible, regardless of your stage of pregnancy.

Pertussis (whooping cough) vaccine

Pertussis (whooping cough) is a **contagious disease** of the respiratory tract that can be serious for young babies. It is recommended that pregnant women be vaccinated against pertussis. The vaccine is usually given between 26 and 32 weeks of pregnancy. It protects you and your baby during the first few months of baby's life. The vaccine must be repeated for each pregnancy.

Contact with people with a contagious disease

Some pregnant women may come into contact with people, especially children, who have contagious diseases. For healthy adults and children, many of these diseases will go undetected or have no serious consequences. However, they can affect pregnant women, the pregnancy, or the fetus.

To reduce the risk of contracting a contagious diseases, see Preventing infections, page 638.

If you feel sick or have any physical signs that suggest you've caught one of these diseases, see a doctor promptly. As a precautionary measure, inform the healthcare facility before you arrive.

If you don't feel sick but you think you have been in contact with someone who has a contagious disease, read the next pages for some advice.

COVID-19

If you think you have been in contact with someone who has COVID-19 and have questions, call Info-Santé (8-1-1).

Pertussis (whooping cough)

If you've been in contact with someone who has pertussis (whooping cough) in the 4 weeks before your due date, see a doctor.

Cytomegalovirus (CMV)

CMV can cause a number of problems in unborn children. It is mainly transmitted by young children, even if they don't appear to be sick. You can reduce the risk of infection by following the guidelines on page 638. For more information, visit cmvcanada.com.

Fifth disease (also known as erythema infectiosum or parvovirus B19 infection)

About half of the adults in North America contracted fifth disease in their youth, which protects them against reinfection later in life. If an unprotected pregnant woman contracts fifth disease, there is a chance the **fetus** may become infected. In rare cases, a **miscarriage** may occur as a result of this infection.

The risk of complications is greatest before 20 weeks of pregnancy. The risk is much lower afterwards. If you come into contact with someone with fifth disease, talk to your health professional. He or she will be able to assess your situation.

Rubella (German measles)

Thanks to vaccination, rubella is very rare in Québec. If contracted, however, rubella can cause complications for the pregnancy and the fetus. If you think you have been in contact with someone with the disease, see a doctor.

Measles

Measles is a highly **contagious disease**. Pregnant women with measles can have a more serious form of the disease. They also are at greater risk of miscarrying or not carrying their baby to term.

If you think you have measles or have been in contact with a person with measles, promptly call your doctor, CLSC, or Info-Santé (8-1-1) to have someone assess your situation.

Chickenpox

Thanks to vaccination, pregnant women in Québec have little exposure to chickenpox. When chickenpox is contracted, it can cause complications for the mother and baby. Here is what you should do if you come into contact with a person with chickenpox:

- If you are vaccinated against chickenpox or have already had the disease, your baby is generally not at risk.
- If you are not vaccinated and have never had chickenpox (or aren't sure if you have), see a doctor within 48 hours. They will be able to assess your situation.

Other contagious diseases

If you come into contact with a person with one of the following contagious diseases, there is no particular danger for your pregnancy or your baby: roseola, hand-foot-mouth disease and scarlet fever. If needed, consult a doctor.

If you are worried you had sexual relations that put you at risk of **sexually transmitted infection (STI)** during your pregnancy, don't hesitate to tell your health professional (see Vaginal swabs, page 128). STI screening is confidential.

At all times, Info-Santé (8-1-1) can advise you on what to do.

Health during pregnancy

Medication and natural health products

If you are pregnant or want to get pregnant and you take prescription or over-the-counter medication or natural health products, talk to your health professional. You can ask whether you should continue, stop, or change what you are taking.

Care should be exercised when considering taking any prescription or over-the-counter medication or natural health product during pregnancy. Some may be ineffective, dangerous during pregnancy, or harmful for your baby, while others may be necessary for you and your baby's health.

If you have questions about prescription or over-the-counter medication or natural health products, talk to a pharmacist, a doctor, or your prenatal care provider.

Prescription medication

You want to get pregnant

If you want to get pregnant and are taking medication for a specific condition such as anxiety, epilepsy, hypertension, hypothyroidism, depression, asthma, or diabetes, talk to your doctor. Your medication may need to be adjusted.

You are pregnant

If you get pregnant and are taking medication, talk to a doctor or pharmacist right away to find out whether you should continue, change your medication, or stop your treatment.

It is very important not to stop treatment without consulting a professional. This could cause complications for you and your baby.

If you get sick during pregnancy, it's good to know that most illnesses can be treated even while you're pregnant. Don't hesitate to talk to your health professional. Medication suitable for your situation may be prescribed.

Over-the-counter medication

Some over-the-counter medications can sometime be taken for short periods during pregnancy. Others may cause complications. Talk to a pharmacist or other health professional before using over-the-counter medication. They can:

- Suggest ways you can minimize discomfort without medication.
- Give advice on what kinds of over-the counter medication you can use during pregnancy.
- Check whether the over-the-counter medication can be used with the products you are already taking.
- Explain how to use the medication.

Natural health products

Be just as careful with natural health products (plants, essential oils, supplements, vitamins, and minerals) as with conventional medication. Some of these products, or their ingredients, may be dangerous during pregnancy. What's more, their effects during pregnancy are not always well known, and their exact contents are not always clearly indicated on the packaging.

Plants used for cooking, like parsley, basil, and garlic, are generally harmless. But when sold as natural health products in the form of capsules, tablets, tinctures, extracts, or essential oils, they can be more concentrated than when they are used in food. This may present risks for the pregnancy.

Some teas and herbal teas may also represent a risk during pregnancy. For suggestions on herbal teas you can use while pregnant, see Herbal teas, page 99.

Ask a pharmacist or other health professional before using natural health products.

Discomforts of pregnancy

Your body changes throughout your pregnancy (see Physical changes, page 41). These changes sometimes cause discomforts that are generally harmless, but can sometimes be hard to bear.

The tables that follow outline some common discomforts of pregnancy as well as tips for relieving them.

If these tips don't help you feel better, if your condition worsens, or if you have any concerns, call a health professional right away.

Fatigue

Description

- When:
  - Common from the beginning of pregnancy until the end of the 1st trimester
  - May come back in the 3rd trimester
- Likely causes:
  - Hormonal changes
  - Poor sleep caused by:
    - Frequent waking to urinate
    - Back pain (see page 148)
    - Heartburn and acid reflux (see page 143)
    - Leg cramps (see page 142)
    - Difficulty finding a comfortable position
    - Emotions or anxiety
  - Diminished nutrition due to nausea and vomiting
  - Insufficient iron intake
  - Decreased caffeine intake
  - Insufficient hydration

Some suggestions

If possible, you can:

- Sleep longer at night (8–10 hours) or take naps.
- Relieve the problems interfering with the quality of your sleep.
- Adapt your diet to take your nausea into account (see page 141).
- Increase your iron intake (see page 93).
- Increase your daily water intake (see page 97).
- Ask for help with your everyday tasks.

Not feeling better?

- Contact Info-Santé (8-1-1). A nurse will be able to advise you.
- Talk to a health professional.

Nausea and vomiting

Description	Some suggestions	Not feeling better?
• When: – Generally appears between 3 and 8 weeks of pregnancy – Often peaks around 8 weeks of pregnancy – Rare after 20 weeks • Frequency: – Nausea: 75% of pregnant women – Vomiting: 50% of pregnant women • Likely cause: – Hormonal changes.	If possible, you can: • Eat a little bit before you get up in the morning, for example crackers or toast. • Get out of bed slowly. • Try to rest during the day. • Avoid going a long time without eating. • Eat smaller amounts more often (small meals and snacks). • Adjust your diet: – Choose foods that you tolerate and feel like eating. – Avoid strong odours and food textures that make you queasy. – Eat cold foods or food in liquid form. • Drink between meals instead of during meals. • Get information about **acupressure**. • Ask your pharmacist if there are any products that may relieve your discomfort.	Talk to your health professional if: • The nausea or vomiting is interfering with your daily life. • You are losing weight. See a health professional right away if: • You show signs of dehydration: feeling of thirst; dry mouth, lips, and nose; less urine than usual or dark urine; dizziness and weakness. • You have severe, persistent vomiting.

Leg cramps

Description	Some suggestions
• When: during the second half of pregnancy • Frequency: over 50% of pregnant women • Cause: acid build-up (lactic and pyruvic acids) in the leg muscles. This build-up causes harmless but extremely painful cramps. • Distinctive feature: they occur mostly at night.	When you have a cramp, you can: • Stretch your leg by pointing your toes upward. • Massage the affected muscles. • Get out of bed. • Walk around. Don't worry if you feel a little discomfort or soreness the next day; it is nothing serious.
	Not feeling better?
	• Talk to your health professional. • See a doctor right away if you have intense, persistent pain accompanied by swelling.

Heartburn and acid reflux

Description	Some suggestions
• When: from the start of pregnancy. Symptoms can get worse as the pregnancy progresses. • Likely cause: hormonal changes associated with pregnancy. These changes slow digestion, causing stomach fluids to move up into the esophagus.	You can: • Avoid eating or drinking before going to bed. • Sleep with your head elevated. • Wear loose clothing. • Eat in a seated position. • Adapt your diet: – Eat smaller amounts more often (small meals and snacks). – Eat protein-rich foods at each meal (see page 85). – Reduce your intake of fatty foods. – Reduce your intake of citrus fruits, tomatoes (and tomato products), and spices if these foods irritate you. – Reduce your caffeine intake (see page 98). – Drink between meals instead of during meals. • Ask your pharmacist if there are any products that may relieve your discomfort.
	Not feeling better?
	• Consult your prenatal care provider if: – Symptoms persist. – Your symptoms are accompanied by fever, nausea and vomiting, or severe headaches.

Constipation

Description	Some suggestions
• When: mostly in the 2nd and 3rd trimesters of pregnancy • Frequency: up to 40% of pregnant women • Likely causes: – Pregnancy-related hormonal changes that slow digestion – Iron supplements – Expansion of the uterus, which puts pressure on the intestine	• Gradually increase your intake of fibre-rich foods: – Whole grain foods – Fruit and vegetables (fresh, dried, frozen, or canned) – Legumes, nuts, and seeds • Increase your daily water intake (see page 97). • Get regular physical activity (see page 60). • Go the bathroom as soon as you feel the need. • If you have hemorrhoids that cause pain when you have a bowel movement, see Hemorrhoids, page 145.
	Not feeling better?
	• Talk to a pharmacist or other health professional, who may suggest you take fibre or psyllium supplements. If you do, make sure to drink plenty of fluids to avoid making the constipation worse. • Talk to your healthcare professional if constipation persists or gets worse.

Hemorrhoids

Description	Some suggestions
• When: mostly in the 2nd and 3rd trimesters of pregnancy • Frequency: 30% to 40% of pregnant women • Likely causes: – Expansion of the uterus puts pressure on the veins near the anus, which makes them swell – Constipation can make symptoms worse	• You can take sitz baths. • If you also are constipated, follow the recommendations on page 144. • If you have pain, your pharmacists can suggest a product to provide relief.
	Not feeling better?
	• See a doctor or your prenatal care provider

Varicose veins and swelling

Description

- Likely causes:
  - Increased volume of blood and pressure from the uterus
  - Restricted blood circulation, which can cause fluid retention in the legs
- Distinctive features: varicose veins are primarily found on the legs, vulva, vagina, and anus

Some suggestions

You can:

- Elevate your legs when possible.
- Sleep on your left side.
- Get regular exercise (see page 60).
- Avoid sitting or standing for long periods without moving.
- Wear compression socks.

Varicose veins on the anus are called hemorrhoids. Tips on treating them are presented on page 145.

Not feeling better?

- Talk to your health professional.
- See a doctor right away if:
  - You have swelling in one leg only.
  - The swelling is accompanied by intense, persistent pain.
  - The swelling spreads (legs, hands, and face).

Numbness and pain in the hands

Description

- When: in the 2nd and 3rd trimesters
- Frequency: about 33% of pregnant women
- Likely causes: fluid retention in the body (oedema or swelling), which pinches the median nerve in the wrist
- Distinctive features:
  - Often affects both hands
  - Mostly occurs at night
  - Goes away after the birth

Some suggestions

- You can try an orthotic device or a wrist protector like the ones worn for rollerblading. Wear them for a few hours a day or at night whenever you feel pain or numbness. If necessary, seek advice from a pharmacist or other health professional.

Not feeling better?

Talk to your doctor if:

- You experience weakness in your hand.
- The problem persists after the birth of the baby.

Back pain

Description	Some suggestions
• Frequency: about 50% of pregnant women • Likely causes: – Lordosis, i.e., arching forward of the spine due to abdominal weight – Ligamentous hyperlaxity, i.e., loose ligaments (see page 46)	Regular and varied physical activity can help relieve back pain during pregnancy (see page 60). For example, you can: • Do pool exercises like aquafitness or swimming. • Do yoga or mobility exercises (see page 62). You can also: • Wear shoes that provide good support. • Keep your back straight and bend your knees when you lift things. • Put a plank under your mattress if it's too soft. • Choose chairs that have good lumbar support or use a small cushion. • Sleep on your side with a pillow between your knees for better support. **Not feeling better?** • If the pain persists, increases, or spreads to your legs, talk to your health professional. • If you are at the end of your pregnancy and you are having back pain that spreads to your abdomen or comes and goes regularly, you may be experiencing your first contractions (see page 206).

Pregnancy gingivitis

Description	Some suggestions
• When: starting in the 2nd month of pregnancy • Frequency: up to 100% of pregnant women • Likely causes: hormonal changes make gums more sensitive, i.e., more likely to swell or bleed	To prevent the swelling and bleeding from getting worse, you can: • Brush your teeth at least twice a day. • Use dental floss every day. Don't worry; it's normal for your gums to bleed more when you floss. Normally, the swelling and bleeding will diminish about one month after you give birth.
	Not feeling better?
	• If necessary, see a dentist.

Common health problems

When you're pregnant, you may also experience health problems that are unrelated to your pregnancy, such as headaches, colds, gastroenteritis, and other types of infections. Some of these illnesses may be more frequent or troublesome while you are pregnant.

Even if you are pregnant, most common health problems can be treated. Talk to a pharmacist or other health professional first, however, before taking any medication.

Don't hesitate to talk to a health professional if you're worried about changes in your health or if your symptoms interfere with your activities.

See a doctor right away if your overall condition deteriorates or you notice any of the warning signs described (see Warning signs, page 151).

An Info-Santé nurse (8-1-1) can advise you on what steps to take at any time.

Warning signs

Some problems during pregnancy require immediate attention from a health professional for evaluation. You can also contact your birthing centre or your hospital's obstetrics department directly.

Some of the warning signs listed in the red box are explained on the following pages.

See a health professional right away if your overall condition deteriorates or if you have any of the following problems:

- Vaginal bleeding
- Loss of consciousness (fainting)
- Severe headaches, upper abdominal pain, or sudden change in vision
- Swelling that spreads (legs, hands, and face)
- Fever
- Lack of baby movement after 26 weeks of pregnancy
- Contractions before 37 weeks of pregnancy
- Loss of amniotic fluid
- Heavy blow to the belly
- Severe abdominal (belly) pain
- Chest pain and sudden shortness of breath
- Pain and swelling in one leg only

Vaginal bleeding

Before 14 weeks of pregnancy

Pregnant women often experience bleeding at the beginning of their pregnancy.

Bleeding may be related to the changes in the body at the start of pregnancy, i.e., implantation of the **embryo** in the uterus. In such cases, bleeding is light and is no cause for concern. Often, the cause of the bleeding is unknown, it does not last, and the pregnancy proceeds normally.

However, half of all women who bleed early in their pregnancy have a **miscarriage** (see Miscarriage, page 160).

When to consult a health professional

You may have light bleeding after a gynecological exam because the cervix is more fragile during pregnancy. In this case, you don't need to be evaluated.

In all other cases, if you experience bleeding during the first trimester, have a health professional evaluate the situation. Women whose blood is **Rh** negative, for example, may need to receive immunoglobulin (WinRho®) if they have bleeding.

Go directly to the emergency room if you have heavy bleeding (vaginal bleeding that soaks two regular sanitary pads or one maxi-pad per hour for two or three hours straight) or if the bleeding is accompanied by weakness, dizziness, or severe abdominal pain.

An Info-Santé nurse (8-1-1) can advise you on what steps to take at any time.

After 14 weeks of pregnancy

It is not normal to have vaginal bleeding after the first trimester of pregnancy (i.e., the first 14 weeks). If you do, see a health professional right away for an evaluation.

The bleeding may come from the placenta, for example, or be a sign of a **miscarriage** or the start of **labour**. Bleeding does not always mean the pregnancy is at risk, but you should be evaluated to make sure everything is all right.

Note that you may experience light bleeding after a gynecological exam, because the cervix is more fragile during pregnancy. In this case, you don't need to be evaluated.

Loss of consciousness (fainting)

Loss of consciousness (fainting) can be normal during pregnancy. But if you experience dizziness or fainting, it's best to see a health professional.

Go directly to the emergency if you lose consciousness and have other symptoms at the same time, such as bleeding, severe abdominal pain on one side, chest pain, shoulder pain, or palpitations.

Also, see a health professional if you have suffered a blow to the head or belly.

Severe headaches, upper abdominal pain, or sudden changes in vision

Contact your health professional right away if you are experiencing any of the following symptoms:

- Severe headaches
- Upper abdominal pain
- A sudden change in vision
- A general feeling of being unwell

Also consult your health professional if you notice that your blood pressure is high (more than 140/90).

Fever

Fever is an increase in body temperature above the normal level. It is the body's way of defending itself against infection.

An adult has a fever if their body temperature (taken orally) is 38°C or higher.

If you have a fever while you are pregnant, it could be dangerous for your pregnancy or indicate that you have an infection that needs to be treated.

When to consult a health professional
If you have a fever of 38 to 38.4°C and your overall condition is good, you can wait a while to see how the situation evolves. You can take acetaminophen to lower your temperature and relieve pain.

However, you should see a doctor or your prenatal care provider if:

- Your fever of 38 to 38.4°C lasts more than 24 hours.
- You have a fever of 38.5°C or higher.
- You feel unwell or have any other concerns.

If you think you have COVID-19, call Info-Santé (8-1-1).

You can contact an Info-Santé nurse for advice at any time by calling 8-1-1.

If you need to take acetaminophen (Tylenol®), choose a product that contains only acetaminophen. Your pharmacist can advise you.

Don't confuse acetaminophen (Tylenol®) with ibuprofen (Motrin®, Advil®) or with aspirin. And don't take ibuprofen or aspirin during pregnancy unless recommended by your health professional.

Only take acetaminophen for a short period. If you need to take acetaminophen for a longer period or for other reasons, talk it over with your health professional.

Lack of baby movement after 26 weeks

At around 20 weeks, your baby's movements increase and are strong enough to be noticed. Some women feel movement a little sooner, others a little later. At the end of your pregnancy the baby's movements may feel different, but they are still present.

Your baby is more active at certain times of day. You might not notice his movements if you are more active or distracted than usual. You also may not be able to feel all his movements, even if he is active. Remember the movements you saw on the **ultrasound** that you couldn't feel.

After 26 weeks of pregnancy, if you can't feel your baby move or he is moving less than usual, rest and see what happens. If you count fewer than six distinct movements over two hours, contact your birthing facility or health professional right away or go to the hospital to make sure your baby is all right.

If you are worried or unsure, you can also contact your hospital's obstetrics department or your birthing centre.

Contractions before 37 weeks of pregnancy

Throughout your pregnancy, it is normal to feel contractions that are unrelated to **labour**. Known as Braxton Hicks contractions, they are irregular and may or may not be painful. They can be caused by sudden changes in your position, standing for long periods, or sexual activity.

You may also feel small "electric shocks" in your cervix or menstrual-like cramps that last a few seconds. If this happens, these are not contractions; they are usually reactions to the baby's movements.

However, if you feel your uterus harden regularly and are experiencing pain, you may be having real contractions. Sometimes the pain of the first contractions is similar to menstrual cramping.

Good to know...

Real contractions last at least 20 seconds. If they come and go at regular intervals, this could indicate the start of labour.

To help tell the difference between contractions and other abdominal pain, see table Telling the difference between contractions and other abdominal pain, page 157.

If you are experiencing regular or frequent contractions (more than seven in one day) before 37 weeks, you may be going into premature labour, especially if you also have more abundant vaginal discharge. Contact your health professional or hospital so they can determine what is happening. Premature labour can sometimes be stopped if it is caught early enough.

After 37 weeks, the same symptoms may indicate that labour is starting. In this case, everything is perfectly normal because your baby is no longer considered premature (see The start of labour, page 204).

Telling the difference between contractions and other abdominal pain

Problems	Symptoms
Heartburn	• Pain in the upper abdomen • Burning sensation caused by excess acid
Intestinal cramps	• Pain throughout the abdomen that may be due to diarrheal or constipation
Urinary tract infection	• Pain in the lower abdomen and sometimes the back • Frequent need to urinate small amounts • False urge to urinate and sense of urgency • Leaking urine • Burning sensation when urinating • Persistent urge even after urinating • Blood in the urine (sometimes)
Ligament pain	• Stretching sensation or pain in the lower abdomen, especially when you move, exert yourself physically, walk for a long time, or turn over at night (ligament pain is more common during second pregnancies and poses no danger to you or your baby)
Uterine contractions	• Painful hardening of the uterus • The first contractions are sometimes like menstrual cramps • Pain lasts at least 20 seconds • When **labour** begins, the pain will come and go at regular intervals

Loss of amniotic fluid (breaking of the waters)

Most pregnant women have vaginal discharge during their pregnancy (see Physical changes, page 41). Sometimes, however, other fluids such as urine or amniotic fluid may be discharged.

Table Telling the difference between the types of discharge, page 159 can help you determine what type of discharge you are having.

Loss of amniotic fluid can indicate the start of **labour**.

If your waters break before 37 weeks, it can pose a risk for the baby. If you think you are losing amniotic fluid, or if you are unsure, call your midwife or your birthing facility or go to the hospital.

If your waters break at or after 37 weeks, you need to go to the hospital or birthing centre.

Telling the difference between the types of discharge

Type of discharge	Description	Amount
Vaginal discharge	• Heavier and runnier in the final months of pregnancy	• Can dampen underwear, but doesn't overflow • Can soak a panty liner
Urine	• More common after physical exertion, movement, coughing, and sneezing	• The flow stops when the bladder has been emptied
Amniotic fluid (waters)	• Continuous loss of a clear, odourless fluid, which happens when the baby moves or the mother changes position	The amount of discharge is another factor that can help you determine if you are leaking amniotic fluid. To estimate the amount: • Wear a sanitary pad (not a panty liner). • Check the pad after 30 minutes. If your waters really are breaking, the pad will be soaked and heavy.

Miscarriage and mourning

Miscarriage

Pregnant women often experience bleeding at the beginning of their pregnancy. Bleeding may be related to changes associated with the start of pregnancy, i.e., the implantation of the **embryo** in the uterus. However, half of all women who bleed in early pregnancy have a **miscarriage**. In some cases, miscarriage can occur without any symptoms or bleeding.

Good to know...

Women whose blood is **Rh** negative may need to receive immunoglobulin (WinRho®) if they have bleeding or a miscarriage. Your health professional will tell you if this is the case for you.

About one in six pregnancies ends in miscarriage. Most miscarriages occur in the first 12 weeks of pregnancy and are caused by major **genetic abnormalities**. The embryo doesn't develop, or the baby's heart stops beating. At this point, the uterus generally stops growing and will expel its contents.

The abnormalities that cause miscarriage occur at random. They do not mean that a woman is infertile or has a health problem.

However, the risk of **miscarriage** does increase with age. For women age 35 and over, one in four pregnancies end in a miscarriage. For women age 40 and over, it is one in two.

If you want to get pregnant again after a miscarriage, it's best to wait until you have had at least one normal menstrual cycle. It may be helpful to consult with a health professional if you have had several miscarriages. Keep taking your folic acid supplement.

Even after a miscarriage, it is possible to have a healthy pregnancy in the future.

In rare cases, the **embryo** implants itself outside the uterus. This is called an **ectopic or extra-uterine pregnancy**. An ectopic pregnancy cannot continue to term. A medication or surgical abortion is usually necessary.

In very rare cases, a baby may die later during pregnancy, for reasons that cannot always be explained.

Grieving: when your pregnancy ends unexpectedly

After a **miscarriage**, you and your partner may feel sad and distressed, and even go through a period of mourning. You may also experience feelings of anger, denial, and confusion.

Some women feel guilty about things they did or did not do early in the pregnancy because they think they caused the miscarriage.

Miscarriage is not related to stress, fatigue, physical or sexual activity, diet, or lifting heavy loads.

If you have had an **ectopic pregnancy**, it is also normal to grieve for a time and to perhaps need help. If you are concerned about your chances of getting pregnant again, feel free to bring it up with your health professional.

The grieving process

The loss of an unborn child is a deeply personal experience. The grief a person may feel is influenced by circumstances. Some people start establishing an emotional bond with their child from the moment they start planning the pregnancy. For others, the loss of the baby represents the loss of their identity as a parent or an end to their plans for a family.

Generally speaking, men and women don't grieve the same way. In addition, individuals may go through the different stages of grieving at different times. Whatever your situation, give yourself time to grieve and work through your emotions at your own pace.

If you and your partner don't know how to break the news to your children or family and friends, you can talk to someone who has been through the same situation or ask a health professional for help. Resources also exist to help your family and friends understand what you're going through and provide support through this difficult time.

The death of an unborn baby can trigger grieving the same way as any human death. It should not be minimized.

If your baby dies after 19 weeks of pregnancy or after being born, you may also be entitled to benefits under the Québec Parental Insurance Plan.

Québec Parental Insurance Plan
1-888-610-7727
rqap.gouv.qc.ca/en/wage-earner/death/death-of-a-child

Here are a few resources to help you during your grieving process:

SOS Grossesse
Telephone helpline for questions about pregnancy and termination of pregnancy
1-877-662-9666
sosgrossesse.ca (in French only)

Info-Santé and Info-Social
8-1-1

Revenir les bras vides (CHU Sainte-Justine)
A series of free videos on perinatal grief (in French only).
chusj.org/en/Care-Services/C/Pregnancy-Complications/Perinatal-bereavement

High-risk pregnancies

Some pregnancies are considered to be at higher risk than others. Examples include cases involving high blood pressure (hypertension), gestational diabetes, or multiple pregnancies. If your pregnancy is considered high-risk, you will be followed more closely and undergo additional exams. You may also be referred to a clinic that specializes in high-risk pregnancies (GARE) for prenatal care.

High blood pressure (hypertension) during pregnancy

Hypertension is when your blood pressure is higher than normal. Some women develop hypertension during pregnancy. In this case, health professionals generally recommend blood work and a urine sample, as well as treatment to lower blood pressure. They may occasionally recommend hospitalization.

Depending on the stage of pregnancy and the condition of the mother and baby, it may be necessary to induce **labour**. In such cases, the medical team will determine the best time for the birth.

Gestational diabetes

Gestational diabetes is an increase in the blood sugar (blood glucose) level caused by certain hormones produced by the placenta. Regular blood sugar monitoring is recommended for women with gestational diabetes.

The most common consequence of gestational diabetes is having a bigger baby. This can result in a caesarean birth or make for a more difficult delivery for both mother and baby. The baby may also have low blood sugar (hypoglycaemia) and breathing problems at birth.

To prevent complications from gestational diabetes, it is recommended to eat a balanced diet and stick to a regular meal schedule (see Special needs, page 100). Regular exercise such as a daily walk is also recommended (see Physical activities, page 60). These recommendations on diet and physical activity apply to all pregnant women, but are especially important for those with gestational diabetes.

An individual or group meeting with a nutritionist is a good way to learn more about the kind of diet that promotes a healthy pregnancy and baby's development.

It may not always be possible to control blood sugar levels, even with a proper diet and good exercise habits. If this is the case, the prenatal care team will prescribe appropriate treatment.

Additional tests may be necessary to ensure the baby is doing well during the final weeks of pregnancy. Special monitoring may also be carried out during delivery.

For more information, you can call the Diabetes Québec InfoDiabetes helpline.

Diabetes Québec
514-259-3422 / 1-800-361-3504
diabete.qc.ca/en

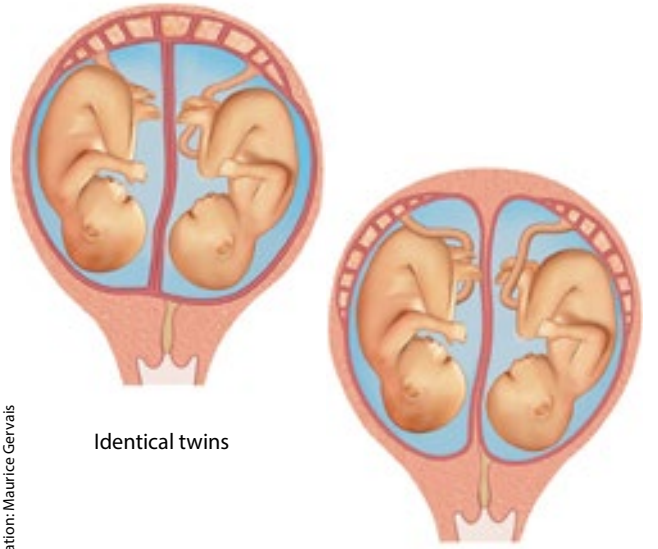
Multiple pregnancies (twins, triplets, etc.)

For many women and their partners and families, a multiple pregnancy can come as a shock. They say having a baby changes your life forever, so imagine when you're expecting more than one! You'll need to make adjustments to plan for prenatal care, the birth, and the way you organize family life once your newborns arrive.

Types of twins

There are two types of twins: identical twins and fraternal (non-identical) twins. Identical twins come from the same egg and the same sperm. They have the same genetic makeup, are of the same sex, and usually share the same placenta. Fraternal twins come from separate eggs fertilized by different sperm. They develop side by side in the uterus, but have a different genetic makeup and their own placenta, and may not be of the same sex.

Two types of twins



Identical twins

Fraternal twins

Illustration: Maurice Gervais

For women with multiple pregnancies, the physical changes associated with pregnancy (see Physical changes, page 41) happen faster and are more intense. These rapid changes can result in increased fatigue and more discomfort (see Discomforts of pregnancy, page 139). If the discomfort bothers you, don't hesitate to talk to your prenatal care provider.

Women carrying more than one baby also have greater nutritional requirements (see Special needs, page 100).

Multiple pregnancies come with a higher risk of complications during pregnancy and delivery. Women with multiple pregnancies will have more frequent checkups, especially at the end of the pregnancy. This is to ensure that each of the babies is developing well.

Preterm **labour** is the most common risk for a multiple pregnancy and can lead to premature birth. Premature babies require more care than full-term babies (see Care of premature babies, page 246).

Even if you are carrying twins, a vaginal birth is often possible.

During the pregnancy, it can be helpful to talk with other parents who have had similar experiences. For example, there are associations for parents of twins in some parts of Québec and resources for future and new parents of twins and triplets, such as Mamans pieuvres.

Mamans pieuvres
mamanspieuvres.com (in French only)

Contact your CLSC to learn about services and organizations in your area.

Domestic violence during pregnancy

Most couples settle disagreements through discussion and negotiation without either partner resorting to physical or psychological abuse. But in some relationships, one partner tries to control the other and uses violence to resolve conflicts.

Some women experience domestic violence during pregnancy. In fact, one in ten women report being victims of violence at least once during the period surrounding their pregnancy. In most of these cases, domestic violence continues after the baby is born.

Examples of domestic violence

Your partner:

- Constantly criticizes your tastes and abilities.
- Puts down your family and friends, or forbids you from seeing them.
- Monitors your movements or your activities and communications (calls, text messages, emails).
- Forces you to have sex, even if you don't want to.
- Pushes or shoves you.
- Threatens to hurt you or your children.
- Gives you no say in financial decisions or controls your spending.

All forms of violence—psychological, verbal, physical, sexual, or economic—can have serious repercussions on your health and that of your child.

Shame or fear of being judged can keep some victims of violence isolated.

Since violence rarely stops on its own, it is important for your safety and the safety of your child to break your silence and talk to someone you trust who can provide support.

You can contact your CLSC or Info-Social (8-1-1, option 2) to get help from a health professional. They can provide psychological and social services or refer you to other resources in your area.

SOS violence conjugale
24/7 bilingual helpline
1-800-363-9010
sosviolenceconjugale.ca (in French only)

Preparing to breastfeed

Jean-François Dufour

Thinking about how you want to feed your baby is just as important as preparing for her birth and arrival. To help make a decision, many families want more information about breastfeeding, how to initiate it, and the potential challenges involved. The following pages provide useful information to help you prepare for breastfeeding.

Making the decision to breastfeed

Health professionals all around the world over recommend that babies be fed breast milk exclusively for the first six months of life. The Canadian Paediatric Society, Dieticians of Canada, and Health Canada all echo this recommendation. Once babies have started eating solid foods, it is recommended that they continue breastfeeding until the age of two years or more.

Knowing the reasons why you want to breastfeed before your baby is born can help you cope with periods of hesitation and discouragement.

Women breastfeed for a variety of reasons. Some breastfeed because they like always having milk ready for their baby, while others see it as a way of strengthening the bond they developed with their baby during pregnancy. Still, others decide to breastfeed because of the health benefits for the mother and baby.

Listing the reasons why you want to breastfeed will help you make your decision. Ask yourself what's important for you and your family in light of your values and your situation. And take some time to think about your intentions and how you can prepare yourself for the challenges you may face on the way.

Regardless of your situation, remember to tell your family and healthcare professional about your decision. That way, they'll know what to expect and be able to support you better. Trust yourself—you know best what your baby needs.

Breastfeeding and health

Breast milk contains **antibodies** and other substances that help baby's **immune system** fight off certain diseases. The more breast milk a baby gets, the more protection she has—protection that may even continue after she stops breastfeeding.

Breastfed babies are at lower risk of diseases, such as diarrhea, ear infections, colds, and bronchiolitis. And when breastfed babies do get these illnesses, they are less severe. Breastfed babies are also at lower risk of **sudden infant death syndrome** and are better protected against certain chronic diseases, such as obesity and diabetes.

Breastfeeding delays the return of menstrual periods. In the short term, women who breastfeed are therefore less likely to develop **anemia**. Over the long term, women who have breastfed have a lower risk of becoming diabetic or developing breast and ovarian cancer.

Most medications are compatible with breastfeeding. If you are taking medication, discuss it with your healthcare provider before your baby is born.

When the mother is sick, breastfeeding is still recommended. However, if you have a fever, cough, sore throat, or nasal congestion, it's important to take certain precautions. While symptoms last, it's best to wear a medical mask, or else a face covering, while breastfeeding. It's always important to wash your hands before feeding your child.

A learned skill

The start of breastfeeding also marks the start of your life with your new baby. Preparing for breastfeeding and the first few days with your baby can help you deal with the surprises and moments of discouragement you may face along the way.

Learning to breastfeed takes practice, both for you and your baby. Before baby arrives, you learn the theory. Then you put the theory into practice, and you realize it isn't always as easy as you thought.

Little by little, with each passing day and each feeding, you will both become more skilled. Then it all starts to come naturally, and everything feels easy! That's when it becomes enjoyable.

It can take four to six weeks for some women to feel comfortable breastfeeding. For others, it will take less time. During this learning period, you and your partner will develop your own ways of working as a team.

It's normal to need information, support and encouragement if you have questions or problems. Don't hesitate to seek help from people you can rely on in your circle of family and friends or from breastfeeding resources (see The importance of a support network, page 180).

It can be useful and comforting to have made initial contact with breastfeeding resources in advance in case you experience problems.

Starting milk production: the first few days

Breasts naturally prepare for breastfeeding throughout pregnancy (see Breasts, page 44). This preparation culminates at childbirth, when hormones send the signal to start milk production.

Breastfeeding itself doesn't change the appearance of your breasts; the changes are primarily due to carrying a baby and having your milk come in.

Whether you have small or large breasts, long or short nipples, they are designed to produce milk and feed your baby. There is nothing you need to do to prepare your breasts for breastfeeding. Whether your baby arrives early, on time or late, you will have milk for her.

Colostrum: your first milk

The first few days after your baby's birth are very important for initiating breastfeeding and starting milk production.

Your first milk (colostrum) is thick and yellowish in colour, and contains just what your newborn needs. You may feel like you're not producing much milk, but when your baby nurses, she gets small quantities that are ideally suited to her little stomach.

During this learning period, it's normal for your baby to nurse very often. She was nourished constantly when she was in your womb. As the days go by, she will get used to this new method of feeding.

Breast stimulation

Stimulating the breasts by nursing at least 8 times every 24 hours helps get milk production off to a good start. It also helps prevent your breasts from getting engorged (see Painful breast, page 487). If your baby isn't ready to nurse, you can stimulate your breasts by expressing milk manually or with a breast pump (see Producing a good supply of milk, page 420).

When your breast milk "comes in"

Between the second and fifth day after giving birth, milk production increases rapidly and the milk becomes clearer. This is known as having your milk "come in." It is caused by hormonal changes and happens in all women, whether they breastfeed or not. For more information on this increase in milk production, see When your milk comes in, page 419.

The composition of breast milk

Breast milk composition changes throughout the breastfeeding period to adapt to baby's needs and age.

Breast milk is made up of proteins, sugars, and all the fats a baby needs, including omega 3 fatty acids that support brain and eye development. It provides each baby with the exact amount of vitamins and minerals they need to develop, with the exception of vitamin D (see Vitamin D: Not your ordinary vitamin!, page 380). What's more, it contains enzymes that facilitate digestion.

Breast milk has antibodies that help baby fight infections and develop her immune system. It is also rich in good bacteria that are thought to provide her with lifelong protection.

To date, over 200 components have been identified in human milk. Certain factors influence the composition and taste of breast milk (see What influences the composition of milk, page 388).

Ways to make breastfeeding easier

The first feeding will be etched in baby's memory and will help her recall what to do next time.

Making skin-to-skin contact in the first hours after the baby is born

Placing the newborn right on her mother's chest, skin to skin, has a number of benefits for breastfeeding. The baby retains her heat better and is calmer. This contact also triggers her reflex to take the breast during the first hour of life, as well as later on (see Right after birth: Mother and child get acquainted, page 438).

It's good to take advantage of baby's first few hours of life to start breastfeeding. After these first few hours have passed, the baby will enter a rest and recovery period during which her reflexes will "hibernate" for a few hours.

If your baby isn't ready to start nursing, it's a good idea to stimulate your breasts as soon as possible after giving birth to help start milk production (see How to express milk by hand, page 454). You can **express** milk in a spoon and offer it to your baby, placing a few drops on her lips at a time.

Staying close to baby and being attentive to hunger signs

It's good to keep your baby near you day and night. Your newborn needs to be close and be reassured by your presence.

Being physically close to your baby allows you to get to know your baby and learn to detect the early signs of hunger (see Hunger signs, page 367). It's an ideal time to give your baby the breast because she will probably be calmer.

Being close to your baby also allows you to quickly provide for her needs, which helps build a bond of trust.

Bringing your baby to the breast
Getting a good latch helps prevent breastfeeding pain and most nipple injuries. In the first few days of life, mom and baby learn together how to establish a pain-free latch and good suction (see Bringing baby to your breast, page 426).

When your baby is sucking effectively, you can see her pause and swallow (see Ensuring your baby is sucking effectively and swallowing milk, page 429). The swallowing motion is harder to notice before your milk comes in, because your baby is only swallowing small amounts of colostrum.

Some women may be surprised by the sucking sensation at first. Some degree of sensitivity may be normal, but if nursing is painful, ask for help without delay.

Breastfeeding on demand or often enough to meet baby's needs
The frequency and length of feedings varies from one baby to another. In the first few days of life, it's normal for a newborn to nurse very often and to have feedings clustered together (see How often to nurse—and how long?, page 433). Frequent feedings stimulate milk production and reassure the baby during this important adaptation period. You can expect to nurse 8 times or more every 24 hours during this period, and afterwards as well.

Some babies frequently show hunger signs. Other babies don't always give cues that they want to feed. If your baby isn't showing signs of hunger or signs of wakefulness, you may need to wake her up to ensure she gets enough milk.

Information and precautions regarding bottles and pacifiers
If it's necessary to feed your baby using a method other than breastfeeding, she can be bottle fed with expressed milk.

However, sucking at the breast isn't the same as drinking from a bottle. Milk usually flows faster from a bottle than from the breast, and the baby's mouth movements are different. As a result, using a bottle, especially for a prolonged period of time, can lead to problems with breastfeeding.

A trained breastfeeding support person can show you an alternative to bottle-feeding, if you wish.

If your baby uses a pacifier, it can be difficult to recognize her hunger signs. Your baby may end up skipping a feeding, which can affect milk production. To maintain milk production at a level that meets your baby's needs, check first to see if she's hungry or needs to be changed or cuddled before giving her the pacifier.

Breastfeeding accessories

There is an ever-expanding array of breastfeeding accessories on the market—everything from breast pumps and nursing bras and pillows to nursing pads and more. None of them are essential, although reusable or disposable nursing pads can be useful if your breasts leak milk. A nursing bra isn't necessary either, but it can be very practical. If you do decide to wear one, it is best to get it toward the end of your pregnancy so that it fits your breast size.

Community groups are good sources of information when the time comes to choose a breast pump or other breastfeeding accessories.

Common concerns and possible problems

Despite the known benefits of breastfeeding, some women are still hesitant to nurse their baby. Common fears include being incapable of breastfeeding, not having enough milk, having sore nipples, not being able to eat everything they want, not giving the father the opportunity to help with the feeding, and having their breasts deformed from breastfeeding. Most of these concerns are based on popular misconceptions or myths. Talk them over with a trained breastfeeding support person.

The first few weeks of breastfeeding can be challenging nonetheless. Possible issues include engorgement, nipple pain or injury, frequent feedings (see Cluster feeding, page 434), difficulty positioning the baby at the breast, worries about milk production, and a crying baby. Most of these issues are temporary, and solutions exist (see Common difficulties, page 467).

Some women think that breastfeeding is meant to come naturally and easily, and may feel flustered if they have problems. Don't worry, most breastfeeding issues are temporary, and solutions are available.

If you want to prepare yourself for breastfeeding or you have concerns, feel free to talk to a trained breastfeeding support person. You can contact a breastfeeding mentor or a professional at your local CLSC. That way, you'll be better prepared to overcome any challenges you may face.

The importance of a support network

Your pregnancy is a good time to talk about your impressions and expectations with your partner, family, and friends. It's also a good time to find out about the breastfeeding resources and community groups in your area.

The role of the partner

As a future father and partner, you can play an active part in the discussions and decision on breastfeeding your child. Your role is important.

You can make a real difference by working hand-in-hand with your partner while a breastfeeding routine is being established.

At the beginning, the mother often needs help getting the baby latched on to the breast. You can help by lending an extra hand to hold the baby, shifting a pillow, or sharing a word of encouragement. Little things like bringing your partner something to drink or making a snack are always appreciated.

You can also reassure your partner when she's feeling unsure of herself, shield her from negative pressure from friends and family, or seek out support if she needs it.

Helping care for your baby will also make breastfeeding easier for your partner and allow you to ease into your role as parent. You can work as a team, taking your turn holding your baby skin to skin between feedings, especially after your partner's milk has come in. You can change diapers, burp your baby, and rock her in your arms to soothe her or put her to sleep.

As soon as your baby is born, you can find ways to support your partner with breastfeeding. Your presence means a lot, especially during the adaptation period.

Support from family and friends

If you or your partner were breastfed, your families may be familiar with the practice. But you might also be the first in your family or your partner's family to breastfeed. In this case, you may want to let them know what your intentions are. Knowing your plans can help them support you in your decision.

Also, don't hesitate to ask them for a helping hand with things like meals, babysitting, errands, and housekeeping.

Breastfeeding resources

There are several types of resources that offer breastfeeding help and support. For more detailed information, see Getting help, page 416.

Breastfeeding resources

- Breastfeeding support groups and organizations
- Early childhood services at your CLSC
- Info-Santé: 24/7 telephone consultations at 8-1-1
- Certified lactation consultations (IBCLC) (private services)
- Breastfeeding clinics with medical specialists (available in some regions)
- Your midwife or doctor

Here are some resources:

Association québécoise des consultantes en lactation diplômées de l'IBLCE
514-990-0262
ibclc.qc.ca/en

Centres de référence des grandes régions de Montréal et de Québec
2-1-1
211qc.ca/en

La Leche
1-866-255-2483
allaitement.ca (Quebec) (in French only)
lllc.ca (Canada)

Mouvement Allaitement du Québec
mouvementallaitement.org (in French only)

Nourri-Source
514-948-9877 / 1-866-948-5160
nourri-source.org/en

Réseau des centres de ressources périnatales du Québec
rcrpq.com/english-version

Remember that everyone's breastfeeding experience is a little different and that every baby is unique. If you or your friends have had difficult breastfeeding experiences in the past, that doesn't mean you will have trouble this time.

It's normal to need time to get used to breastfeeding. As you're learning, you may have moments when you question your decision. It's a good idea to know who to turn to for help and to have people around who can support you.

Breastfeeding a baby isn't always easy, but once breastfeeding is established, it can be very rewarding and nourishing for you and your baby. Trust yourselves and enjoy the pleasures of parenthood—one day at a time.

Preparing for the birth

Stéphanie Caron

Is your due date coming up soon? Check with your prenatal care provider about when you should go the hospital or birthing centre.

Some facilities allow you to contact the birthing unit directly with questions about your pregnancy starting at 20 weeks.

In the weeks prior to your due date, think about what you want to bring to the hospital or birthing centre and start preparing your bag. Knowing who will care for your other children when it's time to leave for the birthing facility will also take a load off your mind when your **labour** starts. Think about telling the person about their routine and preferences.

Visiting the hospital or birthing centre

During your pregnancy, you can find out about the different options available for giving birth (hospital, birthing centre), their services and their specific features (routine, rules, length of stay, and types of interventions).

Some hospitals and birthing centres allow you to visit their birthing rooms. But more and more of them offer virtual tours online. These video tours provide a detailed overview of what will happen during your stay and allow you to familiarize yourself with the surroundings. They also provide information on the type of equipment available during the birth (e.g., bathtub, shower, physio balls, birthing bar, cushions, benches).

Ask your health professional or prenatal class instructor about visiting opportunities.

What to bring to the hospital or birthing centre

Suggestions for the mother

- ☐ Your health insurance card and other proof of insurance (if you have any)
- ☐ Your hospital card
- ☐ Your pregnancy notebook and pregnancy follow-up forms (sheets 1, 2, 3, and 4) if you received any during your pregnancy checkups
- ☐ Your birth plan
- ☐ Your vaccination record
- ☐ A note pad and pen
- ☐ Comfortable clothes for the labour and delivery (if you don't want to wear a hospital gown)
- ☐ Comfortable clothes for day and night
- ☐ Slippers and warm socks
- ☐ Tissues (not always provided by the hospital)
- ☐ A change of clothes and underwear
- ☐ One or two nursing bras
- ☐ Going home outfit
- ☐ Super maxi pads (heavy flow)
- ☐ Your toiletry bag
- ☐ Your glasses and contact lens case, if you wear them
- ☐ Snacks (like muffins, cereal bars, dried fruit) and drinks
- ☐ Items you may want during labour, like massage oil, extra pillows, a hot water bottle, and music
- ☐ Reading material
- ☐ A watch
- ☐ Any medication you are taking
- ☐ Your *From Tiny Tot to Toddler* guide!

Suggestions for the partner

- ☐ Comfortable clothes and shoes
- ☐ Food and drinks
- ☐ A camera
- ☐ Reading material
- ☐ Your toiletry bag
- ☐ A bathing suit (if you want to get in the whirlpool with your partner during **labour**)
- ☐ Your pillow
- ☐ Pyjamas
- ☐ A change of clothes

Suggestions for the baby

- ☐ Diapers (if not provided by the hospital or birthing centre)
- ☐ Pyjamas
- ☐ Undershirts and bodysuits
- ☐ A blanket
- ☐ A hat
- ☐ Going home outfit (appropriate for the season)
- ☐ An infant car seat (required to go home by car, see page 673)

Vaginal birth after caesarean

Women who have had a caesarean (also known as a caesarean section or C-section) are often able to give birth to subsequent children vaginally. Approximately three in four women who prepare for a vaginal birth after a caesarean (VBAC) do give birth vaginally.

Advantages and risks of VBAC

There are many advantages to giving birth vaginally. There are no risks of complications from surgery, you get to hold your baby for as long as you want right after she is born, you are more mobile, and your recovery time is shorter.

However, vaginal birth after caesarean does carry a very low risk of **uterine rupture**. If this happens, an emergency C-section will be necessary. Uterine rupture is rare, but can have very serious consequences for both mother and baby.

A planned caesarean also carries the risk of complication (see Caesarean, page 235).

Decision to have a VBAC

If your last baby was delivered by C-section, you may be wondering how you will bring your baby into the world this time: vaginally or by C-section?

To help you make this decision, your doctor or midwife will assess your situation and tell you what factors could increase or decrease your chances of giving birth vaginally. When discussing this question, make sure to express your preferences and needs with respect to the options available.

In some cases, vaginal birth is contraindicated and will not be recommended.

Your plans may also change. For example, your decision to give birth vaginally may be re-evaluated during your pregnancy, and your healthcare provider may in the end recommend a caesarean. Conversely, if you are planning a C-section, your **labour** may begin before the date set for your caesarean and you and your doctor may decide that you can deliver vaginally.

Preparing for a VBAC

Preparing for a VBAC is no different from preparing for any other vaginal birth. For example, you can take prenatal classes or learn more about pain relief (see Techniques for coping with childbirth pain, page 211).

Having a friend or family member or doula at your side throughout labour and the birth can be helpful. Research shows that this kind of support makes delivery go more smoothly and reduces the risk of having a C-section. Also, remember that you can have an epidural during labour.

Breech presentation

If your baby is positioned with his feet or buttocks facing downward (breech), your doctor or midwife may want to attempt to turn him at around 36 or 37 weeks. This technique, known as version, is used to move the baby into a head-down position and increases your odds of having a vaginal birth. The version procedure is performed at the hospital.

Your doctor or midwife will place her hands on your abdomen to try to move your baby into a head down position. Version is usually attempted after the baby's position has been verified through **ultrasound**. In some cases the procedure is not possible or is contraindicated, for example if there are low levels of amniotic fluid.

After the version procedure, a fetal non stress test (monitoring) will be done to make sure your baby tolerated the procedure without a problem. There are fewer risks associated with version than with a C-section.

If your baby cannot be turned, you can discuss the possibility of attempting a vaginal birth with your doctor or midwife.

Vaginal delivery of a breech baby requires a special evaluation and certain conditions must be met. Not every hospital may offer it. A caesarean will be considered in most cases of breech presentation. Talk to your healthcare provider about your options.

Breech presentation

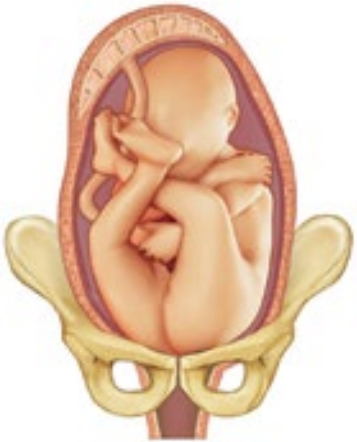


Illustration: Maurice Gervais

Dominic Morand

Birth plan

When your baby is born, you will have decisions to make as parents about the treatment and care mom and baby will receive. Keep in mind that no one knows ahead of time how the birth will go, and that you may change your minds during delivery.

Nonetheless, you will feel better prepared if you have taken the time during pregnancy to:

- Identify your wishes and concerns.
- Share your thoughts with your partner and your family and friends.
- Inform all the health professionals who will be assisting you, as well as anyone who will be with you at the birth, of your values, preferences, and wishes.
- Find out about the services and features available at the hospital or birthing centre where you will have your baby.

A birth plan is a tool that can help guide your thinking. It also lets you communicate your wishes, verbally or in writing, to health professionals and anyone else involved in the birth so they know what is important for you and your partner.

There are many sample birth plans available for your use. Ask for one from your health professional or at prenatal class, or see if your hospital or birthing centre has a version they use. You can also look for sample birth plans in books or online.

Your birth plan describes your ideal birth. Most births go well, but sometimes things can happen differently, for example, in the event of an emergency situation for you or your baby's health.

Keep an open mind about how things may go. Deliveries are unpredictable.

Be confident and remember that if you have any doubts or questions about decisions to be made, you can ask your health professionals for information. They can help you during the delivery.

No matter what type of plan you choose, a good birth plan should be:

- Clear and short (no more than one page)
- Discussed with your health professional before the birth
- Flexible

The following table can help you plan, as much as is possible, the birth of your child.

Things to think about when preparing your birth plan

Topic	Things to think about
Support during the birth (see Having someone with you during childbirth, page 210)	• Who do you want to be with you during **labour** and at the birth? • Do you want a doula to assist you? (see page 120). If so, it is preferable to let your health professional know. • Do you want to know in advance which medical staff will be present at your delivery (e.g., doctors, nurses, midwives and professionals in training)?
Methods for coping with pain (see Understanding and coping with pain, page 209)	• What methods would you like to use during labour to cope with or relieve pain or make it more bearable? (see page 209) • What kind of environment do you want during the birth? (see page 210) • Do you want to use any particular techniques to help relieve pain? (see page 211) • Do you want to use medication? (see page 232) • Which positions would you like to try during labour (see page 215) and pushing (see page 221)? • What kind of equipment and accessories are available to you at the hospital or birthing centre?

Topic	Things to think about
Interventions during childbirth (see Possible interventions during labour, page 226)	• What interventions are possible during childbirth at your hospital or birthing centre (e.g., induction and stimulation of **labour**, fetal monitoring, epidural, episiotomy)? If you wish, ask about: – The reasons for these procedures – Their effects on you and your baby • Which of these procedures do you want to have during delivery and which ones do you want to refuse? • How you plan to deal with unexpected developments? • Are you prepared for the possibility of a caesarean birth? (see page 235) Do you want someone to be with you during your caesarean, and if so, who?
First moments with your baby (see First moments with your baby, page 224)	• Do you want skin-to-skin contact with your baby right after giving birth? (see page 241) • How do you envisage rooming-in with your baby at the hospital or birthing centre? • Will it be possible to stay with your baby at all times? Is this encouraged at the hospital or birthing centre? • Do you want the person who is with you to be able to stay at all times? • If you are in a shared room, what measures are taken to help you room-in and enjoy private time with your baby? • What are the routines and procedures at the hospital or birthing centre during your stay? Are there times where you can ask not to be disturbed so you can rest or have privacy?

Topic	Things to think about
Exams and interventions after the birth (see Caring for your newborn, page 243)	• What exams, interventions, and medications will be suggested for you and your child after the birth? If you wish, ask about: – The reasons – The possible consequences – The timing of these procedures • How do you want to deal with unexpected developments after your baby is born, for example, if your baby is premature and/or has to stay in hospital? (see page 245) • Do you want to have access to measures that make it easier to stay with your child at all times during hospitalization? • If you want to breastfeed your baby, what measures are available at the hospital or birthing centre to help you do so? Would you like to use breast milk banks?
Feeding your baby (see Feeding your baby, page 366)	• How do you want to feed your baby? • Have you thought about telling your family and the professional at your hospital or birthing centre about your decision to breastfeed? • Does your hospital or birthing centre have people familiar with breastfeeding who can help you if needed? • If you have a premature baby or things don't go as planned, how do you feel about using commercial infant formula or supplements for your baby?

Preparing for the baby's arrival

The arrival of a new baby brings major life changes for parents and the rest of the family. When you have a newborn, just taking a shower can become quite an adventure. For a while, you may not be able to manage your home household as you usually would.

It's a good idea to get ready ahead of time, for example, by organizing child care for your other kids, making meals you can freeze, and getting used to having a less tidy house. Ask yourself who you can turn to for help: family, friends, neighbours, a community group?

Are your friends and family asking what kind of gift you'd like when your baby arrives? Why not ask for ready-made frozen meals? Or request "help coupons" you can redeem for babysitting, meals, housework, and so on?

Think also about setting your limits. Long visits and unsolicited advice after the baby is born can be more tiring than helpful. Some parents will prefer to have peace and quiet to create a welcoming family space for the baby.

Don't hesitate to accept offers of help—if it's welcome, of course! There are also community groups that provide services and support to families, for example, a few hours of housework or childcare per week. Contact your CLSC to find out what is available in your area.

Some parents will prefer to have peace and quiet to create a welcoming family space for the baby.

A few tips to help get ready for baby's arrival at home

- When you cook, prepare extra quantities you can freeze in meal-ready portions. Friends and family can also help out by offering homemade frozen meals as a gift.
- Get the house ready for baby's arrival. You can borrow furniture, strollers, and clothes from friends and family, for example, or buy them new or used. Community organizations providing services to families are useful resources.
- If people offer to lend a hand, be clear about your needs. Make a list of things that would make your life easier (e.g., helping with errands, cleaning the house, making meals, picking up your other children at daycare).
- If people don't offer their help, don't hesitate to ask in advance for a helping hand in the weeks after your return home. A little extra assistance can help you catch your breath and make the most of your first days and weeks with your baby.
- Being flexible is the best approach for dealing with the new situations you will face.

Sandra Estrela

Mireille Barakat

The start of labour

Véronique Poirier Jutras

You will soon be bringing your baby into the world. **Labour** generally begins spontaneously between 37 and 42 weeks of pregnancy.

Your expected delivery date is not a deadline. Even if you have not given birth after 40 weeks, there is still a good chance labour will begin on its own.

However, it may be preferable to give birth before 42 weeks rather than wait until 42 weeks have passed. If there is still no sign that labour has started after 41 weeks, your doctor or midwife will discuss the available options with you. They may suggest you undergo some tests, such as monitoring, or **ultrasound**.

The test will help determine whether you can continue to wait for labour to begin on its own or whether it is preferable to induce labour (see Inducing labour, page 227).

Recognizing the start of labour

No one can predict when and how your labour will begin. Most women will recognize labour because of certain telltale signs, such as contractions or their waters breaking. It's normal at that point to feel excited or anxious.

Passing the mucus plug

The mucus plug, which blocks the cervix during pregnancy, is made of thick, jelly-like substance sometimes tinged with blood. You may lose your mucus plug several days before you give birth or during labour. You can even lose it in several stages.

If you lose your mucus plug, don't be too quick to jump to conclusions. This doesn't necessarily mean labour has started. You will need to wait for other signs.

You may also lose your mucus plug without realizing it.

Contractions

For most women, **labour** begins with uterine contractions. During contractions, your belly grows tight and hard, and you have pain that lasts at least 20 seconds (see Telling the difference between contractions and other abdominal pain, page 157).

Many women feel pain in the lower abdomen. For others, the pain is centred in the lower back and spreads to the front. Some women find the pain of contractions similar to menstrual cramps, only stronger.

Every woman will experience contractions in her own way. The sensations may be different for the same woman from one pregnancy to another.

Contractions during labour are regular and grow steadily stronger.

Breaking of the waters (rupture of the amniotic membrane)

For some women (about one in ten), the breaking of the waters (rupture of the amniotic membrane, or amniotic sac) signals the beginning of labour.

The amniotic membrane is made up of two layers, which are often referred to as "membranes." The membrane envelops your baby and holds the amniotic fluid that surrounds him. When it ruptures, the amniotic fluid leaks out.

This is commonly known as having your "water break" because the liquid that leaks out is clear like water, although sometimes tinged with a bit of blood. You may only leak a few drops or it may leak enough to wet your bed or your clothes. In some cases, there may be so much liquid that it drips onto the floor.

At the end of pregnancy it can be difficult to distinguish between normal vaginal discharge and amniotic fluid (see Telling the difference between the types of discharge, page 159). Generally with amniotic fluid, there will be enough to soak a sanitary pad.

What to do?

When your water breaks, you should go to the hospital or birthing centre, even if you have no contractions.

The staff will make sure your baby is doing well. They will also check whether your membrane did actually rupture, or if you simply have vaginal discharge, which tends to be heavier at the end of pregnancy.

Labour will likely start in the hours after your water breaks. If the contractions still haven't begun or if you are a carrier of group B streptococcus (also called GBS), labour may need to be induced (see Inducing labour, page 227).


Alexandre Mallette

When your water breaks, you should go to the hospital or birthing centre, even if you have no contractions.

When should I go to the hospital or birthing centre?

Towards the end of your pregnancy, your doctor or midwife will explain to you the right time to head to the hospital or birthing centre. This will depend on the distance you have to travel, your previous deliveries, your health, and the state of your cervix.

Towards the end of your pregnancy, check with your doctor or midwife at what point you should go to the hospital or birthing centre.

However you should go to your hospital or birthing centre immediately if any of the following situations occurs:

- For a first delivery, you are having regular contractions every five minutes or less for one hour
- This is not your first delivery and you are having regular contractions every five minutes or less. If you live more than 30 minutes away, you should head to the hospital or birthing centre when your contractions occur every ten minutes
- Your water has broken (your membrane has ruptured)
- You are losing blood
- You no longer feel your baby move (see Lack of baby movement after 26 weeks, page 155)

Women often go the hospital or birthing centre because they think they are in active **labour**, when in fact they are still in early labour (see Early phase or "latent phase" of labour, page 218). If this happens, you will be advised to return home and come back later. This allows you to get used to the contractions at home, in a familiar environment.

When labour begins or when in doubt, call your midwife or a nurse at the obstetrics department of your hospital.

They will check with you to see if labour has started and answer your questions, give you advice, and tell you when to come to the birthing centre or hospital.

Understanding and coping with pain

The pain of labour is unique and serves a purpose. It signals the start of the opening process that will lead to the birth of your baby. This process happens gradually. A rhythm develops and the intensity of the pain steadily increases.

The pain is stronger during contractions, while the period between contractions gives you time to recover. For some women the start of labour is hardest; for others the most difficult moment is when it is time to push.

There are various things that can help cope with childbirth pain without using medication. Knowing what they are can help women and couples better understand the pain and prepare in advance.

Having someone with you during childbirth

During childbirth, a woman needs to feel the presence and support of someone she knows and trusts. This can be the baby's father, the woman's partner, a member of her family, a friend, or a doula (see Doulas, page 120). This presence will help her feel better, and reassure and encourage her during labour.

As a father or partner you may feel helpless and powerless during the birth, especially since this is an extremely important time for you. What do you do when the one you love is in pain and tells you she can't take it anymore? How do you deal with all these emotions?

There's no game plan that's guaranteed to work, but you should know that your presence makes a big difference. Try to adopt a positive and caring attitude and encourage your partner as much as you can.

You don't need to be an expert to be useful during delivery. Don't be afraid to try different things. Your partner will tell you what feels good. Keep supporting her and continue what you're doing if your words and actions seem to be helping.

Creating a supportive environment

Women who give birth need an environment where they feel calm, safe and confident. This helps them to secrete the hormones needed for labour. To create a supportive environment, you can do things like dimming the lights and reducing ambient noise as much as possible (e.g. turning down the monitors, asking people to whisper).

Techniques for coping with childbirth pain

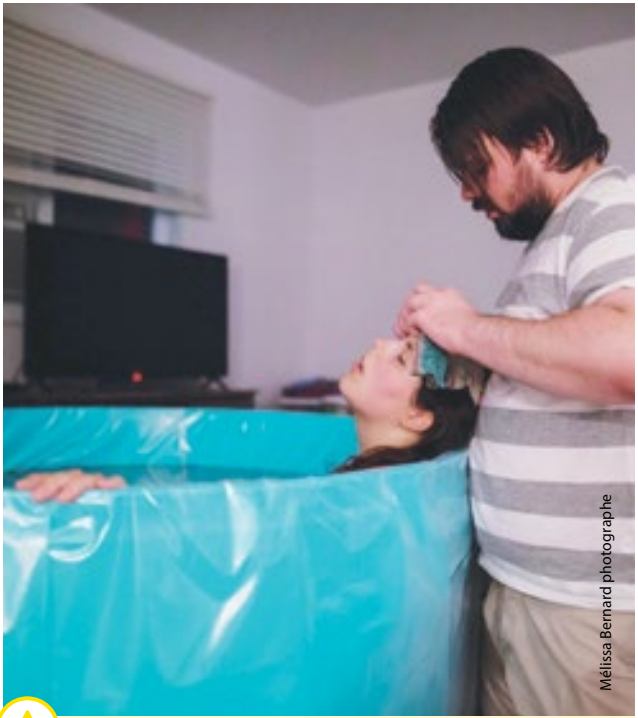
You can try various techniques to see what you find helpful for coping with the pain. Different things may work at different times during your labour.

Movement

Movement helps labour progress. During childbirth, you are encouraged to move, walk around, and squat. Find a comfortable position and don't hesitate to switch from one position to another (see Possible positions during labour, page 215). Large physio balls are usually available to sit and move around on. Don't hesitate to ask for a ball if nobody offers one to you.

Using water

Most hospitals and birthing centres offer you the option of taking a bath or shower. Many women find that being in the water helps them cope with pain.



Many women find that being in the water helps them cope with pain.

Massage

Gentle massage can help reduce anxiety and make the pain easier to bear. During contractions, some women prefer vigorous massage of painful areas or **acupressure**.

Compresses

Hot or cold compresses applied to painful areas can help reduce pain.

Relaxation methods

Some women learn relaxation methods such as breathing techniques, visualization, and self-hypnosis, or do yoga.

You can practice these methods during your pregnancy to help yourself prepare. During **labour**, listening to music and creating your own bubble of calm can also be soothing.

Other techniques

Some birthing facilities also offer injections of **sterile** water beneath the skin or the use of TENS machines, which electrically stimulate painful areas. If either of these methods interests you, don't hesitate to ask your healthcare provider for more information.

If you get to a point where the methods for coping with the pain are no longer working or you feel like you can't bear it any more, keep in mind that pain can often be relieved with drugs (see Pain medication, page 232).

Tips for coping with childbirth pain

- Have someone with you—the baby's father, your partner, a family member, friend, or doula.
- Create a warm, calm, and intimate atmosphere.
- Stay warm.
- Trust yourself and your instincts.
- Stay in the moment.
- Visualize what is happening inside of you.
- Move and change positions as needed (don't stay lying down)—walk around between contractions.
- Relax.
- Breathe slowly.
- Take a shower or bath.
- Eat and drink as needed.
- Make noise.
- Don't hesitate to ask for whatever would make you feel better.
- Have someone encourage and comfort you through their words and actions.
- Have someone touch you, massage you, or simply hold your hand.
- Have someone sponge you with a wet compress.

Keeping your upper body straight can help speed up labour.

Positions during labour

Throughout labour, you can try different positions to help dilate the cervix and help you relax between contractions. Lying flat on your back is often the least comfortable position. If you feel the need to lie down, lying on your side is often more tolerable.

Whether you're standing, squatting, sitting on a physio ball, or even kneeling on all fours, keeping your upper body straight can help speed up labour.

The following page shows examples of the various positions you can try during labour.

Possible positions during labour

Standing

Sitting

Squatting

Kneeling

Illustrations: Maurice Gervais

The stages of childbirth

Caroline Nicolas

Throughout **labour** your body undergoes changes to allow your baby to make his way to the world outside. Childbirth is divided into these three main stages:

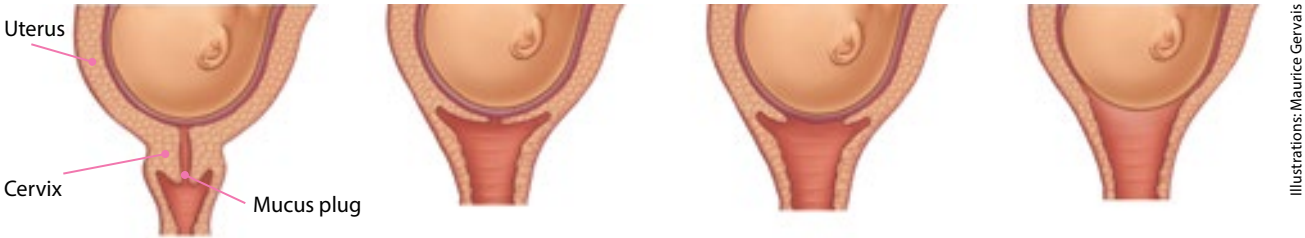
First stage: Thinning and opening of the cervix (also called dilation)
Second stage: Descent and birth of your baby
Third stage: Delivery of the placenta

It isn't possible to predict the length of each stage because it varies from one delivery to the next.

First stage: Thinning and opening of the cervix

The first stage of labour is the period when your contractions start to be regular. These contractions allow the cervix to thin (efface) and open completely (dilate), until it is 10 centimetres wide.

Opening of the cervix



During pregnancy the cervix is closed and thick.

At the beginning of labour the cervix has thinned (also called "effaced").

During labour the cervix opens (dilates).

At the end of the first stage of labour the cervix is fully dilated (10 cm).

Illustrations: Maurice Gervais

Progression of labour

Early phase or "latent phase" of labour

During the latent phase, you may have contractions without being certain what they mean. Is it the start of labour or a false alarm?

At the beginning, the contractions are not very strong. You'll be able to talk during a contraction. They are often irregular and don't last very long. Try to stay calm and don't forget to sleep and eat. Feel free to take a bath or shower if you like. Take this opportunity to get accustomed to what's happening inside your body.

This phase may be long or short; you'll need to be patient. It's not yet time to go to the hospital or birthing centre unless your water breaks or you no longer feel the baby moving.

If your contractions become weaker or stop altogether, this is called false labour. Something is happening inside you, but it's preparatory labour that is helping to "ripen" the cervix.

Active labour

At some point, you'll feel that labour is progressing. The contractions are painful and are closer together, longer and more intense. This is the active phase of labour: the cervix has thinned (effaced) and is open (or dilated) to about 3 to 5 centimetres.

The strength of the contractions gradually increases and the cervix gradually opens to 10 cm (complete dilation). The contractions are often very painful at 8 or 9 cm. They are most intense just before complete dilation at 10 cm.

This phase is often compared to a storm. You may experience strong emotions or feel the need to make noise or scream. You may feel like you're losing control and that it will never end. This is normal.

Try to give in to the **labour**, breathe, visualize your baby starting to move down inside of you and stay in contact with her (see Understanding and coping with pain, page 209).

Labour can be intense and bring strong feelings and emotions. Trust yourself and don't be afraid to ask the person with you or your healthcare team for what you need.

Second stage: Descent and birth of your baby

The second stage of labour begins when your baby has dropped well down into your pelvis and the cervix is fully open (dilated). The baby can now descend into your vagina to be born.

Pushing

When your cervix is open (dilated) to 10 cm, the sensations become different; you will probably feel the need to push. The contractions become a force within you, and all your energy is concentrated on pushing to help bring your baby into the world.

You may feel the urge to push before your cervix is fully dilated. Your care team will guide you when it's time to start pushing to ensure that your pushes are more effective.

The time between contractions can allow you to recover between pushes.

You may have a bowel movement during the pushing stage. This is completely normal. It is also possible that your **perineum** won't have time to stretch enough as the baby comes out and it may tear. These tears usually heal well on their own after the birth.

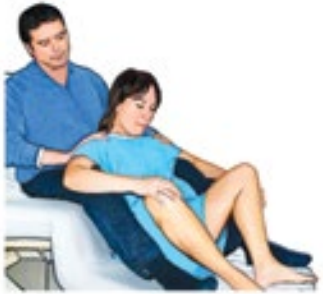
If you have an epidural, your awareness of the urge to push is lessened and may even be entirely absent at the beginning of the second stage. Awareness of the urge will come later, as your baby descends with the contractions. Normally, you can wait to push until you feel the urge to do so. Your efforts will then be more effective—you'll do a better job of pushing and won't have to push as long.

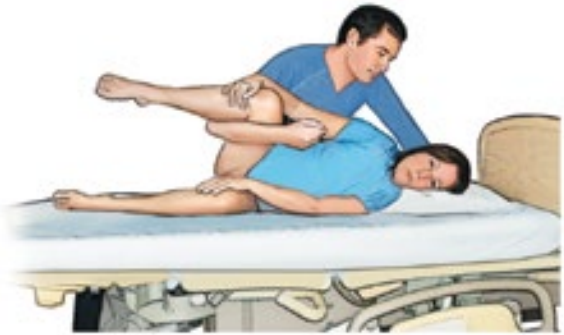
Pushing positions

The following page shows examples of the various positions you can try during the second stage of **labour**.

With help from the person accompanying you or the healthcare team attending the birth, find a position that works for you. Feel free to change positions when you feel the need to do so.

Possible pushing positions





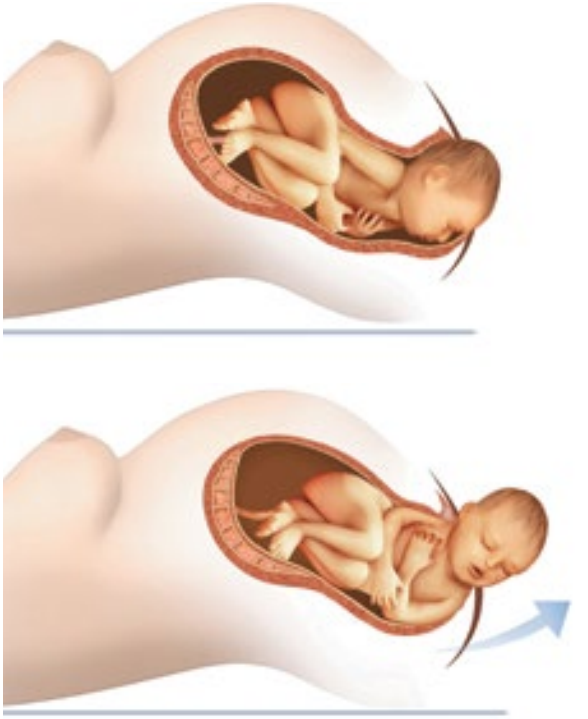
Illustrations: Maurice Gervais

Birth of your baby

The time when you push is an intense experience for you and those accompanying you. As your baby prepares to enter the outside world, the top of his head will appear, and the father or partner will be able to see the baby's hair.

You can also watch your baby's progress in a mirror (mirrors are available in most birthing rooms). After the top of the head, the baby's face will appear. Another push and the baby's shoulders and rest of his body will come out.

Birth of the baby



Illustrations: Maurice Gervais

Third stage: Delivery of the placenta

Your baby is born, but the delivery isn't over yet. Contractions will continue for a little while longer to deliver the placenta.

After the placenta is delivered, your uterus will continue to contract to prevent **hemorrhages** and to regain its original shape. If you breastfeed, your baby's first few feedings will stimulate the production of **oxytocin**, a hormone that increases contractions of the uterus.

If the contractions aren't strong enough, there is a risk of hemorrhaging. In this situation, treatment consists of massaging the abdomen at the uterus to stimulate it to contract, or giving oxytocin as a medication.

Usually, the father or partner will be invited to cut the umbilical cord.

First moments with your baby

Within moments of being born, your baby will announce his arrival with his very first sounds. He will be placed on you. The care team will dry your baby off and make sure he's doing well. If needed, they will clear the secretions out of his nose and mouth.

If all is well with both of you, your baby will stay on your chest, skin to skin. Ideally he will remain there for at least two hours without interruption. With both of you under a warm blanket, you can cuddle your baby as you get acquainted for the first time. At last you can marvel at his tiny face, his fists, and feet, and meet his gaze.

All of this helps your baby to gently transition to life outside the uterus; skin-to-skin contact allows him to maintain his body heat and regularize his breathing and heartbeat.

In addition, it makes your newborn feel safe and makes breastfeeding easier. At some point, your baby's instinct will be to nurse for both food and comfort. The care team assisting with your delivery can help you get started with breastfeeding.

If your condition does not allow it, skin-to-skin contact can be with the father or another significant person. If skin-to-skin contact can't be made right away, don't worry, you will have the opportunity later on and your baby will be just fine.

Your baby will enjoy the warmth of your body or the comfort of being held by his father or another significant person. He will recognize the voices of his parents. Your baby will stick out his tongue, blink his eyes, breathe more quickly, move his lips, turn his head—it's time to get to know one another! This is a wonderful and emotional time of discovery for all, one that marks a special period of bonding as a family.

Your baby is enveloped by the warmth of your body and instinctively seeks to nurse for food and comfort.

Possible interventions during labour

iStockphoto

Stripping the membranes

Toward the end of your pregnancy, your healthcare provider may suggest stripping your membranes (also called a membrane sweep). The procedure can trigger uterine contractions within a few days so you don't have to be artificially induced after 41 weeks (see Inducing labour, page 227).

A membrane sweep can be done during a vaginal exam to check the dilation and consistency of your cervix. It can be an uncomfortable, sometimes painful, procedure and may cause some spotting for the first 24 hours.

Inducing labour

When is labour induced?

Labour will be induced if there is a medical reason to do so, e.g., a woman's water has broken (rupture of the amniotic membrane) but she is not having contractions, or the pregnancy has gone beyond 41 weeks.

In other rare situations the health of the mother or baby may justify inducing labour. Talk to your health professional about the reasons for induction and its potential consequences.

Methods used to induce labour

There are several different ways to induce labour, and the method chosen will depend on many factors, like how ripe the cervix is and whether or not it is a first delivery.

First the ripeness of the cervix is evaluated. If the cervix is still closed (or thick), the woman may be given hormones vaginally (via tampon, tablet, or gel) or orally (via a pill). This will soften the cervix and it will begin to thin (efface). The cervix will then open (dilate) a few centimetres.

Sometimes a catheter with a small balloon attached is inserted into the cervix. The balloon can then be inflated inside the cervix to open it. These methods may sometimes cause discomfort or pain but they help prepare the cervix for the next stage of the induction process.

Contractions may be induced using medication administered intravenously, orally, or through the vagina. Once the medication starts to take effect, it must usually be administered until the baby is born.

It is also possible to break water (rupture the amniotic membrane) artifically. This procedure is generally no more painful than a cervical examination and does not harm the baby.

Stimulating labour

Once **labour** has begun naturally, your care provider may suggest stimulating labour if your cervix is not opening (dilating) and your contractions are too far apart or not strong enough.

The frequency and strength of contractions are increased using **oxytocin**, which is intravenously administered on a continuous basis. Once the oxytocin starts to take effect, it must usually be administered until the baby is born.

Monitoring the baby's health

Throughout the active phase of labour, the care team will regularly check on the baby's well being by listening to his heart with an ultrasound machine. During this phase, an ultrasound is performed every 15 to 30 minutes.

Monitoring with a fetal monitor

If your baby needs to be watched more closely, he will be monitored with a fetal monitor. The period of monitoring can vary in lenght depending on the situation. Monitoring may be intermittent or continuous.

During monitoring, two sensors are strapped to your abdomen and connected to a machine that produces a monitoring strip.

During monitoring, two sensors are strapped to your abdomen and connected to a machine that produces a monitoring strip. One sensor tracks your baby's heartbeat and the other records your contractions and the baby's movements.

If the monitor bothers you or you would like to move around more, ask if you can take monitoring breaks to allow for more freedom of movement.

The staff can explain what the pattern on the monitoring strip means.

There's no need to worry if you stop hearing your baby's heartbeat. Most of the time it's because you or your baby have moved and the sensor is no longer in the right place. Tell the staff so they can readjust it.

When and why is monitoring used?

When?	Why?
During the last trimester	To make sure your baby is doing well if • You have health problems (diabetes, high blood pressure) • There are concerns about your baby (reduced movement, underweight, insufficient amniotic fluid)
When inducing or stimulating labour with drugs	To make sure your baby is doing well and to assess the frequency of contractions. Monitoring continues until the baby is born.
During labour	To make sure your baby is doing well, to monitor the frequency of contractions, and to see how your baby is handling them, if • There is any doubt about your baby's well-being, or if the situation requires more in-depth evaluation or follow-up • You request an epidural during labour, in which case you will probably be connected to a fetal monitor until the baby is born • You are planning for a vaginal birth after a caesarean (VBAC) • You have a high-risk pregnancy If you had a pregnancy without complications and you're having a normal labour, your baby's heart will be checked regularly with an ultrasound machine to make sure he's doing well.

Pain medication

In hospitals, certain drugs can be administered to ease birthing pains. The following options may be offered to you: an epidural, narcotics, nitrous oxide gas, or a pudendal nerve block. These methods are described below.

Ask in advance which of these options are available at your hospital.

Everyone reacts differently to medication. If you have any questions, don't hesitate to ask your prenatal care provider or delivery room care team.

Epidural

Epidural anaesthesia, often referred to as an epidural, is the most effective method for relieving childbirth pain. It involves injecting a local anaesthetic through a flexible tube (catheter) inserted between two vertebrae in the lower back. The drug numbs the nerves in the abdominal area and partially numbs the leg nerves.

The epidural reduces or eliminates the pain of **labour** while allowing contractions to continue. However, it can diminish contractions and prevent you from moving around as freely as before. This can slow the baby's descent.

If you want to have an epidural, an evaluation will first be done to ensure, among other things, that this type of anaesthesia is not contraindicated for you.

Good to know...

It is best not to receive an epidural too soon, to ensure that your **labour** is well underway. On the other hand, you may not be able to have it in time to relieve your pain before the push.

Before receiving an epidural, you will be connected to an intravenous solution (IV) that will remain in place until after the medication stops working. You will also probably be hooked up to a continuous fetal monitor, especially if you are given drugs to stimulate your contractions (see Stimulating labour, page 229).

In some hospitals, you can still walk around and go to the bathroom while under an epidural. Ask your care provider.

However, if you have problems urinating, you may need a **urinary catheter**.

The effects of the epidural may make it more difficult to know how to push. This is why there may be a greater need to use vacuum extractors or forceps to deliver a baby when the mother has an epidural. Epidurals do not increase the risk of having a caesarean.

Narcotics

Narcotics are analgesics administered as injections into a muscle or vein. They decrease the sensation of pain without eliminating it completely. They are mainly used during the early phases of **labour** when the pain level is still low. The more the pain increases, the higher the dose needed to relieve it.

The possible side effects of narcotics also increase with the dose. These drugs can make you sleepy and nauseous and affect your heart rate. The baby may also experience some of these effects. That's why narcotics are not normally used at the end of labour.

Sometimes the baby requires medical monitoring for a few hours after birth until the drugs are eliminated from his system. However, these drugs have no long-term effects on the mother or baby.

Nitrous oxide

Nitrous oxide, also known as "laughing gas," is administered through a breathing mask. It partially relieves pain during labour. Nitrous oxide can cause nausea and dizziness, but is generally well tolerated.

Pudendal nerve block

A pudendal nerve block is a pain medication administered just before the push. Its purpose is to reduce **perineum** and vaginal pain during childbirth. Using a long needle, an anaesthetic is injected into the two pudendal nerves through the vagina.

You can discuss pain management options in advance with your prenatal care provider or ask your delivery room care team if you have any questions.

Episiotomy

An episiotomy is a cut (incision) in the **perineum** that is made just as the baby is about to be delivered. It may occasionally be used in situations where the baby needs help to exit more quickly. The cut is then sutured under local anaesthesia.

Episiotomies are no longer done routinely because they have been shown to increase the risk of deep tears to the perineum.

Caesarean

The caesarean (also called caesarean section or C-section) is a type of delivery performed when the baby cannot be born through the vagina. This surgical procedure involves cutting open the mother's abdomen and uterus to remove the baby. In Québec, about one in four women give birth by C-section.

Reasons to have a caesarean

A caesarean can be planned or unplanned, and there are several reasons why it may be performed. Here are some examples of situations where a caesarean may be necessary.

Situations requiring planned caesareans

- Certain medical problems in the mother
- When the placenta fully or partially covers the cervix (*placenta prævia*)
- Certain cases of breech presentation (see Breech presentation, page 190)
- A previous caesarean combined with conditions not favourable for vaginal delivery (see Vaginal birth after caesarean, page 188)

Situations requiring unplanned caesareans

- The baby is in a position that does not allow for a safe delivery
- There are concerns about the baby's health
- **Labour** has not progressed adequately, despite proper stimulation
- The mother has major medical problems

What happens during a caesarean

Before the caesarean, the mother will be given an intravenous solution (IV) and fitted with a **urinary catheter**.

Caesareans are generally done under an epidural (see Epidural, page 232) or spinal block. The spinal block is similar to the epidural, but the drug is injected into a different region of the spine. It allows for a faster anaesthesia. In both cases only the lower body is anaesthetised and the mother remains conscious. In rare cases, a general anaesthetic that puts the patient "to sleep" is used.

Generally, once the preparations for the caesarean are complete, the person accompanying the mother can enter the operating room and sit near her. A sheet hides the view of the belly during the operation.

The incision is usually horizontal, above the pubic hair line. Once the baby is delivered and the umbilical cord is cut, the baby is placed against the mother's skin if both baby and mother are doing well.

The placenta is then removed, and the uterus and abdomen are closed with stitches or staples.

Even after a caesarean, the mother will be able to start skin-to-skin contact with her baby and initiate breastfeeding. Depending on the circumstances and where the delivery took place, this could be in the operating room, the recovery room, or the hospital room (see Is breastfeeding still possible?, page 444). If the mother is unable to start skin-to-skin contact, the father or another significant person can do so instead.

Generally, the person accompanying the mother during a caesarean delivery can enter the operating room and sit near her.

Possible consequences of a caesarean

Caesareans may have short and long-term consequences.

Short-term effects of a caesarean delivery include the following:

- Abdominal and pelvic pains that require the use of drugs
- Difficulty urinating
- Possible difficulties with breastfeeding immediately after the caesarean due to the pain and discomfort caused by movement (see Is breastfeeding still possible?, page 444)
- Hospital stay sometimes longer than for a vaginal birth
- Longer recovery than for vaginal delivery

Most caesareans go well. However, since it is a surgical procedure, complications are possible for the mother, including infection, bleeding, **thrombophlebitis**, and injury to internal organs. These complications may require additional interventions and care.

In the long term, the caesarean may affect future pregnancies by increasing the risk of a placental disorder such as *placenta prævia*. There is also the possibility of **uterine rupture** during a future vaginal birth, although the risk is very low (see Vaginal birth after caesarean, page 188).

In the hours immediately after the birth, a baby born by caesarean may have a lower body temperature. Skin-to-skin contact with the mother or other parent can help improve the situation. Babies born by caesarean are also more likely to experience mild respiratory distress.

Recovering from a caesarean

At the hospital, you will be encouraged to gradually start walking, drinking, and eating as the effects of the anaesthesia wear off and you feel better. Moving around after a caesarean helps speed recovery and prevent complications.

The pain of the incision and numbness of the skin in the surrounding area may be uncomfortable. The presence and duration of the pain and numbness vary from one woman to another. Your doctor will prescribe drugs for pain relief. The incision will heal in the weeks following childbirth.

Before you leave the hospital, a health professional will tell you how to care for your wound and will give you advice for your specific situation. Don't hesitate to ask all the questions you may have. You can also read the section The body after birth, page 254, for more information.

You will also be given advice on how to care for your newborn. Usually a baby born by caesarean does not require any special care.

It will take a few weeks before you can resume all your activities, such as driving, lifting heavy objects, engaging in certain physical activities and sports (see Physical activity, page 258), or having sexual relations (see Sexuality after birth, page 264).

When to consult a health professional?
After your return home, consult a health professional if you see any signs of a possible wound infection (e.g., redness, discharge).

If you experience any of the problems listed in the red box on page 254, see your doctor or midwife right away or go to the emergency room.

You may also find that having a caesarean triggers a range of sometimes contradictory emotions. Each experience is unique, and the way you feel after a caesarean can change over time. Don't hesitate to talk your feelings over with a professional.

The first few days

François-Xavier Delorme

Your baby has finally arrived. Who does she look like? Her daddy? Her mom? Maybe a distant relative? Whatever the resemblance, your baby is unique, and now it's time to get to learn all about her.

Skin-to-skin contact

Skin-to-skin contact with your newborn in the first hours, days, and weeks of life soothes and comforts her. Skin-to-skin contact is an excellent way to get acquainted with your baby and develop an emotional bond.

Enjoy skin-to-skin contact as often as you like. Simply place your baby directly on your chest with just a diaper on and cover her in a blanket.

Skin-to-skin contact with the mother's chest can make breastfeeding easier.

You can start skin-to-skin contact right after birth and continue as long as you like. Your baby will feel warm and safe snuggled up against you.


Julien Carpentier-Roberge

If you plan on driving home, a car seat is mandatory for your baby from the moment you leave the hospital or birthing centre (see Travelling safely, page 673).

Your stay at the hospital or birthing centre

Hospital stays generally last 24 to 36 hours after vaginal delivery and 36 to 48 hours after a caesarean section. At birthing centres, the stay is usually about 24 hours. The length of your stay may vary depending on you and your baby's health.

Your stay at the hospital or birthing centre is a unique opportunity to get used to your baby and learn to take care of her. Make the most of it!

Most hospitals encourage parents to room-in with their newborn. This gives them more time to get to know their baby and get accustomed to taking care of her, with a nurse nearby if they need help or advice.

Rooming in also lets you feed your baby on demand. If you breastfeed, those first moments together are precious for getting your milk production going (see Ways to make breastfeeding easier, page 176).

If you have visitors, make sure that they're not sick when they come to see you and that they don't have any infections, such as a cold or a cold sore (oral herpes).

Many hospitals and birthing centres provide the opportunity to meet with a vaccination counsellor during your stay there. The counsellor's role is to support you with your reflection process about vaccination for your child. If you aren't given this opportunity, don't hesitate to discuss any vaccination-related questions you may have with your health professional (see Vaccination, page 617).

During your stay you must also complete the paperwork required when there is a birth.

Caring for your newborn

During your stay at the hospital or birthing centre, the nurses, doctors, or midwives will provide care to your baby to ensure her well-being and to prevent or screen for health problems.

If you have concerns or questions about the care provided to your newborn, feel free to talk to these health professionals.

Preventive care

In the hours following delivery, the care team will suggest giving your newborn a vitamin K shot to prevent bleeding. Newborn bleeding is rare but can be severe and even fatal.

They will also suggest that an antibiotic ointment be applied to your baby's eyes to prevent certain serious infections.

Physical examination

During your stay, a health professional will give your newborn a thorough physical examination to make sure she is healthy.

Neonatal screening

The purpose of screening is to detect rare diseases that are generally not apparent at birth but can pose serious risks to a baby's health. If a child has one of these diseases, treatment must begin as soon as possible, before symptoms appear. Early detection can help prevent or attenuate severe, permanent consequences.

Hearing screening

After your baby is born, you will be offered a hearing screening. A small plug is inserted into your baby's ear. It's linked to a device that emits sounds and records the ear's response. The test is painless for your child.

For more information on screening for hearing loss, visit quebec.ca/screening/ and click on "Newborn hearing screening" or call 1-877-644-4545.

Blood screening

Within a few days after birth, the staff will suggest that a blood screening be done. To do so, they will take a few drops of blood from your baby's heel.

Urine screening

Urine screening is done when your baby is 21 days old. During your stay at the hospital or birthing centre, you will receive a kit to collect a small quantity of urine from your baby, as well as a leaflet with instructions on what to do.

What happens after samples are taken?

For most children, the screening results will be normal and the parents will not be contacted. No news is good news!

If the screening results are abnormal, you will be contacted and referred to a specialized centre for additional tests.

For more information on blood and urine screening, go to quebec.ca/screening and click "Blood and urine newborn screening" or call:

For blood screening: 1-855-654-2103
For urine screening: 1-855-905-5253

When the unexpected happens

All parents want a healthy baby. But sometimes the happy event of childbirth can take an unpredictable turn.

Even under the best conditions, things may not go as planned. Having a family brings great joys, as well as its share of challenges and uncertainties.

If your baby suffers from an infection, **birth defect**, or other health problem she may require hospitalization after birth or in the days that follow. This comes as a shock to parents who must learn to live with this new reality and adjust to a role different from the one they imagined.

The birth may also occur before the date scheduled. Babies are considered premature when birth takes place before 37 weeks of pregnancy. A premature baby may require some of the special care presented in the table on page 246.

Care of premature babies

Time of birth	Care
Before 34 weeks	Transfer to a neonatal intensive care ward in a hospital that has one. Your baby may • Be placed in an incubator to keep her warm • Receive phototherapy (exposure to light in an incubator) if she has jaundice • Receive intravenous solution (IV) • Receive help breathing • Receive help feeding
34 to 37 weeks	Extra care, but less of it. Your baby may • Receive help feeding • Receive phototherapy (exposure to light or a cradle) if she has jaundice • Receive help breathing (only in rare cases)

Some suggestions for getting through these difficult moments

You may feel guilty or helpless if your baby is hospitalized for a complication such as premature birth, infection, birth defect (whether discovered before or after birth) or another health problem. Here are a few suggestions to help you through these difficult times.

Ask questions

Don't be afraid to ask questions about your baby's health and the care and treatment she's receiving. If you have concerns about certain aspects or her care or treatment, ask if other options are available. She's your baby and you are entitled to have a say in decisions affecting her.

It is the responsibility of members of the care team to keep you informed. However, time constraints sometimes make it hard to have these conversations. Ask them when is the best time to talk and find out when the doctor usually visits.

Don't hesitate to ask your child's care team any questions you may have.

Ask for help and support

If possible, ask your family and loved ones to help you by taking care of the house or minding your other children. You may not always be able to be at the hospital, especially if you have other children.

In the case of a prolonged hospital stay, it's essential that you get enough rest to stay healthy and to be able to care for your baby when she arrives or returns home. Remember that your child will need you not only during the hospitalization but afterwards as well.

Don't hesitate to ask for psychological help if you feel you need it. Specialized care teams often include social workers and psychologists that can support you.

Find out about the resources available

The specialized care team at the hospital can advise about help you can receive at home. You can also request a follow-up with your CLSC when your child is discharged from the hospital. It's important not to neglect the post-hospitalization period, which may also be difficult for some parents.

If your baby has a particular health problem, check if there are resources for parents of children with the same problem. The help of other parents who face similar challenges can be useful.

The following website lists many resources available across Québec: laccompagnateur.org (in French only).

There is also an association to support parents of premature infants:

Préma-Québec
1-888-651-4909 / 450-651-4909
premaquebec.com

A few suggestions for making a hospital stay easier

Many parents want to be with their baby when she is hospitalized. Sometimes, the father and mother take turns staying with their baby during the day when they are able, or may want to spend the night. Check with your hospital about the options available.

For example, you can ask if the hospital has a room where you can room-in with your baby if you want to. Keep in mind, however, that some hospitals may have space constraints that make staying with your baby difficult.

Have physical contact with your baby in an incubator

Don't hesitate to ask for help with touching your baby in the incubator or with holding her in your arms or skin-to-skin under a blanket. Your baby will feel your presence and this will help her. If you can't take her out of the incubator, ask if you can put a scarf or piece of clothing that smells of you in beside her.

Breastfeed your hospitalized baby

Even if she is hospitalized, your baby may be able to nurse and take in part or all of the milk she needs. If you want to breastfeed, but your baby is not yet able to suck, it is important to stimulate your breasts in the hours after birth to get your milk production going (see Ways to make breastfeeding easier, page 176).

Don't hesitate to ask for help with touching your baby or with holding her in your arms or skin-to-skin.

Express your milk until your baby can breastfeed on her own. Your milk can be refrigerated or frozen until she is ready for it. When you give her the milk, extra minerals or calories may be added to it if your baby needs them.

You can ask for help expressing your milk. Breast pumps are often available in intensive care wards. Don't be discouraged if you get only a few drops the first few times. Your breasts need regular stimulation to produce what your baby needs.

Don't forget that your baby has a tiny stomach and only needs a few drops of milk when first starting to breastfeed. Having a photo of your baby, being close to her, or making skin-to-skin contact for a few minutes beforehand can help you express more milk.

If you hadn't planned to breastfeed, it's not too late to think about it.

Ask about hospital visits

Some hospitals may allow visits by your other children or your loved ones. Make sure your visitors aren't sick when they come to see your baby and that they don't have any infections, such as a cold or a cold sore (oral herpes). Even an ordinary cold can be serious for your newborn.

It can be a good idea to talk with your other children about what's going on. The baby's siblings also have feelings and concerns about the baby's health.

For example, you may wish to reassure them that what's happening with the baby is not their fault. Slightly older siblings often believe that their feelings of jealousy toward the new baby have caused the complications. You can get them involved in caring for the newborn whenever possible.

Death of a newborn child

The loss of a baby is always an ordeal for the parents and family.

It is very rare for a baby to die before birth or in the first few days of life. The cause is usually extreme premature birth or birth defects.

When a baby dies during pregnancy, it is often recommended that the mother have a natural or induced vaginal delivery. After the delivery, it can be particularly difficult for her if she starts producing milk or has bloody discharge. These signs often act as reminders of the loss of the baby.

Grieving the loss of a baby

At the hospital some parents may ask to hold their baby in their arms, to dress her, or take photos. Doing so can help with the grieving process.

An autopsy may be performed to determine the cause of death. Various funeral options (e.g., cremation, burial) are usually suggested.

Back home it's normal to experience feelings of shock, outrage, confusion, and sadness. The intensity and duration of these emotions will vary from person to person, as will and the amount of time needed to recover. The different phases of grief may overlap, and don't always come in the same order. Also, the two parents often do not mourn in the same way or at the same pace.

Support resources

Parents who have experienced the death of a newborn say that the presence and support of their loved ones helped them through the ordeal.

There are also support groups for parents who have lost a child. These groups can provide valuable assistance to parents as they go through the mourning period and allow them to share their experience with other bereaved parents.

Parents can also see a health professional (e.g., psychologist, social worker) for counselling, either individually or as a couple.

Consult your CLSC to find out about services offered there or other services in your area.

To find the CLSC in your area
Visit sante.gouv.qc.ca/en/repertoire-ressources/clsc.

Fondation Portraits d'Étincelles
Free photo and photo touch-up service for babies who died prior to or at birth (in French only)
1-877-346-9940
portraitsdetincelles.com

Parents Orphelins
Association québécoise des parents vivant un deuil périnatal
514-686-4880
parentsorphelins.org/en

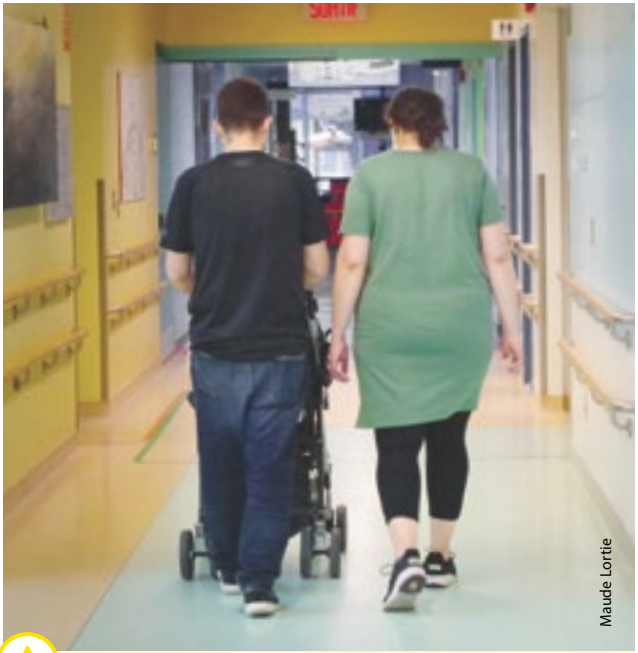
Revenir les bras vides
CHU Sainte-Justine
A series of free videos and information documents on perinatal grief (in French only).
chusj.org/en/Care-Services/C/Pregnancy-Complications/Perinatal-bereavement

You can check with the Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST) for details about absences and leave you may be entitled to.

Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST)
1-844-838-0808
cnesst.gouv.qc.ca/en/working-conditions/leave/specific-situations/leave-event-termination-pregnancy

If your baby died after 19 weeks of pregnancy or after her birth, you may also be entitled to receive benefits under the Québec Parental Insurance Plan.

Québec Parental Insurance Plan
1-888-610-7727
rqap.gouv.qc.ca/en/wage-earner/death/death-of-a-child



Parents who have experienced the death of a newborn say that the support of their loved ones and groups for parents who have lost a child helped them through the ordeal.

The body after birth

Your body needs time to recover. Be patient—it's normal. It will take several weeks to get to a good level of energy.

Back home, if you see signs that worry you, don't hesitate to contact the CLSC nurse or Info-Santé (8-1-1). You can also consult your doctor or midwife.

The following pages provide information about the body after childbirth and about post-delivery care for both vaginal and caesarean deliveries.

After you return home, see a doctor or your midwife right away or go to the emergency room if

- You show signs of **hemorrhaging**
  - You soak one regular sanitary pad an hour for two consecutive hours

  or
  - You lose large blood clots (e.g., more than one egg-sized clot)
- You have a fever—temperature of 38.0°C (100.4°F) or higher
- You have severe abdominal pain not relieved by analgesics
- You have difficulty breathing
- You have a new pain in your leg with swelling
- You have severe headaches, upper abdominal pain, or a sudden change in vision

Call 9-1-1 if you show signs of shock: agitation, weakness, paleness, cold and damp skin, sweating, confusion, palpitations.

Contractions

You may feel uterine contractions, especially while you are breastfeeding. If this isn't your first pregnancy, you may experience more contractions than during previous pregnancies. If you need relief from the pain, contact your health professional.

Blood loss

After giving birth vaginally or by caesarean section, it is normal to experience blood loss, known as lochia. For the first day or two, your blood loss will be heavier than during menstruation and will then diminish. If your bleeding increases instead of diminishing, consult your healthcare provider.

Occasionally you may pass a blood clot. This happens generally in the morning after urinating or breastfeeding. So long as the bleeding lessens after passage of the clot there is no need to worry. Be aware that unusual physical effort may cause redder and more abundant lochia. See the box on page 254 to know when to see a health professional.

As the days go by, the colour and texture of the lost blood will change. It may be mixed with mucus (a whitish substance). The colour will gradually change from pink to brown, becoming paler, and it could turn yellow.

Lochia discharge usually last three to six weeks. During this time, use sanitary pads. Do not use tampons or a menstrual cup.

Hygiene

Hygiene is very important after giving birth. Here are a few helpful tips:

- Change your sanitary pad at least every 4 hours.
- Always wipe from front to back.
- Wash your hands after using the toilet.
- Wash yourself once a day or more, but do not use a vaginal douche.

If you had a vaginal birth, you can shower or take a bath in a clean tub at any time, but don't use oil or bubble bath.

If you had a caesarean delivery, you can shower at any time. You can have a bath starting around five days after the procedure, as long as the incision is healing well.

Stitches

Don't worry if you have stitches in your perineum: they will not tear when you have a bowel movement. After showering or bathing, gently dry the stitches before you get dressed.

If you had a caesarean delivery, it is important to dry the stitches on your belly thoroughly with a clean towel after taking a shower or bath. After seven days, you can remove any adhesive strips that have not come off by themselves. If you see any signs of possible infection (e.g., redness, discharge), see your healthcare provider.

Bowel movements

It is normal not to have a bowel movement in the first two to three days after vaginal delivery and three to five days after a caesarean.

However, if you still haven't had a bowel movement after this period, you may be constipated. Constipation is common after both vaginal and caesarean deliveries.

These tips can help:

- Gradually increase your intake of high fibre foods:
  - Whole grain foods
  - Vegetables and fruits (fresh, dried, frozen, or canned)
  - Legumes and nuts
- Increase your daily water intake.
- Go to the bathroom as soon as you feel the need.
- Gradually resume low-intensity physical activity when you feel able to do so (see Physical activity, page 258).

If these measures aren't enough, ask a health professional whether a laxative might help.

Urine

After the delivery, you may feel a burning sensation when urinating. If you do, try spraying your vulva with warm water while you urinate.

For information on urine leakage, see The perineum and pelvic floor section below.

The perineum and pelvic floor

Seen from the exterior, the **perineum** is the part of the body located between the vulva and the anus (see Female anatomy, page 26). Inside, the muscles of the perineum form a "hammock"—the pelvic floor. The muscles of the pelvic floor support your internal organs, including the uterus, bladder, and rectum. Among other things, the perineum helps prevent leakage of urine and feces.

During pregnancy and childbirth, the perineum adapts to facilitate the birth. After the baby is born, the pelvic floor muscles are stretched. It is also normal that the vulva looks different, e.g., the labia are more open.

After a vaginal birth, the perineum may remain sensitive for a while. In some cases, it may also be sensitive after a caesarean.

It can take several weeks or months before the pelvic floor muscles regain adequate muscle tone. Exercises for the pelvic floor muscles and the deep abdominal muscles can help restore proper muscle tone. It's advisable to talk to your healthcare provider to find out when to start doing these exercises and how to do them properly.

In the first few months after childbirth, a third of all women experience urine leakage. This is especially the case for women who has perineal tears or delivered a large baby.

If you have urine leakage, pain during sexual relations, or any other concerns, don't hesitate to talk to your healthcare provider. If necessary, he or she can give you advice about specialized resources in perineal and pelvic floor rehabilitation (e.g., physiotherapy, sexology).

Fatigue

It's normal to be tired after a vaginal or caesarean delivery. It takes a few weeks to get to a good level of energy. Be patient—your body needs time to recover.

Recovery speed and energy levels vary from day to day and from one woman to another depending on things like the baby's demands, the mother's quality of sleep, and the help she has available. Despite your newborn's needs, try to take care of yourself. If possible, try to sleep when your baby does.

Don't hesitate to ask for help when you need it.

All new mothers need rest and a helping hand to recover from the demands of childbirth.

If you're concerned about your fatigue, don't hesitate to contact Info-Santé (8-1-1) or your health professional.

Physical activity

Pregnancy and childbirth bring about major physical changes that can last for months after your baby is born.

Resuming physical activity little by little can help improve your energy level and physical fitness. It can also contribute to your psychological well-being.

When your pain is gone and you feel up to it, you can gradually resume low intensity activities such as walking. For example, you could start with one daily walk and gradually work up to a few short walks per day. You can increase their frequency and length bit by bit, depending on your energy and tolerance level.

Around four to six weeks after giving birth, you can gradually start increasing the intensity of your activities (e.g., take brisk walks). Choose activities you enjoy while paying attention to how your body has recovered since giving birth.

Listen to your body and its limits. They may not be the same as they were before your pregnancy.

It's usually recommended that you wait until your **perineum** has regained its muscle tone (see The perineum and pelvic floor, page 257) before you move on to high intensity or high impact exercise like running. This can take from a few weeks to several months after childbirth.

As for swimming, you can usually start again once your lochia discharge (see Blood loss, page 255) becomes less abundant. It is advisable to talk to your healthcare provider before you resume swimming.

If you had any complications during your delivery, it may also be wise to check with your healthcare provider before you start exercising again.

Weight

Some of the weight gained during pregnancy is lost with the delivery of the baby and placenta and the release of amniotic fluid. In the six weeks that follow, the uterus returns to its normal size. Blood volume and swelling also decrease, leading to further loss of weight.

After that, your body will gradually use up the fat reserves it accumulated during pregnancy. The pace of weight loss can differ from one woman and one pregnancy to the next. Be patient! It takes time to shed the weight you gained over nine months.

With a balanced diet (see Eating well, page 77) and an active lifestyle (see Physical activity, page 258), losing 1 to 2 kg (2 to 4 lb.) a month is reasonable.

Going on a weight-loss diet is not recommended, especially if you breastfeed. A low-calorie diet can diminish your milk production and energy level.

Pregnancy transforms a woman's body. Even if the weight gained can be lost within a few months, you may not get your pre-pregnancy silhouette back.

Give yourself time to accept these changes and don't hesitate to talk about them with people you trust.

Baby blues

After the birth of your baby it's normal to have mood swings and to cry more than usual. Many new moms experience the baby blues for a short period of time.

The baby blues follow the birth of the baby and can last from a few days to approximatively two weeks. Hormonal changes and fatigue are largely responsible for this temporary depression.

Here are few tips to help you feel better during this time:

- Talk about how you feel.
- Let the tears flow without trying to resist or worry too much about the cause.
- Get your family and friends to help out a little more.
- Allow yourself to take a break or nap.
- Take care of yourself (see Taking care of yourself, page 740).
- Practice skin-to-skin contact with your baby.
- Talk to other parents.

The online tool *You, Me, Baby* provides strategies to support your well-being. Visit toimoibebe.ca/en.

If your baby blues last for more than two weeks or if you feel more and more sad or irritable, you may be experiencing depression.

You can call Info-Santé or Info-Social at any time by dialling 8-1-1 or contact your CLSC or a psychologist.

Hormonal changes and fatigue are largely responsible for baby blues.

Depression

After the arrival of a child, new parents sometimes go through a difficult period or even a depressive episode. Depression often manifests itself differently in men and women.

Unlike the baby blues, which is temporary, the changes in behaviour and mood associated with depression are present almost every day for at least two weeks.

Depression in women

Up to 1 in 5 women experience depression after childbirth.

Women suffering from depression usually experience sadness or a general loss of interest and overall pleasure in daily activities.

They can also show some of the following signs:

- A decrease or increase in appetite
- A sleep disorder (sleeping too much, difficulty sleeping, or inability to sleep, even when baby is sleeping)
- Agitation or psychomotor impairment (e.g., slowed speech)
- Fatigue or loss of energy
- Excessive anxiety and irritability
- Feelings of worthlessness or excessive guilt (e.g., the impression of not being a good parent or not being able to establish an emotional bond with the baby)
- Difficulty developing a sense of attachment, feelings of ambivalence or disinterest toward the child
- Difficulty concentrating or indecisiveness
- Thoughts of death or suicidal ideas

Experiencing some of these signs doesn't necessarily mean you're depressed. They can be confused with normal situations that occur after childbirth (e.g., fatigue from waking up to care for your baby, difficulty finding time to eat, or increased appetite due to breastfeeding).

If you're concerned, see Seeking support.

Depression in men

As many as 1 in 10 men suffer from depression following the birth of a child.

Men experience the same feelings as women but may express their distress differently.

For example, they may be more aggressive or irritable, have mood swings, or feel physical discomfort such as stomach aches, headaches, or difficulty breathing. Some men may also show hyperactive behaviour (escaping into work or sports for long hours) or excess consumption of alcohol or drugs.

Seeking support

If you or your partner are showing signs of depression, or you feel like things aren't going well, seek help right away. Treatments are available for depression and other mental disorders. Consult a health professional, contact your local CLSC or a psychologist, or call Info-Social at 8-1-1.

Sexuality after birth

Some people feel less sexual desire after the birth of the baby. Fatigue, the adaptation to parenthood, the time and energy invested in caring for the baby, physical or emotional complications, and hormonal changes can all lead to a decreased interest in sexual activity. After the birth of a child, the time available for intimacy can also be limited.

Many partners aren't sure when to resume sexual activity after the delivery. If there are no medical reasons to put it off, partners can engage in sexual activity without fear when they feel like it.

The timing for resuming sexual activity with penetration will vary depending on you and your partners' individual needs and preferences.

While breastfeeding, the body releases hormones that can prevent the vagina from producing sufficient lubrication. If that happens, you can use a lubricant to facilitate genital fondling and penetration. Choose a water-based lubricant if you use a condom.

Don't pressure yourself. Adapt your sex life to your new reality.

Birth control

During your pregnancy, start thinking about what kind of birth control you will use after the baby arrives.

Very closely spaced pregnancies may have an impact on the health of the baby and the course of the pregnancy. If you want to get pregnant again quickly, talk to your doctor.

You can still get pregnant even if you haven't had your period yet. Ovulation can occur as soon as the third week after vaginal or caesarean delivery. Use an effective birth control method to prevent an unplanned pregnancy.

Breastfeeding and lactational amenorrhea method (LAM)

If you breastfeed exclusively, ovulation may be delayed. To use breastfeeding (lactation) as a birth control method, you have to understand the principle behind the lactational amenorrhea method (LAM).

To be effective, LAM requires the following conditions:

- Your baby is less than six months old.
- You breastfeed exclusively (no commercial infant formulas, food, or water is given to the baby)
  - Breastfeeding is on demand and not according to a set schedule (see Breastfeeding on demand or often enough to meet baby's needs, page 177). For LAM, feedings should be no more than four hours apart during the day, and six hours apart at night.
- You haven't had any bleeding or started having your period again.

Before using LAM or another natural method of birth control (e.g., Billings or symptothermal), it's a good idea to contact the Serena organization for further information and support.

Serena
Organization promoting natural family planning methods
1-866-273-7362 / 1-888-373-7362
serena.ca

You can also visit the following website:

World Alliance for Breastfeeding Action (WABA)
waba.org.my/resources/lam

Birth control methods

Your choice of a birth control method depends on your preference and your personal situation, which should be assessed with your health professional. This assessment can be done at the end of pregnancy or before you leave the hospital or birthing centre.

The table on page 267 describes the birth control methods available.

Contraceptive implant, IUDs, contraceptive injection, the progestin-only pill, and combined hormonal contraceptives are the most effective types of birth control. Don't stop your current birth control method before starting another. To avoid unprotected sex, keep a supply of condoms handy.

The withdrawal method, or coitus interruptus, and the calendar method are not effective.

Learn about birth control methods by visiting the website prepared by the Society of Obstetricians and Gynaecologists of Canada sexandu.ca.

Birth control methods

Method	When you can start if you have no contraindications
Contraceptive implant	Any time after giving birth, depending on your state of health
Hormonal IUD	Any time after giving birth, depending on your state of health
Copper IUD	Any time after giving birth, depending on your state of health
Contraceptive injection	Depending on your doctor's advice and your state of health
Progestin-only pill	Any time after giving birth
Combined hormonal contraceptives that contain estrogen and progestin: • Pills • Contraceptive patch • Contraceptive vaginal ring	• 6 weeks after giving birth • Depending on your situation, your healthcare provider may recommend you start three to four weeks after giving birth
• Diaphragm • Cervical cap	6 weeks after giving birth
Condom	From the start of sexual relations

Possible effects of hormonal contraceptives on milk production

Hormonal contraceptives do not affect the quality of your milk or the health of your baby.

However, if you use a combined hormonal contraceptive and you are breastfeeding, it's possible you will experience a slight drop in milk production. If this happens, contact a lactation consultant, your midwife, your doctor, or a CLSC nurse.

If you use a hormonal IUD, contraceptive injection, or progestin-only pill, it is unlikely that any of these methods will affect your breastfeeding. If you do notice a problem, contact a lactation consultant, your midwife, your doctor, or a CLSC nurse.

Emergency contraception

If you have had unprotected or poorly protected sex, there are emergency contraception methods you can use.

Emergency oral contraception (EOC; the morning after pill)

This method works up to five days after unprotected or poorly protected sex, at any time after a vaginal delivery or a caesarean, whether or not you're breastfeeding. The sooner it is taken after poorly protected or unprotected sex, the more effective it is. You can get it from a pharmacist without a doctor's prescription.

If you're breastfeeding, be sure to mention it to the pharmacist or doctor. They can prescribe an EOC that you can take while you're breastfeeding.

Copper IUD

Provided it is not contraindicated for you, your doctor can insert a copper IUD up to 7 days after unprotected or poorly protected sex.

Odile Ste-Marie

Dominique Belley

The newborn


Geneviève Hamel

Fetal position

During his first few weeks of life, your baby will often take up the same position he did in your belly. We call this the fetal position.

Size and weight

Babies born from 37 to 42 weeks of pregnancy are said to be full-term. They usually measure 45 to 55 centimetres (18 to 21 inches) and weigh 2,500 to 4,300 grams (5.5 to 9.5 lb.).

It's normal for a baby to lose up to 10% of his weight in the first few days of life. He eliminates his meconium and first stools. He also loses water because he was immersed in liquid throughout the pregnancy. And he's only drinking a little milk at a time. If born at term and in good health, he will be back up to his birth weight 10 to 14 days after birth.

Skin

A newborn's skin colour varies from child to child. His hands and feet are sometimes paler and may stay blueish for up to 48 hours. The skin may also be mottled. This is due to cold – your baby is still learning to control his own temperature. In most cases, the mottling disappears once your baby is in a warm place.

The skin is usually smooth, soft and transparent in places. It may wrinkle and peel, especially on the hands and feet. It is sensitive to heat and cold.

At birth, babies can be covered in ***vernix caseosa***, a white paste that protected their skin in the amniotic fluid. The whitish coating will be absorbed in a few hours or days. Some babies, even premature ones, can also have skin covered with a fine down, which goes away after a few weeks.

Eyes

The eyes of white-skinned newborns are blue-grey or slate blue. Darker-skinned babies often have dark eyes at birth. The eyes usually adopt their permanent colour at about 3 months old but may change up to 1 year. Newborns usually cry without tears, which appear at 1 or 2 months.

Head

Your baby has a delicate neck, but should be able to turn it sideways easily. If he has trouble moving it and it seems to hurt, he may have a stiff neck. If the stiffness persists, get advice from a health professional.

Pressure during labour and delivery sometimes deforms your baby's head. It will regain its round shape in a few weeks. The bones of the skull are not yet knitted. They are attached by a diamond-shaped membrane, the anterior fontanel.

Located on top of the head, the anterior fontanel is supple to the touch and forms a small depression when your child is sitting. You can sometimes see it beating with the heart. A smaller triangular fontanel is located on the back of the head. Fontanels are the most fragile areas of the head, but you can safely wash them and touch them gently. The bones of the skull will knit between 9 and 18 months, and the fontanels disappear.

A bump or swelling containing blood and/or other liquid may be visible beneath the scalp. It will cause the brain no harm and disappear without a trace, usually in a few days.

The baby's head is large and heavy. It needs to be supported when you pick him up.

Swollen breasts

Both boy and girl babies may have swollen breasts, which may even produce a little milk. Do not try to release any milk. Everything will take care of itself in a few days.

Genitals

In **girls** the labia minora are swollen for 2 or 3 days after birth. There may be a whitish deposit between the lips of the vulva. Don't clean it off – it is excellent protection against bacteria.

During the first week, a few drops of blood may drip from the vagina. Don't worry; this mini-menstruation is caused by extra hormones coming from the mother before birth.

In full-term **boys**, the testicles have usually descended into the scrotum, which is purplish red. If they haven't, tell the doctor.

The foreskin is the skin covering the head of the penis. Don't try to force this skin to move. It would be painful and might injure your child. Leave it to nature – in 90% of boys it will dilate and descend naturally at about 3 years old. In only a few cases, this won't happen until adolescence.

Circumcision is an operation in which all or part of the foreskin is removed. It is not recommended because it serves no purpose. Some parents call for circumcision for religious or cultural reasons.

Spots

The newborn may have small red spots between the eyes, on the eyelids or along the back edge of the scalp. They turn white when touched under slight pressure, and become more visible when your baby cries. They will disappear during the first year. Babies sometimes have bluish spots on the buttocks or back, which should be gone by the age of 3. Other marks are permanent.

Sneezing

It's normal for your baby to sneeze often. Because the hair inside his nose hasn't grown enough, he may sneeze up to 12 times a day to eliminate secretions that interfere with his breathing. It's not because he has a cold.

Hiccups

Your baby may also get the hiccups, especially after feeding. This isn't serious. It won't hurt him and the hiccups stop by themselves in a few minutes. Putting him back on the breast may also end his hiccups.

The need for warmth

Newborns need warmth but not too much. They shouldn't perspire. If the room temperature is comfortable for you, it is for him too. A temperature between 20°C (68°F) and 22°C (72°F) is appropriate. Use light blankets; add and remove them according to the temperature. Don't wrap him up too much.

Urine

A baby who is drinking enough will urinate regularly (see Is your baby drinking enough milk?, page 370). His urine is pale yellow and has no detectable smell. During the first week of life, he will urinate more and more often. By day 5, he will be wetting at least 6 diapers a day.

During the first couple of days, you may notice orange spots (urate crystals) in your baby's diaper. These crystals are normal and not dangerous. But if they are still present two days after birth, it may be a sign that your baby is not drinking enough. If you are still seeing orange spots in your baby's diaper after a week, consult a doctor.

Is your baby urinating less often than usual? Does his urine look darker and have a distinct smell? It may be because he's very hot or overdressed and is a little dehydrated.

What to do?

- Remove a layer or two of clothing.
- If he is breastfeeding, increase the number of feedings.
- If you're using a commercial baby formula, make sure it is prepared correctly, because a mistake during mixing (dilution error) can result in dehydration (see Handling commercial infant formula, page 402). Make sure he is drinking enough milk. You can then give him a little water in between feedings.

If the situation persists, call Info-Santé (8-1-1) or consult a health professional.

A baby with a fever may also have darker urine that has a smell. You may need to check his temperature (see Fever, page 643).

Stools

During the first 2 or 3 days, your baby will eliminate the residue remaining in his intestines from before he was born. The stools will be very dark and sticky: this is meconium.

Afterwards, the stools will be yellowish, greenish or brownish.

If your baby is drinking enough (see Is your baby drinking enough milk?, page 370), his stools will be liquid or very soft.

During the first 4 to 6 weeks, your baby may have 3 to 10 bowel movements per day. If your baby doesn't have at least one bowel movement per day, he might not be drinking enough.

After 4 to 6 weeks, some babies fed with breast milk will have fewer bowel movements even if they are drinking enough (e.g., one bowel movement every 3 to 7 days). If your baby is defecating infrequently but the stools remain soft, it is not a problem.

During the first year, the frequency, consistency, and colour of the stools will vary depending on what your baby is fed. You will gradually learn to recognize your child's normal stools.

If your baby's stools suddenly become more liquid than usual, it may be a sign of a transient trouble (see Diarrhea, page 662). If your baby is healthy, continue to feed him normally. If you think he is sick, call Info-Santé (8-1-1) or consult a health professional.

See your doctor if your baby's stools are red or black because this may indicate blood. If the baby's stool is discoloured (white, grey, or beige), consult a physician promptly because it could be a sign of a serious liver problem.

Talking with your baby

Hélène Bouffard

Your baby starts “talking” to you from birth onward. She cries, moans, babbles, wriggles and sometimes sucks intensely. By paying attention to all this, you are communicating with your baby. You can also talk to her with loving words; tell her what you are doing as you take care of her. She will feel safe and secure just at the sound of your calming words.

Your baby will listen more than talk during her first two years of life. This is normal because her brain is still developing. She is absorbing what she hears. She will learn to talk by repeating the sounds and words that she hears.

Your baby will listen more than talk during her first two years of life.

Crying

Babies can't communicate with words, so they use crying as one way of expressing themselves.

All babies cry and it's normal. Some cry more than others.

Crying tends to increase starting in the second week of life. It reaches a peak around the sixth week and usually decreases by the third or fourth month.

It can be hard to understand why a newborn is crying. By spending time with her, you will learn to recognize what her different cries mean. For example, you'll know if she is hungry or tired, needs to burp, needs affection, wants your attention, or has a dirty diaper.

You will also learn how to soothe your baby's crying. Her reactions will help you understand what makes her feel better and what she doesn't like.

Sometimes, despite your efforts, you won't understand why your baby is crying. When that happens, stay with her and try to remain calm. This will teach her that she can trust you.

During her first nine months, your baby doesn't have any sense of time. She needs you to respond quickly when she cries. Comforting a baby when she cries will not spoil her. It teaches her that you are attentive to her needs. She will feel loved.

That said, even if your baby cries, she can be put down in a safe place if you need a bit of time to yourself.

Excessive crying (colic)

All babies can cry heavily at times, whether they are full-term or premature, breastfed or bottle-fed, or boy or girl.

Some babies cry for more than three hours a day, especially at the end of the day, and seem inconsolable. During a crying spell, your baby may appear to be in pain: her face is red, her fists are clenched, and her legs are curled up on her tight belly. She may have gas because when babies cry, they swallow air.

These episodes of excessive crying, often called colic, are completely normal. They are rarely associated with a health problem and have no long-term consequences for the baby.

What to do?

Make sure your baby's needs are being met and that she isn't exhibiting any other concerning signs (see the red box, page 285).

You can try different techniques to help soothe your baby:

- Find a calm area and turn down the lights.
- Put on soft music, some background noise, or speak softly to her.
- Massage, caress, or touch her, for example by placing her on your stomach with her skin against yours, in a warm place.
- Offer your breast. Many babies calm down while sucking at the breast: it can satisfy their hunger and be a source of comfort.
- Move her around, rock her, take her for a walk in a stroller or baby carrier, or take her for a car ride.
- Give her a bath. Some babies find water soothing.
- Place your baby face down on your forearm with her back against your belly, her head in the crook of your elbow, and your hand between her legs. Often babies find this position soothing.

This is a soothing position for your baby.

Keep in mind that if the method you use to soothe your baby works once, it may not work the next time.

If you've tried these various techniques for several days and nothing is working, or if you have any concerns, do not hesitate to consult a health professional. He or she can reassure you about your baby's health and suggest other options if necessary.

Medication and natural health products for "colic" are usually not recommended.

In general, excessive crying is only something to be concerned about if it is accompanied by other signs. For example, you should see a health care professional if, in addition to being inconsolable, your baby

- Behaves differently
- Won't eat or sleep
- Has a fever (see Fever, page 643)
- Is vomiting or has abnormal stools (see Stools, page 279)
- May have been injured
- Is showing other signs that worry you

If your baby is inconsolable

Bouts of excessive crying is hard on the whole family. It's normal to feel perplexed, helpless, irritated, or even frustrated.

When you are feeling tired or impatient, it's good to have someone you can trust who can give you a hand. You can ask someone to look after the baby for you so you can rest. When you come back, you will be able to pass along your sense of calm.

Are you feeling overwhelmed and have no one to replace you? Put your baby in a safe place, like her crib, close the door and leave the room for a few minutes. It's normal to need a break. Check on your baby every ten minutes to make sure she is still safe, but don't pick her up again until you have calmed down.

Don't be afraid to seek help from a babysitter, relative, doctor, CLSC, or volunteer centre.

Never shake an infant or young child: shaking can cause permanent brain damage or even death. Put her down and get help.

Breath-holding spells

Starting at 6 months of age, some babies may cry until they stop breathing for several seconds and briefly lose consciousness. They may turn blue or pale. An episode like this is called a breath-holding spell. Babies do this unintentionally when they are experiencing something unpleasant.

It's normal to be worried if this happens, but don't worry: your child's health is not in danger. Remain calm, stay with your baby, and reassure her. She will quickly start breathing again on her own. However, if a breath-holding spell occurs before the age of 6 months or lasts for more than one minute, it's a good idea to talk to her doctor.

Karine Henry

The need to suck

All newborns have the reflex to suck. Sucking the breast is natural and ideal for your baby. It is more satisfying than any replacement.

Not all newborns need a pacifier (soother). Many are content with the breast.

If your baby sucks her thumb or fingers, encourage her to change this habit as soon as possible: try a pacifier because it's easier to control. Your baby may occasionally need her pacifier for comfort but she should not have it in her mouth all the time. Gently remove the pacifier when it's no longer needed, to avoid creating a habit.

A pacifier can act as a gag. Don't be too quick to use it to calm your baby. She is trying to tell you something through her cries. Be attentive to find out what she really needs.

Sucking her thumb, fingers or pacifier can sometimes change the position of her teeth. Around the age of 2 or 3, help her gradually give up this habit. It's important she stop before her first adult teeth come in. The dentist or dental hygienist can give you advice. Sucking a pacifier can sometimes affect your child's pronunciation. A child who talks with a pacifier in her mouth is hard to understand and she will not learn to express herself properly.

To attach a pacifier to clothing, use the clips designed for this purpose.

! Never use a string to attach the pacifier to the crib or around your baby's neck or wrist. The string could strangle your baby. Don't use a safety pin to attach the pacifier to your baby's clothing as she could injure herself.

Choosing a pacifier

If your baby needs a pacifier, choose one for her age. There are several silicone and latex models.

If your baby uses her pacifier for chewing, give her a teething ring instead. The pacifier disk must remain outside her mouth. If the baby chews it, it could break and she could swallow the pieces and choke.

Cleaning the pacifier

Before using a new pacifier, disinfect it according to the manufacturer's recommendations. Each time your baby asks for it, wash it in hot, soapy water and rinse it. Do not put it in your mouth; you may give her cavity causing bacteria. Pull on the disk to make sure it is properly attached to the nipple. This safety precaution is important, especially when your baby has teeth.

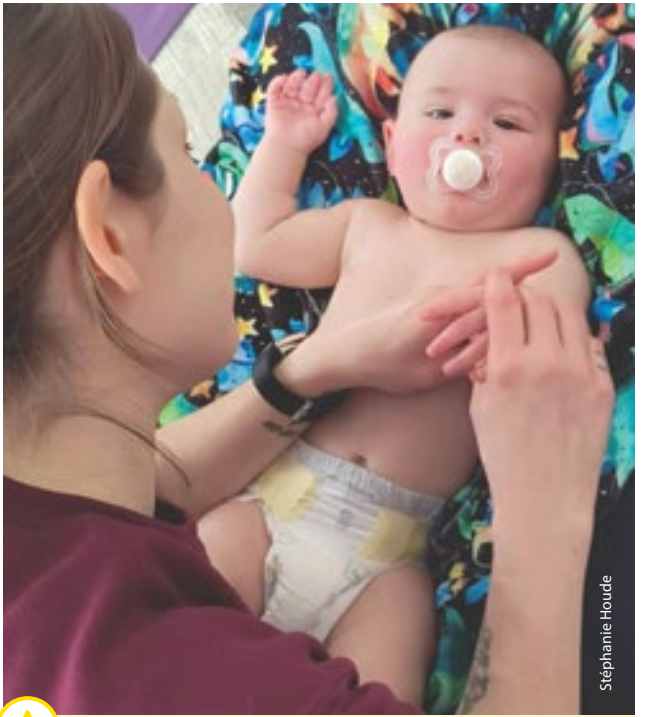
Check the condition of the nipple regularly. It must be very flexible. If it has changed colour or shape, is sticky or cracked, throw it out immediately.

Health Canada suggests you replace pacifiers after two months of use, no matter their condition.

Touch

Touch is the first sense a baby develops while in the uterus, from rubbing against the walls of the uterus or from feeling you stroke your belly to make contact. For newborns, feeding time is a comforting, reassuring, and special time you spend together.

Touch fulfills a need that is as important as drinking and eating.



Massaging an infant is easy and relaxes her. It helps her body work properly and promotes her growth.

Touch is a form of communication newborns seek. Holding her against your chest or your shoulder, and the way you rock her is comforting. Your caresses help her feel well, and calm her fears. Your kisses encourage her awareness of life. Through touch, you are showing your love.

Your baby will be thrilled if you like giving her massages! And it's not hard to do.

You can begin the massage on your baby's temples or the soles of her feet. Repeat the movements that she seems to like and follow your intuition. There are good books available about baby massage, or you can contact your CLSC. Baby massage workshops are also available.

Use bath time if there isn't a better routine time for the massage. Wash your baby with your hands rather than a cloth. Take the time to rub her body with cream. She'll appreciate this contact and the time you spend with her.

How to give a baby massage

- Choose a time when your baby is awake and receptive, preferably not too close to a feeding.
- Make sure the room is warm, comfortable and cozy.
- It's best to sit on the floor.
- Use a firm but gentle touch with your entire hand to avoid tickling her.
- Use a small quantity of vegetable oil (such as sunflower) warmed in your hands for pleasant contact. Try the oil on a small part of the body first to make sure there's no allergic reaction.
- Stay relaxed and be attentive to your baby's preferences.

Taste and smell

Newborns already have a sense of taste and smell. Very early on, they are able to recognize their mother by her smell.

The scent of milk draws your baby to the nipple to satisfy her hunger. Sucking gives her an intense feeling of well-being. The taste of breast milk can vary depending on the mother's diet.

When the father takes her in his arms for the first time, the newborn will also recognize her father's scent. It is good for father and child to share skin contact in the first few hours after birth.

Hearing

Your baby can hear at birth, and even before she is born. She is especially sensitive to the voices of her mother and father, possibly because she has often heard them while she was in the womb. She may turn her head toward your voices. Familiar sounds reassure your baby. Calling her in a soft voice can often calm her. Loud or sudden noises, however, will make her jump and may upset her.

Most babies born in Québec have normal hearing. At birth, about six babies in 1,000 may have hearing problems. However, it's difficult for even the most attentive parents to evaluate a baby's hearing during the first few months of life.

Your child should react to the sound of voices and noises without seeing what is making the noise; for example, the sound of a dog barking behind her head or the doorbell ringing. Normally around the age of 6 to 9 months, she will turn towards the sound of the noise. If this doesn't happen, it's a good idea to talk to your doctor who can direct you to resource people that can help (audiologist, ORL or ear, nose and throat doctor).

The ears of newborns can stick out somewhat. Nothing can be done to correct it at this age. You can talk to your doctor about it before your child starts school.

After your baby is born, you will be offered a hearing screening (see Neonatal screening, page 244).

Eyesight

From birth onward, an infant can see faces, shapes and colours, and prefers faces and geometric shapes. Sight is an important way for your baby to communicate.

At the age of 1 month, she will look for and at light that is not too bright. At 2 months, she can start seeing the difference between colours and can use her eyes to follow a person or object that moves slowly. Her field of vision increases to that of an adult's at about 1 year. For more information, Eye problems, page 632.

Sight is an important way for your baby to communicate.

Sleep

Geneviève Trudel

Sleeping safely

Starting from birth, your baby should sleep on her back. Once she begins turning over on her own, you can let her sleep in the position she prefers without any danger.

Your baby should always sleep on a firm mattress and in a crib, cradle, or bassinet that meets Canadian government safety standards (see Crib, cradle, and bassinet, page 684). Aside from a tight fitted sheet, there should be nothing on the bed (e.g., comforters, pillows, bumper pads). If you think your child needs to be covered, use a light blanket or a sleep sack suitable for the child's height. Make sure your baby isn't too hot.

Sharing your room

Recommended by the Canadian Paediatric Society

The Canadian Paediatric Society and Health Canada recommend that babies sleep in their own beds in their parents' bedrooms for the first six months of their lives. It is the safest place for a baby to sleep.

Aurélie Maheux-Dubuc

For her own safety, your baby should sleep on her back, in her own crib.

If you are unable to sleep well when you're in the same room as your baby, you could have her sleep in a secure crib in another room (see Crib, cradle, and bassinet, page 684). The quality of your sleep is very important.

Do you sleep with your baby?

Every year there are reports of deaths of babies who were sharing a sleep surface with their parents.

To avoid an accident, never sleep with your baby

- on a couch or similar furniture (eg., upholstered chair)
- if you have been drinking, taking medication that makes you drowsy or using drugs
- if you are extremely tired (more than usual)

In these cases, it is much safer for your baby to be in your room, but in her crib.

To safely share your bed, make sure that you

- Always lay your baby on her back
- Use a firm mattress (no soft surfaces or water beds)
- Remove soft bedding and other items (e.g., pillows, comforters, stuffed toys)
- Leave enough distance between the mattress and wall that your baby can't get stuck
- Never let your baby sleep alone in an adult bed

Sleeping away from home

Your baby must sleep in a safe place, even when you are away from home. Never, under any circumstances, put your baby to bed alone in an adult bed and don't use pillows. If you don't have a crib, a blanket placed directly on the floor can act as a temporary safe bed for a baby who is less than 6 months old. Using a mattress placed on the ground or a playpen are two other potential solutions for putting your baby to bed when you are travelling. If using a playpen, do not add mattresses or padding.

A car seat should be used only for transporting your baby in the car. Car seats and baby seats should not be used in place of a crib as they are not a safe place for sleeping.

If you use a stroller when you go for walks, your baby will be safest and most comfortable sleeping on her back. The back of the stroller should fold down flat or almost flat, and your baby should be properly strapped in. Some parents prefer using a secure baby carrier for walks (see Baby carriers, page 763).

Be careful; your infant is not safe in her baby carrier if you are sleeping or lying down while wearing the carrier.

When you go for walks, your baby will be safest and most comfortable sleeping on her back in a stroller.

Sudden infant death syndrome (SIDS)

The sudden death of an infant under the age of one occurs while the baby is sleeping. We still do not know the cause of **sudden infant death syndrome** (crib death).

The main risk factors for sudden infant death syndrome (SIDS) are:

- Exposure to maternal tobacco use or other sources of tobacco smoke during pregnancy and after birth (see Tobacco and electronic cigarette, page 64).
- Sleeping on the stomach
- Blankets or bedding that can end up completely covering a child's face

Babies who are breastfed and properly vaccinated have a lower risk of SIDS.

Here are the recommendations to reduce the risk of sudden infant death syndrome:

- Make sure your baby sleeps safely (see Sleeping safely, page 295 and The nursery, page 683).
- Eliminate smoking as much as possible during pregnancy and make sure no one smokes near your baby.
- Put your baby to sleep on her back. Tell anyone who looks after your baby to do the same. Babies who usually sleep on their backs and are then put to sleep on their stomachs are at greater risk for SIDS.
- Make sure your baby is neither too warm nor too cold when sleeping (e.g., light clothing, room at a comfortable temperature).

Using a baby monitor does not mean you can disregard these safety precautions. They must be followed even when using a monitor.

Preventing a flat head

When babies sleep, they should be on their back (see Sleeping safely, page 295). But if your baby always lies on the same spot on her head, she may end up having a "flat head." It's because the bones of her skull are still soft. The medical term for this phenomenon is "positional plagiocephaly."

Therefore, it's important that your baby not always lie on the same spot on her head to avoid creating a flat area.

A slight flattening of the head may improve on its own. A more pronounced flatness may be permanent, but it will not harm your baby's brain development.

By varying your baby's position throughout the day (e.g., sitting in her little chair, in your arms, on the floor on her stomach and back, in the baby carrier [see Taking baby for a walk, page 762]), you avoid having her head always resting on the same spot.

Your baby needs to spend some time on his tummy every day.

Many babies love this position. It's soothing and counts as tummy time.

Babies focus their gaze on what interests them (e.g., your face, the window). When you change your baby's position, she may turn her head to continue watching you or the object she's interested in. That way, her head won't stay resting on the same spot.

When they're awake and under supervision, it's important for babies to spend time on their stomach. From her very first days of life, lay your baby on her tummy. You can lay her on a flat surface, on your stomach, or on your arm. Start with a few minutes, several times a day, for as long as she feels comfortable. Do this until she's spending at least 60 minutes total per day on her tummy.

Some tips to help prevent or reduce a flat head are shown in the box next page.

If you notice that your child has a flat head, turns her head to one side more than the other, or you have questions, talk to your healthcare provider.

Some tips to help prevent or reduce a flat head

- Make sure your baby can turn her head equally in both directions.
- Change your baby's position in her crib every day (e.g., one day, place your baby's head at the foot of her crib, then at the head of her crib the next day).
- Regularly move your baby's rocker, bouncer, or other chair to vary the directions she looks towards.
- Switch sides each time you give her a bottle.
- Regularly place your baby on her tummy.
- Limit the amount of time she spends with her head resting on a hard surface (e.g., on a play mat or in her car seat).

Sleep in the first weeks

Your baby will sleep and wake according to her needs and feelings. Some babies wake almost only to nurse. Others are awake longer from their first days out of the womb. The amount of time they stay awake will be longer as the weeks pass.

As with adults, newborn babies go through different sleep cycles: drowsiness (light wakefulness), calm sleep and agitated sleep. When your baby is in her agitated sleep cycle, she may make sucking movements, frown, cry, smile, jump, tremble, groan, breathe hard or move. This is normal. No need to wake and comfort her. However, you may want to wake her if she needs to be encouraged to feed.

Sleep at around 4 months

At 4 months, the average amount of time a baby sleeps is 14 to 15 hours per day. Babies will start to sleep longer through the night.

At about 4 months, babies usually have a more regular and predictable daily routine. Because you've paid close attention to your baby from the time of birth, she will feel safer and more secure. She will be able to wait a bit longer for things. She learns to comfort herself by putting her hand in her mouth. Little by little she learns to fall asleep on her own. Beginning at between 4 and 6 months, some babies won't need to feed during the night anymore. Others will still need to – possibly even more so than during the weeks before.

Gradually you will recognize more and more of your baby's signs of fatigue.

Bedtime routine

It's a good idea to make bedtime a relaxed, happy time. Repeating the same actions every night will create a bedtime routine that makes going to sleep easier. Turn on a night light in the hall and leave the bedroom door partly open.

If you stick fairly close to your routine each day, your baby will start to understand when it's bedtime. For example, develop a routine of a warm bath, quiet game, a story, soft music or a song.

A lot of parents enjoy this time of the day with their baby, and take the time to rock her to sleep. Others prefer that the baby learns to fall asleep on her own.

If you want, once the routine and quiet time are finished, put your baby in her crib even if she isn't fully asleep. When your baby learns to go to sleep on her own it means she can go back to sleep on her own in the middle of the night if she wakes up during a period of light sleep.

There's no right or wrong way in your bedtime routine. The important thing is for you to feel comfortable with the routine you choose.

The bedtime routine helps your baby get ready to sleep.

Sleeping through the night

Sleeping through the night is what adults do; babies have different sleep patterns. A baby's sleep schedule can in fact vary quite a bit from one baby to the next. "Sleeping through the night" generally means five or six hours of sleep between 11 p.m. and 8 a.m. About 70% of 3-month-old babies sleep five hours at night; 85% do at 6 months, and 90% at 10 months.

Follow your baby's rhythm and needs. When feeding at night, you can keep things calm and quiet so she learns the difference between night and day. For example, keep the lights very dim and resist the very natural urge to speak to her.

Sleep after 6 months

Most babies between the ages of 6 and 12 months sleep 8 to 10 hours a night for a total of about 15 hours a day.

Sometimes, 6- to 12-month-old babies start waking up again in the night. This is the normal period for separation anxiety. You might also notice during the day that your baby reacts more strongly when you leave her, when you go to another room or when you put her to bed. When she wakes up crying at night, you can reassure her simply by being there and talking softly to her. Often, just your voice and touch will make her feel better. Remember that it's normal for babies to have wakeful periods. Your baby can learn gradually to go to sleep by herself.

Valérie Miot

Remember that whatever your baby needs to go to sleep is the same as what she will need to go back to sleep when she wakes in the middle of the night. If she needs to be breast- or bottle-fed or to be rocked to go to sleep, she will probably need you to help her go back to sleep when she wakes in the middle of the night.

If you want her to learn to go back to sleep on her own, you need to teach her first to go to sleep on her own in the evening. If she does need you there, you can try teaching her to go to sleep on her own by gradually decreasing the amount of time you stay with her each evening.

If your baby cries a lot at night, you should check to make sure she's not sick. Take her temperature. If it happens often, talk to your doctor. He or she can reassure you about your baby's physical well-being and support you during the difficult period.

If your baby doesn't have any health problems, think about your bedtime routine and see if it can be improved to encourage sleep.

Sleep between 1 and 2 years old

A 1- or 2-year-old child sleeps 8 to 12 hours per night. Generally, up to 18 months, your child needs two naps per day, one in the morning and the other in the afternoon. Beginning at about 18 months to 2 years, she may need only one nap. Sometimes she will be in a bad mood when she wakes up. Be patient and wait a bit before getting back to regular activities. Remember that each baby's sleep needs are different, and they decrease as she grows.

Sleep problems

A lot of children aged 1 or 2 cry at bedtime. They are going through a normal period of separation anxiety, which can last to 18 months or more. Their fears make it harder for them to be without you at bedtime. Keep your bedtime routine with a gentle firmness. This will help reassure your child.

Nightmares and night terrors

Beginning at age 1, many children have night terrors. The child may scream and cry, yet seems to be sleeping deeply. You don't need to wake her or do anything in particular, unless you think she might hurt herself. If you can't console her, don't worry, she will calm down soon.

If she wakes up in a panic and seems very awake, she probably had a nightmare. Being there to reassure her will help her fall back to sleep calmly.

And don't worry, night terrors and nightmare problems generally go away as your child grows. Several books offer tips on how to teach older children to deal with the problem.

Disturbed sleep

If your child wakes up at night, try the bedtime routine we suggested previously for children over the age of 6 months. If you have trouble creating a bedtime routine, or if your child keeps waking up at night despite your routine and you're concerned, talk to a health professional.

Your child's sleep is disturbed if

- She wakes often during the night (more than two times)
- She wakes for a long period during the night (more than 20 minutes)
- She needs you when she wakes at night
- She wakes more then four or five nights out of seven
- She's woken up during the night for at least three months

In these cases, getting help is a good idea. Reading about the problem or talking to a professional can be useful.

Geneviève Trudel

Your child's development


Nadine Dubé

Children grow and develop step by step. All children go through the same stages, but each at her own pace.

As your child develops, so do her abilities. For the first two years of her life, she'll learn to better understand the world around her with your help. She will also start communicating and regulating her emotions. She will learn to get around, first by crawling, then on all fours and, eventually, by walking. There will be a lot of change in just two years!

To grow and develop, your child needs simple but essential elements. She needs to eat, sleep, be kept clean and dry, and feel safe. She also needs nurturing care from her parents and others around her.

The relationship you have with your child is very important to her development. Each person who spends time with her also contributes to her growth and development.

Your child needs you in order to grow and develop. Your caring words and actions are essential.

Temperament

A newborn baby already has a way of being and reacting. That's his temperament. It's what makes him unique.

For example, babies can have differences regarding:

- How long they cry
- How active they are
- How readily they embrace new things
- How sensitive they are to noise, light, and movement

There is no good or bad temperament. However, depending on his temperament, you might find your baby more demanding than other children around you. It's still important to be warm and loving towards him and attentive to his needs. He'll learn to self-soothe and feel safe and confident with you.

Every baby is unique. By getting to know your baby, you can adjust to his temperament.

The parent-child relationship

From birth, your baby is trying to connect with you. Her five senses (hearing, eyesight, touch, taste, and smell) enable her to perceive the world around her. For example, she likes to hear your voice and look at your face (see Talking with your baby, page 280).

Your baby expresses her needs with signals like crying and moving her arms or legs. For example, her crying may mean she's hungry or uncomfortable (see Crying, page 282). She calms down when you hold her and attend to her needs.

When you feed, bathe, or talk to your child gently while looking at her, you're building your relationship with her. Little by little, you're discovering the enjoyment of being together.

Your baby develops through her relationship with you and the others who care for her. For example, she learns to self-soothe and communicate.

Attachment

When you respond to your child's needs consistently and with nurturing care, a trusting relationship develops between you. This bond is also known as attachment.

Take the time to observe your baby and get to know her. For example, try to tell the difference between when she is hungry or tired. You will learn to understand her better through trial and error. When you try to meet her needs, she'll see that you're there for her and that she can count on you. She'll develop a feeling of trust and safety with you.

A newborn mostly expresses her needs by crying (see Crying, page 282). You won't risk spoiling her by comforting her promptly. That helps her feel confident and secure.

Newborns do not have the ability to wait for their needs to be met. Starting at 4 months, she gradually becomes able to wait a few seconds, then a few minute. If you're unable to respond to your baby's need promptly, you can try to distract her. Continue talking to her or offer her a toy: "Mommy's on the toilet right now. I'll look after you soon." When she's older, she will understand better what you are saying to her.

If your child feels confident and safe with you, she will also feel more confident exploring the world around her. She will know he can go back to you when she needs to. Encourage her to explore at her own pace, in line with her abilities. She needs to explore her environment to develop.

Separation anxiety

From 8 or 9 months onwards, your child may have difficulty being separated from you. This is called separation anxiety. This anxiety is normal: your baby feels safe when you're there and she wants to stay with you. This reaction will gradually fade until around 18 months, when she will have experienced a number of positive reunions with you.

When you leave, reassure your baby and say you'll be coming back, even if she doesn't understand well yet. It is best to leave without drawing out your goodbye. Your child may react when you leave. That doesn't mean you should go back to her. The important thing is that she feels that you are confident and that you're not worried about leaving her with someone else. While you're away, you can leave your child with a piece of clothing or blanket with your scent.

When you arrange for a babysitter, you can spend some time with your child and the babysitter. This gives your child time to get used to the babysitter and see that you trust that person.

From 8 or 9 months onwards, your child may have difficulty being separated from you.


Ariane Savard

Communication

Your baby started hearing you talk before she was even born. From her earliest days, she's interested in your voice and loves the varied and playful changes it makes when you talk to her. She also observes your face and guesses your emotions. She understands words months before she's able to say them.

At first, your baby expresses herself through crying, mimicking, gesturing, moving her arms and legs, grimacing, and making sounds. Start by observing her to try to understand her. To respond, talk to her. Give her time to react to your words, then speak to her again. Communication is like a tennis game where each person takes turns hitting the ball back and forth. It's important that your child has a place in the exchange, whether she expresses herself by crying, or with sounds or words.

Making communication easier

To help your child communicate with you, you can:

- Position yourself at her height, facing her, so she can look at and listen to you.
- Get her attention and avoid getting distracted yourself, whenever possible.
- Encourage her often with a gentle word, a smile, etc.

When talking to your child, you can:

- Name the things that attract her attention (e.g., "Ah! That's the light," "Oh! That's a dog").
- Describe what you're doing and what she's doing (e.g., "I'm going to give you some milk," "You're taking your bath").
- Name how she's feeling, even if she doesn't understand yet (e.g., "You're angry about waiting. You're hungry").
- Repeat often to help her learn.

It's recommended that you use the correct words (e.g., "cow" instead of "moo-moo"), because those are the words she will use later on.


Nicole April

It's best to be at the same height as your baby when you talk to her. It's easier for her to look at you when you're face to face.

First words

Your child will gradually transition from making sounds to using words. Each child progresses at her own pace. It's important not to put pressure on her, for example by asking her to say a word. Rather, celebrate her effort and be interested in what she is communicating, no matter how she's doing it. Encourage her attempts to communicate, whether it's by pointing, making sounds, or saying words.

It's normal that you and those around you don't always understand what your child says. She's not yet able to pronounce words like an adult. You can try to guess what she means and name it. Say the word again correctly, but don't ask her to repeat it. Your child will improve over time.

If you have any questions or concerns about your child's language development, don't hesitate to see a healthcare professional.

Structure

The structure you provide for your child includes creating a routine and setting limits. Every child needs structure. Create a routine and set limits that you feel are appropriate for his age and needs.

Your daily efforts to provide consistent structure will help your child in the years to come.

It's best if different family members provide structure in a similar way.

Having a routine and respecting boundaries helps your child develop.

Setting up a routine

A routine is a set of habits or actions that are regularly repeated in a child's daily life. It's established gradually. It's different for each family.

Your child likes it when things are repeated in more or less the same order (e.g., snack time, bath time, story time, bedtime). You can also follow a morning routine (e.g., opening the blinds, hugging your child, then feeding him). He also likes actions or activities to be similar from one day to the next. You can sing the same song or tell the same story before bedtime.

A routine is calming and reassuring for your child.

Children need a stable routine to help them understand what's happening and what's going to happen. A routine reassures and calms your child. Then he's more open to connecting with you and developing himself.

It's normal for the steps of your routine not to happen at exactly the same time each day. It's also normal not to follow your routine when there are special occasions or unexpected events.

Setting limits

Although it can be difficult to set limits, your child needs them. As a parent, you're preparing your child for life outside the home (e.g., daycare, extended family), where there are other limits and rules.

The purpose of limits

Your child needs limits to feel secure and confident, even if they make him angry.

The limits you set are necessary to prevent him from hurting herself. For example, when your child first starts walking and gets close to a staircase, he has to hold your hand.

Limits also help your child gradually learn to respect other people and his environment. For example, once your child is able to use crayons, he is not allowed to draw on everything in the house.

Limits help children feel secure and confident. They also help children understand what's expected of them.

How should I set limits?

At first, you set limits by making the environment safe (e.g., you set up a barrier at the top of the stairs; see Babyproofing, page 683). Gradually, your child will also understand your instructions. At about age 1, he begins understanding very simple rules (e.g., "Stay here").

The sentences you say to your child should be short and concrete (e.g., "Give me your hand"). Your instructions and expectations will change as your child gets older and more independent.

If your child doesn't seem to understand, you can use gestures (e.g., motioning with your hand to say "come on") or show him the behaviour you want (e.g., petting a cat without hitting it).

Sometimes, even if your child understands your instructions, he won't follow them. He can't control his impulses yet. He also needs to test the limits he's in the process of learning. To help him, repeat the same instruction often in different contexts (e.g., he shouldn't hit his parents or other people). Also, try to respond the same way to the same behaviours (e.g., tell him to speak quietly every time he yells).

When you set limits consistently, it makes it easier for your child to respect them. He will gradually learn to follow the rules with your help and by observing how others behave around him.

Parents don't set all limits in the same way. The most important thing is to respect your child.

What should I do when my child doesn't respect limits?

A good way to help your child when he doesn't follow your instructions is to direct him to another action or activity. For example, if he's trying to rip off a plant's leaves, you can calmly say "no" and direct him to a game he likes.

When your child reacts strongly to a limit, you can name his emotions, showing him that you understand how he feels. Tell him that what he wants is not possible right now.

You help your child by demonstrating and encouraging the expected behaviours, rather than punishing her. If your child throws his spoon while eating, he will learn better if you tell him to "keep your spoon" than if you punish him by taking his snack away. Punishment doesn't show your child what you expect of him.

If you have any questions or concerns about providing structure or about the intensity of your child's reactions, don't hesitate to contact a healthcare professional.

Physical punishment (e.g., spanking, slapping, hitting) and behaviours that humiliate a child (e.g., insults, putdowns) are detrimental to the child's health, safety, and well-being. These practices must not be used and are governed by Québec law. For help, please see the Resources for parents section.

What should I do when I'm angry?

Most parents find it challenging to set and maintain limits when their child isn't respecting them. If you feel your anger building up, you can calmly let your child know (e.g., "I'm starting to lose my patience" or "I need to calm down"), even if he doesn't understand yet.

You can ask someone else to look after him or make sure he's safe (e.g., in bed) and leave the room for a few minutes. By doing so, you prevent impulsive, hurtful, or violent behaviour.

A parent's yelling and angry gestures are stressful for a child. He won't learn as well what you expect of him if he's stressed. By staying calm, you'll manage the situation better, and your child will maintain his confidence in you and himself. He'll see that he's still loved, even if you don't agree with what he's done.

If you lose your temper, you can apologize to your child, even if he doesn't understand yet. That way, you're setting a good example for him.

Encouraging your child

Your child is learning. He needs you to be supportive and patient. Give your child more positive attention than negative, with lots of praise and encouragement. It's better to highlight his efforts and celebrate his progress, rather than focusing on his struggles and undesirable behaviours.

Your encouragement lets him know what your expectations are and reassures him about his abilities and skills. Through his day-to-day experiences, your child will build his self-esteem and a positive sense of self-worth. Encouraging your child with a smile or a kind word is beneficial from his very first months.

It's normal for you to be more encouraging and patient on some days and less so on others. Being a parent is challenging. You're learning, too.

Encouraging your child with a smile or a kind word is beneficial from the very first months.

Your child needs to explore through play.

Play

Play is crucial to your child's development. By playing, she discovers her abilities and the world around her. Playing also allows her to take initiative and become more independent. You can integrate play into your daily routine. For example, when you make peekaboo sounds while changing your baby's diaper, you're playing with her.

As a parent, make sure your child's play environment doesn't have anything in it that could cause serious injury (see Babyproofing, page 683). When your baby is in a safe environment, let her explore it and test her abilities. Your child needs to explore in order to develop. That's how she learns to overcome challenges on her own.

Playing allows your child to take initiative and become more independent.

Toys are not always necessary for play. Sharing experiences with you will always be worth more than any toy. Tickling, dancing to music and splashing in the bathtub are examples of games to play together. Going on outings also creates opportunities for play (e.g., going to the library, park, or pool).

When your child does play with toys, they should be age appropriate. They must also be safe for her (see Choosing toys, page 691). Toys can have different functions depending on a child's age. At first, your child explores them by putting them in her mouth or handling them. Then she discovers what can be done with them (e.g., stacking, interlocking).

The best toys are not the most expensive ones. Toddlers can play with a variety of household items, including pots, spoons, bowls, and cardboard boxes that can become a house, tunnel, car, hat, etc.

The best toys are not the most expensive ones.

You can introduce books to your baby within his very first months and leave some within his reach.

Books

You can introduce books to your baby within his very first months. Looking at a book together is a great way to connect and spend time with him. Your child will enjoy being near you and listening to you speak.

At first, a book is a toy for him, and he'll put it in his mouth, throw it, and hit it. Let him explore. You can turn the pages, point, and name what you see. You can also change your voice and make noises like different animals and vehicles.

Gradually, your child will better understand what you're saying as you turn the pages. He'll also be able to pay attention for longer. Looking at a book with you helps your child develop his language skills and interest in reading. Reading will be an important part of his life when he goes to school.

Some children develop an interest in reading less easily or more slowly. You can continue to leave books within your child's reach, even if he doesn't seem interested. He may become curious later. You can also go to the library to encourage his interest.

When looking at a book with your child, the most important thing is to have fun and enjoy the time spent together.

Many libraries offer the free welcome kit *Books for Baby*. For more information, visit the website: unenaissanceunlivre.ca/en/.


Maxime Delage

Little by little, your child will better understand what you're saying to her and will be able to pay attention for longer.


Emilie Audy

It is recommended that screens be turned off during playtime.

Screens

Recommended by the Canadian Paediatric Society

Children younger than age 2 should not spend time in front of screens. It is also recommended to turn off all screens (TV, phone, tablet, etc.) when spending time together as a family, even if they're simply left on nearby.

These recommendations are being made because we're increasingly discovering the negative effects of screens on children. For example, young children who are often exposed to screens have a higher risk of developing language difficulties.

Children are attracted by the light, sounds, and colours on screens. They can easily handle mobile phones and tablets. That doesn't mean it's good for them. Despite their name, so-called educational apps and videos do not help children develop either.

Young children learn by interacting and developing relationships with others. Talking to your child, singing him a song, looking at a book with him, and playing with him are the best ways to help her develop. When you have things to do, instead of putting your child in front of a screen, you can leave toys and books within her reach. For some tasks, you can also keep your child in a baby carrier (see Baby carriers, page 763).

When you're away from your child for a long time, you can still use a screen to talk to him. You can also use a screen to help your child stay connected with loved ones who live far away. During the chat, an adult should help your child interact with the person on the screen by repeating and explaining what's being said.

Young children learn best when you're not distracted by a screen (e.g., phone, TV). Your child needs your attention—and your gaze. As much as possible, avoid using a screen when you're with him. When your child sees you looking at a screen, he may want to use it, too. Later, he may mimic your use of screens.

It's recommended that children under age 2 not be exposed to screens. There is more and more evidence about the negative effects of screens on children.

Stages of growth

Here are a few tips to help guide you on the great adventure of being a parent. They offer guidelines on your child's growth and give you some ideas for ways to have fun with him.

Remember that the ages we use are only approximate. Children grow at their own individual pace and may learn new skills sooner or later.

The following pages offer information about different levels of growth at each age:

- Motor skills
- Communication and language
- Understanding (cognitive growth)
- Relationships (socio-affective growth)

For premature babies (born before the 37th week of pregnancy)

Babies born early must make up the weeks they lost in their mother's womb. This doesn't happen magically when they're born but takes place slowly over the first 2 years. Use your baby's corrected age when looking at progress on growth charts and comparing with other children. If not, you may expect too much.

To correct the age of a baby born before term, count from the birth date that was expected. For example, if the expected birth date was March 1st but your baby was born on January 1st, he is two months early. In this case, when you calculate your baby's corrected age, subtract the two months from his actual age. On April 1st, his real age will be 3 months, but his corrected age is 1 month.

We encourage you to consult the Association des parents d'enfants prématurés – Préma-Québec (see Associations, agencies and support groups, page 784).

Birth to 2 months

Fine motor skills

During his first few weeks, your baby moves but has little control over his movements. His senses are awakening. If you touch the inside of his hand, he'll try to grasp your finger. He will look at a mobile over his crib. Around 1 month of age, his eyes will follow a moving object. Shake a rattle near him and he will react to the sound.

The baby's fine **motor skills** are poorly organized and his movements are not voluntary. This is normal. This is the reflexive stage, which will disappear as the brain matures.

Moro's reflex means that your baby will jump when he hears a loud noise or is moved quickly. This is not a sign that your baby is nervous.

The sucking reflex is well developed. This allows your baby to feed himself or to calm down by putting his hand in his mouth.

An offshoot of the orientation reflex will make your baby turn his head if you tickle his cheek or arm. It helps your baby look for the breast.

The automatic stepping reflex appears when babies are held standing. He will try to walk on the examination table (the doctor can show you this). Your baby can't support his own weight yet, nor will stimulating this reflex help him walk sooner.

Understanding

Watch your baby and you will see he is born with some extraordinary abilities. He does exciting new things every day. He is not too small to play, and can imitate some gestures like sticking out his tongue and opening his mouth. He can tell the difference between black and white and bright colours.

Relationships

Newborns show a preference for human faces. Their memory is growing. They look for your face, and can find it. Their emotions are intense and hard to control; they need your help in doing so. Their emotions are expressed through everything from crying to cooing and babbling.

From birth, newborns show a preference for human faces.

Language

Crying is your baby's first way of communicating. At first, babies cry as a reflex, not by choice, usually when something is bothering them. They have different ways of crying to tell you about different needs, such as food or sleep.

They coo from the earliest months. They don't understand the meaning of words but can sense emotions such as joy, anger and tenderness in your tone of voice. They react to loud noises. Your baby recognizes your voice and likes to hear it. In his own way, he is already communicating!

Activities

Talk with him – Talk softly. Tell him a story or sing him a song. Imitate the sounds he makes and watch for his reaction. By doing this, you will be helping him to pronounce sounds and learn tones and rhythms. He will want to join in the conversation.

Say his name often; soon he will recognize it. Move around while calling him; he will move his head in the direction of your voice. Do this often. It is important for learning speech.

From 2 to 4 months

Fine motor skills

Your child is beginning to control his head movements and hold his head up better and better.

He is becoming more active. When lying face down, he raises his head and pushes up bit by bit using his arms. He moves his legs and explores his hands and feet. He loves to be touched and kissed and nuzzled, and for you to move his feet like pedals and to play with his hands. He will grab a rattle and try to suck on it. Don't be surprised; for quite a while he will try to put everything in his mouth. This is how he learns. You'll see him playing with his tongue and saliva and making bubbles.

Language

Your child will make different sounds depending on what he needs. He's moving toward babble ("dada, mama, baba"). He reacts to familiar voices and the sound of his toys. He will also smile in reaction to your stimulations.

He doesn't understand words yet, but likes it when you hum or sing to him because he recognizes your voice and feels safe. He pays attention to the tune and your gestures. If he cries, talk softly, he may calm down. He may pay attention to music.

Relationships

The first social smile usually appears in the second month. The human face interests the baby, who answers a smile with a smile. At 2 months, he starts becoming interested in other babies and may become excited when he sees one. At 3 months, he is becoming more and more aware of other members of the family.


Émilie Laquerre Carrier

Introduce your child to new textures.

Understanding

Your baby repeats pleasant actions he has learned by accident, such as sucking his thumb and putting toys in his mouth.

Activities

Touring the home – Give the baby a detailed tour of your home. Show him and tell him what's in it. He will try to grab things, practicing his hand-eye coordination.

Tickling – At bath time or while playing, help your child discover textures. Tickle him with paper tissue, teddy bear, dry washcloth, etc.

From 4 to 6 months

Fine motor skills

Your baby is stronger now and holds himself better. Lying on his back, he raises his head, pedals and puts his feet in his mouth. If you pull on his hands, he rises and his head follows the movement. His back is straight but he still needs to be supported. Lying on his front, he rolls over onto his back with pleasure.

He looks at his hands, puts them in his mouth, grabs things easily, holds them well but sometimes drops them. He will follow objects with his eyes but may sometimes squint. His vision is very good and he can distinguish small details.

Understanding

He likes fairly big, coloured objects hanging within reach. He enjoys looking at them, touching them and turning them around. He knows that if he moves the rattle, it will make a noise. He also knows that if he babbles, you'll pay attention for a longer time. When he drops something, he doesn't look for it.

Language

He expresses his needs by yelling, crying and babbling. He is improving the babble with sounds that respond to yours. He roars with laughter and sometimes shouts for fun. Exploring his voice, he tries sounds, repeats them and tries to imitate others. He watches people talking to him and looks for the source of a noise. When he is babbling, answer him. He will find out he can affect the world around him and learn to take turns speaking. Talk to him often.

Relationships

Now that your baby is more aware, he will be more active in seeking your attention. He may cry because he's bored and hopes you will come and move him around and babble with him. He may even interrupt feeding to look at mom and dad. It's a good idea to keep him in the same room you are in and talk to him. You can pick him up as often as you want, even if he's not crying.

Lying face down, your baby will learn to coordinate his movements.

At this age, the child is interested in the people around him. He looks for the sources of noise. He also recognizes family and friends. Take advantage of this to check

- If he reacts when you smile at him
- If he stops crying when you talk to him
- If he turns toward you when you say his name
- If he follows your movements without constantly squinting

If he shows little reaction and you are worried, don't hesitate to talk to the doctor about it.

Activities

Lying face down – Place your child on his belly and put some safe and interesting objects in front of him. He will want to reach out, grab them and handle them.

Rattle – Your child will want to shake a rattle to make noise.

From 6 to 9 months

Fine motor skills

He is starting to move around on his belly. He rolls over. He's learning to crawl, backwards first, becoming more skilled and moving faster. Lying face down, he holds himself up with his arms. You can get him to move forward by offering him a teddy bear or a small ball. He can grab smaller and smaller objects and move them from hand to hand.

He holds the breast with two hands while feeding. He may even turn around while suckling to watch what's going on around him. His teeth sharpen and he will probably learn the joy of biting.

He is beginning to eat food. To be safe while eating, he must be close to you and fully secure in the highchair. He likes to play with his bowls and food. At about 9 months, his hand-eye coordination will improve. He can drink by himself from a bottle with a spout.

Language

Deliberate communications begin at about 7 months, mainly by gesture until 18 months. Meanwhile, the baby's babble is becoming more diverse and sophisticated, copying the sounds he hears. He is interested in people who talk to him, looking at them and answering to his name. He now starts using a few familiar words ("daddy, baby").

By about 9 months, your child understands familiar gestures. If you hold out your hand and ask for his toy, he might give it to you. A baby understands language before he tries to use it voluntarily. At this age, your child understands many words even if he can't yet say them.

Understanding

He likes mirrors and articles he can handle, turn and move. He enjoys large plastic cubes. He is fascinated by noisy games and will bang things against each other or the table, walls and floor. He likes squeeze toys that make noise. He will play the same game over and over. He doesn't throw things on the floor to make you angry – he's learning how to throw and how things fall. Your child learns from the things you do with him. He is gathering knowledge and putting it to use.

At about 8 or 9 months you will notice that your child likes to look at his cubes, his teddy bear and his bowl from every angle – top, bottom, left, right, back and front. He's learning perspective. In front of a mirror, he tries to capture his image and yours; he examines himself. Tell him that it's him, and say his name, which he has known for a long time now.

Relationships

The baby is discovering his body and his parents' faces. He feels the need to touch them, to put his fingers in their mouth, nose and eyes. He pulls at their clothing. He laughs at the faces they make and becomes something of a tease. He tries to attract the attention of other babies by smiling and babbling when they meet. The fear of strangers may make him cry when he sees unfamiliar faces.

At 8 or 9 months, it will be hard to separate your child from the person who takes care of him the most. He will cry when you leave. Try playing peekaboo so he will understand that you're not disappearing forever when you leave. He'll learn to keep an image of you in his mind.

After you have left or when he wakes up, he may be worried to discover you aren't there. Always tell him, particularly if he's taking a nap, that you are going away and will be back soon. A child may become attached to substitute objects such as a doll or blanket to make up for absent parents. Be careful of this precious article and wash it secretly. Keep an identical spare if possible and switch on laundry day.

Help make the baby's separation from his mother easier by having the father or partner also spend lots of time with him. This will make it easier for the child to turn to another person in the family circle (see Importance of the father-child relationship, page 732).

Activities

Peekaboo – Several times in a row, hide your face behind your hands then reveal yourself while calling "peekaboo." Start the game over using his favourite toy; he will be surprised and happy to see it reappear so quickly. At this age, children think that people or things they can no longer see have really disappeared.

Mirror, mirror on the wall – Put yourself and your baby in front of a mirror. Make lots of smiles and faces; he is learning to recognize both you and himself. Make noises with your mouth and he will try to answer them.

The wide world – Whatever the season, take him outdoors. It's good for his health and yours. Help him discover the world around him – trees, birds and flowers – and other children.

Whatever the season, take him outdoors to help him discover the world.

The tunnel – A big cardboard box with holes in both ends makes a fine tunnel to crawl through. Be sure to remove any staples first. Get down on all fours with your baby and you'll see the world from his point of view.

Blocks, balls, bottles – Give him blocks to pile, balls to push and floating toys. In the bathtub he will play with plastic bottles and small containers; he will love to fill and empty them. Don't use toys that don't drain because they make a fine home for bacteria and other nasty microbes.

Words and books – Reading stories is a good way to learn new words. Choose a book with simple colour pictures.

Parts of the body – You can now play at identifying parts of the face. Then name parts of the body.

From 9 to 12 months

Fine motor skills

Your little one will want to explore every corner of the home. He races around on hands and knees and disappears before you know it. He's becoming more and more independent. He may not walk yet but he can stand up, squat and bend over.

Using furniture for support, he stands up, takes a step or two and falls down. And starts over! His hand coordination is improving and he is becoming more and more capable of doing things. He picks up crumbs and tiny objects and holds them between thumb and forefinger. He still puts things in his mouth because that's how he discovers. So pay attention!

Language

Your child can understand what you tell him, especially if you speak plainly and use gestures as well as words. This is the stage when your baby starts to follow simple instructions (e.g., show me your nose). He knows "bye-bye" and "clap" and how to hide. He is beginning to communicate for specific reasons, to get something or attract attention. You have to know what he wants because he illustrates his babble with gestures while saying "ba ba ba, ma ma ma" and so on, holding out his hand and eventually pointing to the thing he wants. He turns when his name is called and imitates the sounds you make. He also still enjoys noise-making toys, and can locate the source of a familiar but hidden noise or voice (from several metres away).

Relationships

He is becoming very sociable. He and the children he plays with are beginning to imitate each other. He cries when he can't see you any more. You are still the centre of his life but he is exploring the world around him with great curiosity. It can put your patience to the test but this curiosity is a sign of good development.

He can begin playing alone, but would much prefer that dad be there to give him a friendly hard time. He still doesn't play with the same toy for very long, but can show his appreciation for one specific object.

Your baby will love simply playing with a ball.

Understanding

Your child enjoys imitating you. He is beginning to show interest in books and music. He really enjoys games of emptying and filling. He is able to use his knowledge in new situations. If you prevent him from taking something, he will look for other ways to get it. He can coordinate several actions to achieve a goal, such as crawling across the room to get a toy.

He links events and reactions, such as how his parents react to his crying. He is fascinated by the results of his actions, and may pull on the tablecloth to get the glass of milk on the table.

Activities

A ball – Sit on the floor face to face with your legs open. Roll the ball between his legs. Ask him to send it back the same way. He will be proud of himself when he sees you're happy he succeeded.

A toy chest – Give him a box full of colourful, washable toys such as balls, blocks, stacking rings and fabric animals. Keep him fairly near to you. He'll start playing by himself.

A cupboard for baby – Give him permission to go through a cupboard located away from the stove and full of plastic containers in various shapes and colours. While he plays with them you can work quietly in the kitchen. Don't forget to use security locks on all the other drawers and cupboards.

Smells – Use mealtime to introduce your baby to different odours, such as bread, meat, fruit, vegetables and spices. This will help develop his sense of smell.

Books – Let him handle his first books, made of cardboard or cloth. Point at things on the pictures and tell him their names. He will learn to identify them and later to name them.

Help him explore his surroundings by letting him play with everyday objects.

From 12 to 15 months

Fine motor skills

Your baby can walk, or almost. But there's no rush. Children grow at their own pace. Maybe he prefers to wait until 15 to 18 months. Don't push it. He'll soon be climbing on the furniture and moving chairs around you.

He is very capable on all fours and can climb the stairs this way. He is learning about shapes, putting small cubes inside big ones, balls in holes, rings on a cone.

Understanding

He sorts objects by shape and colour. And he likes testing different actions. For example, if he drops an article down the stairs he'll throw another one down to see what happens.

Language

Children generally say their first words at about 12 months. A baby's first words will refer to people close to him (e.g., mommy, daddy) and to familiar articles (e.g., ball, doll). It's important to know that some words will not match adult speech (e.g., banky for blanket). He recognizes the names of familiar people and things. He enjoys repeating what he hears and continues to babble.

Relationships

Your child is very sensitive to his parents' emotions, especially in unfamiliar or threatening situations. A parent's worried or confident expression will affect his behaviour and feelings. Your young child is more sensitive to family mood than anything else.

During your baby's one-year medical exam, the doctor will ask you some questions about your child's growth; for example:

- Does he turn toward you when you call his name?
- Does he look directly in your eyes?
- Does he point at things to show his need or interest?
- Is he beginning to pretend (feeding a baby, talking on the phone)?

Activities

The falling tower – Show him how to make a stack of three or four blocks. Put one down and ask him to add a second, and so on. Then tell him to knock the stack down – and start over.

Play with your baby at building – and rebuilding – a tower. This will help him learn to gather and handle objects.

Decorating the refrigerator – Your child will have fun with fridge magnets. Moving them around helps teach the finger and thumb to pinch, and improves hand-eye coordination. Careful! Be sure the magnets are firmly assembled and too big to swallow (see Choosing toys, page 691).

Mastering the stairs – Once he starts walking, there's a new game he'll love: going downstairs backward.

Nursery rhymes and chitchat – Chatting with him frequently is a good way for your baby to learn language skills. He will enjoy having body parts named, for example. To add to your choices, your local library may have CDs of the nursery rhymes and songs that children love so much.

From 15 to 18 months

Fine motor skills

By now your child is walking. He happily struts around with legs apart and arms out for balance. It's a good time to buy him some soft shoes for walking outdoors (see First shoes, page 775). He climbs stairs on all fours, goes downstairs backward, gets into cupboards, climbs on chairs and touches everything.

He's learning to handle screw tops, door handles and the pages of a book. He helps you dress him, and undresses quickly and throws away his boots. He can take a few steps sideways or backward. He can roll a ball toward an adult.

He can also draw pictures with a large crayon. He can stack two or three cubes and put things in a bowl. He likes to fill and empty containers.

Careful! He still puts things in his mouth, including stones. He is so excited he wants to eat and sleep less.

Understanding

He is still experimenting with gravity, dropping things on purpose from his highchair. Throwing things is still part of his learning program. He looks for various ways to do what he wants and tries out new behaviour. For example, if he steps on a plastic duck it makes a noise. He may then try to squeeze it in his hands or sit on it to make the same noise. He's starting to solve problems by trial and error.

Relationships

This is the beginning of independence, and a very important time in a child's social development. It can be very hard on parents. He will follow you and imitate the things you do around home – toilet, housekeeping, toothbrushing, preparing meals. Lend him a cleaning cloth, a spoon and a bowl. Name the things he does. Invite him to imitate the sounds of things he hears: cars, airplanes, the vacuum cleaner, dogs and cats. He likes to pretend he's on the phone. Play music for him and he will dance to the rhythm. Play chase and hiding games with him and he'll be delighted. He loves playing in sand and splashing water.

He likes playing alongside other children of his age but each will play independently. Interactions between two children of the same age become longer and more complex. Periods of mutual imitation indicate that, to a certain extent, the child is conscious of the other's intentions.

Rather than responding to what he wants before he asks, let him express his needs.

Language

He is starting to grasp simple instructions (e.g., "go get your teddy bear") and depending less and less on your gestures. When he hears a noise, he looks toward the source of it. By 18 months, he knows at least 18 words that his parents understand, and he speaks one word at a time. He says "daddy" and "mommy" and a few useful terms such as "down", "wait" and "more".

He may name some body parts (nose, eyes), pets (dog, cat), and articles of daily life (ball, car). He tries to repeat words and imitate the sounds of animals.

Give him time to talk and encourage conversation, because he will learn through practice. When he says a word, add more words to it. For example if he says "turn", you say "yes, the top is turning fast."

Activities

Puzzles and a tool box – He is becoming more capable with his hands. He loves toys he can put together and take apart, nesting and stacking games. It's time for his first jigsaw puzzle (with large parts), a plastic tool box and some big building blocks.

A pull toy – He likes to push and pull a vehicle. Give him toys with long handles, carts, wagons, balls and boxes full of various things. Tie a piece of string to an empty shoe box and suggest that he put his teddy bear in it. This makes a great sled.

Bubbles – You can blow bubbles for him to catch in the bathtub. He will get very excited so be sure to keep him sitting down. This will be just as much fun outside on the grass.

Drawings – Give him paper and non-toxic wax crayons. Show him how to doodle and he will immediately see the link between action and result. After praising the artist, hang the masterpiece on the fridge.

Your child is able to pick up ever-smaller objects.

From 18 to 24 months

The Agir tôt program provides an opportunity for you to meet with a nurse to discuss your child's development and any concerns or questions you may have. The meeting is held at your local CLSC, at the same time as your child's 18-month vaccination appointment. You can prepare for the meeting by observing your child's daily activities. This will make it easier to answer any questions the nurse may ask about your child's development. To learn more, visit the website: publications.msss.gouv.qc.ca/msss/fichiers/2021/21-864-11WA.pdf.

Fine motor skills

Your child has a wild need to move now. He runs, stops, starts, stops again, legs wide, chest forward, crouches as if urinating, stands up, starts running again and falls down. He bumps into everything. He kicks his ball to move it. He dances by spinning around and around when he likes the music. He loves playing outside. He needs room to walk, jump and run the way he wants. Teach him to rest when he's tired by sitting cross-legged. It's a good position for the legs.

By about 2 years he can do a standing jump and between 2 and 3 years he will be able to hit the ball with his foot. He will also learn to walk on his toes.

He is becoming more coordinated every day. He may be able to run a piece of string through something hollow or a bobbin of thread. Between 2 and 3 years old, he will be able to hold scissors and turn the pages of a book one at a time.

He doesn't want help at the table. He holds his spoon well but still has trouble getting it to his mouth. He willingly splashes his soup on himself. He can easily take off his hat and socks, and you can encourage him to dress himself by choosing clothes that are easy to put on.

Language

By about 18 months, your child will clearly understand simple sentences like "go get your ball" with no gesturing. He will also turn his head toward a noise. By 24 months, he can do what you ask (e.g., point at a picture in a book). He likes listening to little songs and stories. By 30 months, he can correctly answer questions about who, what and where with words and actions.

His vocabulary is now growing quickly. From the 18 words he knew at 18 months, he has learned 100 by 24 months. The first 2-word sentences appear at about 2 years (e.g., daddy gone, more milk), and grow to 3 words by about 2 ½ years. At this age, your child is also starting to use small words like "me" and "one."

Little conversations will soon become possible. You'll be able to talk with your little one about an event or a thing. Don't worry if he still can't pronounce all the sounds and syllables. Children make lots of language mistakes at this age.

Relationships

Your child is becoming more self-assured and independent. Do you feel the distance is growing between you? In fact, he's discovering the world around him. He sometimes talks a lot and continues to imitate you. He feeds his teddy bear, washes it, walks it and puts it to bed. He's playing the role of mother and father.

At 2 years old, he wants to do everything by himself: eat, drink and undress, mainly. He loves learning. Sometimes he makes a mess but never mind. Let him experiment while you watch. His success will make him confident.

Your child will have fun with you or with an older child but not yet with a toddler his own age. He may find it hard to lend his toys but you will gradually convince him to share. It will be easier at 3 or 4 years. Many children go through a phase when they push, bite and hit. Say NO clearly but don't hit or bite your child.

Your child is ready for his first construction games.

Understanding

Between 18 and 24 months, he learns that objects exist even when he can't see them. When your child sees an object moved from one place to another, he looks for it in the last hiding place. He also looks for articles he hasn't seen moved.

Your child can understand symbols now, and can think of people, things and events he doesn't see. He can imitate someone who isn't there, or pretend to. He can draw objects. At about 2 years old, he will be able to sort articles based on common characteristics such as colour.

He is also beginning to understand cause and effect. When your child bangs on things with a spoon, he realizes that each one has its own sound.

Activities

A story every night – As often as possible, take the time to read your child stories. Point out pictures by naming objects and actions. Ask him to turn the pages and let him handle the book.

Your child will learn that reading goes from left to right and from the top of the page to the bottom, and that stories have a beginning and an end. He will express his emotions. This is a great time to share precious moments of pleasure and togetherness. Choose books he likes. You can go to the library, and ask family members to give him books as presents.

Other word games – Writing is everywhere. While taking a walk, satisfy his curiosity by reading things that attract his attention: posters, the names of stores, advertising, road signs, etc. He will learn to recognize logos, which is the first step toward understanding words.

The sound of music – He is also discovering music. Listen to CDs and sing his favourite songs with him. He often prefers songs accompanied by simple gestures. Since he is using toys with more ability, you can provide him with simple instruments like drums, a xylophone and cymbals.

Free creativity – It's time to use toys that let him create things. He likes finger painting, modelling clay and mud pies. Say something about what he makes. He will want to talk about it. Don't forget to show off his handiwork – he will be very proud of it.

Long live the outdoors – Your child needs to move. He needs space to run and jump. Play with him outside in your yard or the park as often as possible. He likes playing outside and it's good for him.

Costumes – He loves disguises and will borrow grownups' hats and shoes. Set aside some old clothing that doesn't matter if it gets dirty.

The age of toilet training varies greatly from one child to another.

Toilet training

Toilet training usually begins at about 2 years old. Most children are fully toilet trained through the day between 2 and 4 years old.

Toilet training usually takes from 3 to 6 months. We recommend that you do not set a timetable. There is no use forcing a child who isn't ready.

Night-time bladder control may take several months or even several years.

A child is capable of toilet training somewhere between 18 months and 3 years of age. Here are a few signs that your child might be ready for this new experience:

- Your child can walk to his potty.
- He is starting to undress (he can pull down his pants).
- His diaper stays dry for several hours.
- He understands simple instructions, like "take this to Daddy."
- He can express his needs with words like "want milk" and he will soon be able to say "need to pee!"
- He is proud he can do things by himself.

It's important to go at your child's speed so this major new step in life is positive. Never try to force him to toilet train before he's physically and mentally ready. Trust him!

How to make toilet training easier

Here are some ways to make toilet training easier:

- Get him ready a bit at a time by teaching him the words and gestures of elimination – "poop", "pee", "potty", "toilet".
- Ask him to imitate you. Your child will want to copy you in the bathroom the same way he copies your speech. Put the potty close to the toilet and urge your child to do the same thing you do. When he's ready, he'll want to be like mommy and daddy.
- Use the potty rather than the toilet during the first steps. Your child will feel safer and more stable.
- Ensure that he is well seated on the potty, feet on the floor. If he's too high, use a small footstool so he can relax.
- To begin with, ask your child to sit on the potty with his clothes on, and then again after the wet diaper has been removed.
- Congratulate your child every time he shows interest in sitting on the potty.
- Later, have him sit on the potty at set times of the day (for example, after waking up, after eating and before naps, baths and bedtime) to establish a routine.
- Start using training pants or cotton pants after your child has been using the potty regularly for a few days.
- Don't be discouraged by accidents. This is all part of learning.
- Encourage his efforts and avoid punishing him if he has an accident.

One of these days your child will want to go in the potty. There's no rush, and it will be easier if there's no stress.

It's not a good idea to start toilet training during an unsettled time in your child's life, such as when you move, hire a new sitter or a new baby arrives.

Emergent reading and writing

Now that your child has learned to handle books, he's beginning to discover the written word. Long before he goes to school, you can use everyday events to help him take the first steps toward reading.

Your child watches you and wants to imitate you. Do some of your reading and writing while he's watching. Here are a few suggestions for activities:

- When he begins naming the people around him, you can write each person's name beside their photo. If he says "daddy" for example, you can write the name in big letters under a picture of daddy.
- When he brings you a drawing, write his name at the bottom of it.

Let him handle books. Reading will be an important part of his life when he goes to school.

Once your child has learned to handle books, he'll become increasingly familiar with the written word.

Your child will make the connection between speech and writing a bit at a time. He will discover the purpose of writing and decide it is a good idea.

Don't hesitate to visit your local library.

Nadeige Charles


Caroline Cloutier

Feeding your baby

Jean-Claude Mercier

An act of love

If delivery goes well, the baby is put on mom's tummy right after birth. This "skin-to-skin" contact is a source of comfort and reassurance that helps your newborn adapt to life in the outside world. It also gives mom an opportunity to get to know her baby. This is an intense and moving moment for the whole new family.

These intimate moments give parents a chance to observe their newborn child. In the hour after birth, most babies will put their hands to their mouth, stick out their tongue and try to suck. Your baby might want to suck without necessarily needing to drink much milk.

Feeding your baby is a time of intimacy and sharing. Frequent contact is important and will play an important role in the lives of you and your baby.

Snuggled in your arms, your baby feels the milk filling her stomach. She loves the sound of your voice and the warmth of your body! Feeding your little one can be so much more than a simple task that needs to be done. Make the most of such moments to interact with your baby.

Hunger signs

Your baby will show you he is hungry in any number of ways. His breathing will change, his eyes will move beneath his eyelids, he will move his arms and legs, stretch, bring his hands to his mouth or face and make sucking motions. These are all signs that your baby is hungry. You will recognize them more easily if you keep your baby close to you.

There's no point waiting for your baby to cry or get angry before starting to feed him. Changing a diaper to wake a sleeping baby is sometimes a good idea, but is best avoided if your little one is very hungry. Do whatever works best for you.

Feeding schedule

Over the first few days, most babies can't distinguish between hunger and their need to suck. They want to be fed every time they wake up. Some babies, especially those with jaundice, may remain drowsy until they regain their birth weight and sometimes may forget to wake up to feed. They need to be stimulated, even during the night, to make sure they drink enough.

Keep in mind that newborn babies are in a period of intense learning. They must "learn" to feed, which is why they may need to feed longer and more often.

As the weeks and months pass, feeding frequency and duration, like sleeping patterns, may vary from one time or one day to the next. No two babies are the same. Some babies have a regular schedule, while others are more unpredictable. As your baby gets older, feedings tend to become shorter and less frequent.

Your baby's schedule depends on a variety of factors:

- Age
- Appetite
- Temperament and mood
- How effective she is at sucking and the speed at which the milk flows
- The time of day

Breast milk is easy to digest since it is perfectly adapted to babies. Breastfed babies usually feed 8 times or more per day, especially during the first few months.

Most commercial infant formulas are made from cow's milk. They take longer to digest because the baby's stomach has to work harder. This is probably why babies fed on commercial infant formula tend to feed 6 or more times a day.

It's hard to tell how many times your baby will feed per day; and it's just as hard to know how much milk she will need each feeding.

Instead, you will have to learn to recognize signs that your baby is hungry or full. Let her drink when she shows signs of hunger, but don't force her when she's full in the hope that she will wait longer between feeds.

In the beginning, you may have difficulty understanding your baby's needs. Is she hungry? Has she drunk enough? Is she crying because she's uncomfortable and wants you to pick her up? If you get the impression that your baby is drinking too much or too little, your midwife or CLSC nurse may be able to help.

Étienne St-Michel

Whether you breastfeed or bottle-feed, it's important to adapt to your baby's appetite.

Is your baby drinking enough milk?

Before you go back home, make sure you can tell if your baby is feeding well and getting all the milk he needs. Talk to your midwife or a nurse at the hospital if in doubt.

When your baby is feeding enough, the appearance and quantity of his stools and urine will change. Here are a few signs to help you determine if your newborn is getting enough milk.

Urine

Urine is darker and more concentrated over the first 2 or 3 days. Your baby may also have orange stains (urate crystals) in his diaper: this is normal for the first 2 days. In the first week, the number of times your baby pees will increase by one every day:

- Day 1 = 1 time
- Day 2 = 2 times
- Day 3 = 3 times, etc.

After the first week, your baby will pee at least 6 times in 24 hours if she drinks enough milk. Each pee generally contains 30 to 45 ml of urine. The urine is clear and odourless.

Stools

Over the first 2 or 3 days of your baby's life, stools will be dark and sticky; this is called meconium. Digesting milk will bring about a change in stool appearance. Gradually, they will become less sticky and a dark green colour. If your baby is drinking enough, there will be no meconium at all left in his digestive system by the fifth day. Stools will be yellow or green if he is drinking breast milk, or greenish beige if he is being fed commercial infant formulas.

If your baby is drinking enough, his stools will be liquid or very soft. He may have 3 to 10 bowel movements per day over the course of the first 4 to 6 weeks. If your baby doesn't have at least one bowel movement per day, he might not be drinking enough. After 4 to 6 weeks, some babies fed with breast milk will have fewer but very substantial bowel movements even if they are drinking enough (e.g., one bowel movement every 3 to 7 days).

Weight gain

Even if your newborn is drinking enough, he will nonetheless lose a little weight (about 5 to 10% of his birth weight) over the first few days. He will start putting it back on again around the fourth day and will regain his birth weight by around the second week (between 10 and 14 days).

Once your baby regains his birth weight, he should continue to gain weight steadily. That's a good sign that he's drinking enough. If you think your baby isn't drinking enough or you're worried about his growth, contact a CLSC nurse, your midwife, or your family doctor (see Tracking baby's growth, page 616).

If you think your baby isn't drinking enough or you're worried, contact a CLSC nurse, your midwife or your family doctor.

For more information on urine, stools and the size of your infant, see The newborn, page 272.

The number of times your baby pees and poops every day is a good way to tell if she is drinking enough.

Signs that your baby is drinking enough

- He is putting on weight.
- He feeds well and often (8 times or more per 24 hours for breastfed babies and 6 times or more per 24 hours for formula-fed babies).
- You can see or hear him swallowing.
- He seems full after drinking.
- He pees and poops in sufficient quantities.
- He wakes up on his own when hungry.

Signs that your baby is not drinking enough

- He is very drowsy and very difficult to wake for feeding.
- His urine is dark yellow or there is very little of it.
- There are still orange stains (urate crystals) in his urine after the first two days.
- His stools still contain meconium (dark, sticky stools) on the 4th or 5th day.
- He has fewer than one bowel movements per 24 hours between the age of 5 days and 4 weeks.

Growth spurts

During growth spurts, her appetite will suddenly increase and she may want to be fed more often, sometimes every hour. Growth spurts generally last a few days and may occur at any time during the first few months. Some babies will have more growth spurts than others (see Baby's growth, page 615).

Growth spurts occur most frequently around:

- 7 to 10 days
- 3 to 6 weeks
- 3 to 4 months

During growth spurts, your baby will feed more to meet her needs.

Hiccups

It's normal for your baby to get the hiccups, especially after drinking. Hiccups don't seem to bother babies. They will stop by themselves after a few minutes.

Burping

All babies swallow varying amounts of air as they drink. If your baby is calm during and after feeding, he probably doesn't need to burp.

But if your baby seems to be in a bad mood or squirms while drinking, the first thing to try to calm him down is to burp him. One or two burps are usually enough, but more may be required for babies that drink quickly or from a bottle.

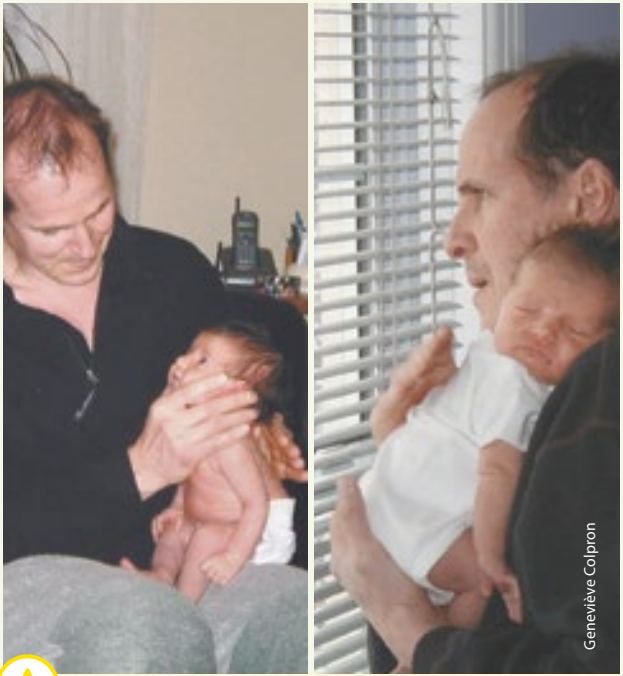
How to burp your baby

Here's how to burp your baby:

- Hold your baby in an upright position against your shoulder or sit him down on your lap.
- Gently rub or tap his back for a few minutes.

After he burps, check to see if he's still hungry.

Don't insist if your baby won't burp: some babies don't. Let him be if he's asleep. He'll wake up if he needs to burp.



To burp your baby, gently rub or tap his back for a few minutes.

Regurgitation

After nursing or feeding, babies may regurgitate, or "spit up," some or all of the milk they have drunk. Regurgitation is effortless, and is normal for babies.

Regurgitation happens because the muscle that prevents milk from flowing back from the stomach to the mouth has not fully developed.

Some babies regurgitate more than others. They may regurgitate right after feeding or a little later. Sometimes, you may have the impression your baby has regurgitated almost everything he drank. But even though it may seem like a lot, most regurgitations only contain a small amount of milk.

Regurgitation tends to diminish at around 6 months and usually stops around one year.

Regurgitation can be difficult to distinguish from vomiting, especially in a baby (see Vomiting, page 665).

As long as your baby is in good spirits and gaining weight, there's no reason to be concerned. Most of the time, regurgitation is harmless.

It is best to see a doctor if your baby

- Seems to be in pain
- Projectile vomits several times a day
- Wets his diapers less than before
- Isn't gaining enough weight

Gas

Gas is perfectly normal and isn't caused by milk!

Newborns' intestines start digesting milk right away after the first feedings. This new sensation may make babies uncomfortable for the first few days. They may squirm or cry and often have lots of gas. They may need to be calmed and comforted in their parents' warm arms.

Even as they get older, most infants will continue to have a lot of gas. Some babies burp less and expel air this way instead. If gas is making your baby uncomfortable, try to soothe her in your arms, shifting her position or moving her legs.

Excessive crying (colic)

During the first few months, a healthy baby may cry very hard and for a long time (see Excessive crying (colic), page 283). Most of the time, excessive crying is completely normal and is unrelated to diet.

If your baby drinks too fast, chokes and starts to cry, she may swallow lots of air. This can make her feel bloated and uncomfortable. Burp your child or take feeding breaks to soothe her.

Allergies and intolerances

Babies cannot be allergic to their mother's milk. In rare situations, they may react to certain proteins ingested by their mothers and passed on to them in her milk (see Breastfed babies and allergies, on page 574).

In rare cases, babies fed with commercial infant formulas may be intolerant to them and require a special formula. A doctor can recommend a formula adapted to your baby's needs.

Social pressure

In Québec, the way babies are fed has changed a great deal over the past two generations. People around you will have made similar or very different choices to your own. They will regularly give you tips, information and advice. Some will be in favour of breastfeeding, others not. Some will say you should introduce other foods very early; others will tell you to wait.

As a mother or father, you may end up feeling pressure to do things a certain way. Just remember that there is no single recipe for how to feed and take care of your baby. As the days go by, you will find what works best for your baby and you.

Baby's changing needs

The first few weeks are a learning experience for the whole family. Feeding your baby will become an important part of your day. And it's not always easy to know if your baby is hungry or getting enough milk.

Over time, you'll fall into a routine as your baby learns to show her needs more clearly. She will become more skilled and efficient at sucking. She will spend less time feeding and sometimes drink less frequently. Feeding your baby will be easier.

After 3 months, your baby will start interacting a lot with others. She will be alert and interested in everything happening around her—even when she's drinking! Feeding will become a time of sharing between you and your baby.

Feeding a premature baby

A premature baby may not be able to feed by himself for the first few weeks. It all depends on how early he was born and how healthy and heavy he is.

At the start, he may need to be fed a special formula intravenously. Then he will be able to be fed milk directly into his stomach through a tube. After that he will gradually start drinking from his mother's breast or a bottle.

Premature babies' digestive systems are immature (not yet developed). Premature babies are also more susceptible to certain infections.

Breast milk is easily digested and contains **antibodies** that help prevent infections. The medical team will encourage you to **express** your milk to give to your baby. Breast milk meets all the special needs of your premature baby. By expressing your milk, you are helping care for your baby. If you weren't planning to breastfeed your child, it's never too late to change your mind.

If your baby is born very prematurely, minerals or calories may be added to the milk you express for a time.

If your child is not breastfed, special milk for premature babies will be used.

Vitamin D: Not your ordinary vitamin!

Vitamin D plays an essential role in calcium absorption and bone health.

It's true that exposure to the sun's rays provides vitamin D. However, direct sunshine isn't recommended for babies. Because of this, you have to find another way to fulfill their vitamin D needs.

Your healthcare professional will help you determine whether your baby needs a vitamin D supplement. If so, you can find the necessary supplements at your drug store.

Your drug insurance plan should cover vitamin D supplements if you have a prescription from your doctor.

Dominic Roy

Milk

Mahalia Gagnon

In the first year of life, milk plays a crucial role in your baby's diet. In fact, it's the only food you will give your baby in the first months. In this chapter, you'll find everything you need to know about which milk to give your newborn or older baby.

Which milk is best?

Health professionals the world over recommend that babies be fed breast milk exclusively for the first six months of life. The Canadian Paediatric Society, Dieticians of Canada, and Health Canada all echo this recommendation. Once babies have started eating solid foods, it is recommended that they continue breastfeeding until the age of two years or more.

In Québec, 9 out of 10 mothers breastfeed their newborn at birth, and about 3 out of 10 mothers continue for up to 6 months or more. You can decide to breastfeed for a few days, a few months, or over a year. It's up to you.

Some women find that breastfeeding doesn't work for them, despite the benefits. Others find that breastfeeding is not what they'd expected or hoped and decide to give their babies commercial infant formula.

It is recommended that babies who are not fed breast milk be given cow's milk that has been processed and adapted into commercial infant formula.

The baby formula industry processes cow's milk to make its nutritional content closer to that of mother's milk. But commercial infant formulas still can't match mother's milk. They don't contain the same proteins, they don't supply **antibodies**, and they don't provide immune factors, growth hormones or white blood cells (see The composition of human milk, page 387). Babies who aren't fed with breast milk have a higher risk of ear infections, gastroenteritis, bronchiolitis, pneumonia and other problems.

For babies who are not fed breast milk, the Canadian Paediatric Society, Dietitians of Canada and Health Canada all recommend using an infant formula enriched with iron up to the age of 9 to 12 months. Cow's milk is completely inappropriate for babies under 9 months.

However you feed your baby, your baby needs you, your attention and your love. You can fulfill his need for warmth, security and affection by holding him in your arms when you feed him and maximizing skin-to-skin contact, particularly in his first few weeks. You can also massage him, take a bath with him and use a baby carrier to help you "stay in touch."

Mother's milk

The thick, yellowish milk that comes in the first few days after birth is called colostrum. Colostrum is very rich in proteins, vitamins and minerals—just what your newborn needs. It supplies large amounts of white blood cells and **antibodies** that protect your baby from infections. It also cleans her intestines of the residues that build up before birth.

Between the second and fifth day after giving birth, milk production increases rapidly. The milk becomes clearer and takes on a blueish – or yellowish-white colour. This is when your milk "comes in." It is caused by hormonal changes and will happen even if you don't breastfeed your baby or **express** your milk. If breasts are stimulated often during this period, including at night, milk seems to come in more quickly. Frequent stimulation also helps reduce discomfort if breasts are engorged.

Your milk changes over time to adapt to your baby's needs as she grows. Milk also changes over the course of a feeding and according to the time of day.

It is recommended to supplement breastfed babies with Vitamin D until they are getting enough of it from their diet (see Vitamin D: Not your ordinary vitamin!, page 380). Your healthcare professional will help you determine what dose your baby should take.

Producing breast milk

Pregnancy hormones prepare the breasts for breastfeeding. Milk production begins at the end of pregnancy, which is why some women experience some leaking during this time. Whether your baby is born on his due date or earlier, there will be milk for him.

When milk is removed from the breast, it stimulates the breast to produce more. This stimulation can come from the sucking action of your nursing baby or from expressing milk by hand or with a breast pump. Your breasts will produce milk as long as your baby nurses or the milk is expressed.

The breast produces milk continuously all day long. It accumulates in breasts waiting for your baby to nurse or for the milk to be expressed. The speed at which milk is produced depends on how much milk has accumulated in the breast. Breasts have a natural mechanism that adjusts to the baby's needs and prevents the mother from being uncomfortable. It works like this:

- The more the breast is emptied, the more quickly it will produce milk.
- The longer the breast is left full, the more slowly it will produce milk.
- The more often the breasts are emptied, the more milk they will make.
- The less often the breasts are emptied, the less milk they will make.

If the breasts are stimulated more often, milk production self-adjusts in a few days.

The more often the breasts are emptied, the more milk they will produce.

If you gradually stop removing milk from your breasts, they will progressively stop producing it. This will prevent your breasts from becoming engorged and sore. If you stop all at once, your breasts will become engorged and stop making milk after a few days.

Each breast produces milk independently. If only one breast is stimulated, the other breast will stop making milk within a few weeks.

The composition of human milk

Breast milk composition changes throughout the breastfeeding period to adapt to your baby's needs and age.

Breast milk is made up of proteins, sugars, and all the fats your baby needs, including omega 3 fatty acids that support brain and eye development. It provides each baby with the exact amount of vitamins and minerals they need to develop, with the exception of vitamin D (see Vitamin D: Not your ordinary vitamin!, page 380). What's more, it contains enzymes that facilitate digestion.

Breast milk has **antibodies** that help your baby fight infections and develop his **immune system**. It is also rich in good bacteria that are thought to provide him with lifelong protection.

To date, over 200 components have been identified in human milk. Certain factors influence the composition and taste of breast milk.

What influences the composition of milk

The mother's diet

Drinking a lot of fluids doesn't increase the amount of milk you produce. While you're breastfeeding, you'll naturally be thirstier than usual. Listen to your body—you don't need to force yourself to drink a lot. However, if you notice your urine is dark or cloudy, it means you're not drinking enough.

There aren't any foods that increase milk production. Eat regularly and eat enough. You can also have snacks if you're hungry.

Some foods can have a slight effect on the taste of the milk you produce, but your baby will adapt. Some studies suggest that it can help babies develop their taste for food if mothers eat a varied diet while breastfeeding.

Most breastfeeding mothers can eat whatever they like, including foods deemed risky during your pregnancy (i.e., sushi, deli meats, cheese).

If you think your baby is having a reaction to something you're eating, read Breastfed babies and allergies, page 574.

If you are a vegan (i.e., you don't eat any animal products, that is, meat, fish, eggs or milk products) and you are breastfeeding, you should take a Vitamin B_{12} supplement.

Eat foods rich in protein, iron, calcium and Vitamin D. It might be a good idea to consult a nutritionist.

Fish

Fish belongs on your menu. However, some fish species absorb pollutants that make their way into breast milk and could harm a baby. To take advantage of the benefits of eating fish while minimizing the risk from contaminants such as mercury, read Fish and seafood, page 88.

Coffee, tea, chocolate, herbal tea and other drinks

Caffeine passes into breast milk. If you consume a lot of it, it can make your baby nervous and irritable until the caffeine is eliminated from his system. Caffeine is found in coffee, tea, energy drinks, chocolate, and some soft drinks.

Energy drinks are not recommended while breastfeeding because they contain other substances that might harm your baby.

Other products (coffee, tea, etc.), may be consumed in moderation, up to two cups or so per day.

Decaffeinated drinks such as cereal-based beverages and herbal tea can be good substitutes for caffeinated beverages.

Alcohol

Any alcohol consumed by a breastfeeding mother goes into her milk. It takes 2 to 3 hours to eliminate alcohol from breast milk, depending on the mother's weight.

Alcohol can interfere with breastfeeding and may reduce milk production and lead to early cessation of breastfeeding.

Even though a breastfeeding baby only receives a tiny share of the alcohol his mother drinks, he eliminates it more slowly than an adult and his system is more sensitive to its effects. This can have harmful impacts, especially on the baby's sleep habits.

Breastfeeding mothers can drink an occasional alcoholic beverage. The benefits of breastfeeding outweigh the risks of occasional light alcohol consumption.

If you do have a drink, you can reduce your baby's exposure to alcohol in one of these ways:

- Breastfeed your baby right before having a drink.
- Or wait 2 to 3 hours per serving of alcohol before nursing again. After waiting, simply nurse normally at the next feeding.

If you have more than one serving, feed your baby milk you expressed in advance (frozen or refrigerated) while the alcohol remains in your system. You may need to **express** milk to relieve engorgement of your breasts, but this milk should be discarded because it contains more alcohol.

To find out how long it takes for your body to eliminate alcohol according to your weight, visit beststart.org/resources/alc_reduction/pdf/brstfd_alc_deskref_eng.pdf.

Each serving or glass of an alcoholic beverage takes 2 to 3 hours to be eliminated from your blood and milk.

If you have questions about alcohol consumption while breastfeeding, talk to your health professional.

Good to know...

In Canada, one serving or 1 drink = 13.5 g (17 ml) of pure alcohol.

Size of a standard drink

340 ml or 12 oz
of beer
(5% alcohol)

=

140 ml or 5 oz
of wine
(12% alcohol)

=

85 ml or 3 oz
of fortified wine
(e.g., Port wine)
(20% alcohol)

=

45 ml or 1.5 oz
of spirits
(40% alcohol)

Illustrations: Maurice Gervais

Use of tobacco, electronic cigarette, cannabis, or other drugs and exposure to second-hand smoke are not recommended while breastfeeding.

Tobacco and electronic cigarette

Tobacco can interfere with milk production. Nicotine from tobacco and electronic cigarette also passes through breast milk and can cause crying, irritability, and insomnia to the breastfed child. Try to avoid smoking or vaping just before feeding.

Talk to your doctor if you want to use quit-smoking products such as patches or nicotine gum.

Even if you do smoke or vape, breastfeeding provides many benefits for you and your baby, including protection from respiratory infections.

Cannabis and other drugs

Cannabis and certain other drugs such as amphetamines, cocaine, heroin, LSD, and PCP pass into breast milk and are dangerous for your baby.

Cannabis use by a breastfeeding mother can result in irritability, shorter, less frequent feedings, and reduced muscle tone in the baby.

Medications

Most medications pass into breast milk, but in very small amounts. Some medications are a better choice because more is known about their effects on nursing babies.

Many medications may be taken while breastfeeding, including acetaminophen, ibuprofen and most antibiotics.

Decongestants containing pseudoephedrine can reduce milk production. It's best to ask your pharmacist to recommend another product.

Talk to a health professional before taking any medication or natural health product. Some medications may decrease your milk supply or cause other problems.

It's very rare to have to stop breastfeeding because of medical treatment. If a health professional advises you to stop breastfeeding because of a medication, here's what you can do:

- Say that breastfeeding is important to you and your baby.
- Ask if there are any medications that can be taken while breastfeeding instead.

Exposure to contaminants

In Québec, environmental pollution is not generally a problem for breastfeeding mothers and babies.

Breastfeeding mothers who come in contact with or breathe in chemical substances contained in household products may pass these substances on in small amounts to their babies through breast milk. This is only a problem in the case of regular and prolonged exposure, such as occurs at work.

In day-to-day life, exposure to the following products on an occasional basis is nothing to worry about:

- At the hairdresser: hair styling products, dyes and perms
- At the dentist: local anaesthetic, fillings and root canals
- In the home: latex paint and varnish, home cleaning products

If you work in an environment where you are exposed to contaminants like solvents, inks or dyes that may be dangerous to your breastfed baby, you may be eligible for reassignment or preventative withdrawal. Visit cnesst.gouv.qc.ca/en/life-events/i-am-expecting-child for more information. You can also consult your doctor.

Handling expressed milk

Before handling expressed milk, make sure your hands, breast pump and accessories are clean.

Storing breast milk

Breast milk is best when fresh and taken directly from the breast, but it refrigerates and freezes well, too. If you only feed expressed breast milk to your baby, it's preferable to use freshly expressed or refrigerated milk. Prolonged freezing slightly reduces the nutritional value of breast milk. However, it's still better than any other milk.

Breast milk can be kept in glass or hard plastic containers or even in special, thicker baby bottle liners designed for breast milk. Baby bottle liners for commercial formulas are too thin and don't freeze as well. They need to be doubled up because they are too fragile.

Milk that has just been expressed or taken out of the refrigerator can be kept at room temperature for up to 4 hours. If it will be used later than that, keep it in the refrigerator. If you don't plan to use it within 8 days, freeze it as soon as possible. You can put it straight in the freezer after expressing it. Here are a few tips:

- Save milk in different amounts (between 30 and 90 ml) to reduce waste.
- Don't fill containers past ²/₃ full. Liquids take more space after they freeze.
- If you want to store a lot of milk in a single container, put it in the refrigerator until you have the amount you want.
- Mark the date on the container and seal it tightly.
- Store milk in the back of the freezer away from the door to avoid changes in temperature.
- You can put all your frozen breast milk containers inside a larger, tightly closing container.
- Use the oldest milk first.

If the fresh, refrigerated or thawed milk has been warmed up but your baby changes her mind, you don't need to discard it unless it has been in contact with bacteria from your baby's mouth. You can keep it in the refrigerator for 4 hours or more. Use it for the next feeding; otherwise you'll need to throw it out.

Information on thawing milk can be found under Warming milk, page 501.

Breast milk storage time

	Room temperature	Refrigerator	Freezer*
Fresh breast milk	4 hours at 26°C (79°F) 24 hours at 15°C (59°F) (in a cooler with ice pack)	8 days at 4°C (39°F)	6 months (refrigerator freezer, but not in the door) 12 months (chest freezer)
Previously frozen breast milk	1 hour	24 hours	Do not refreeze

* The freezer temperature must be cold enough to keep ice cream hard (-18°C or 0°F).

The storage times in the table above don't always apply for hospitalized babies. For hospitalized babies, follow the recommendations of the hospital staff.

Warning

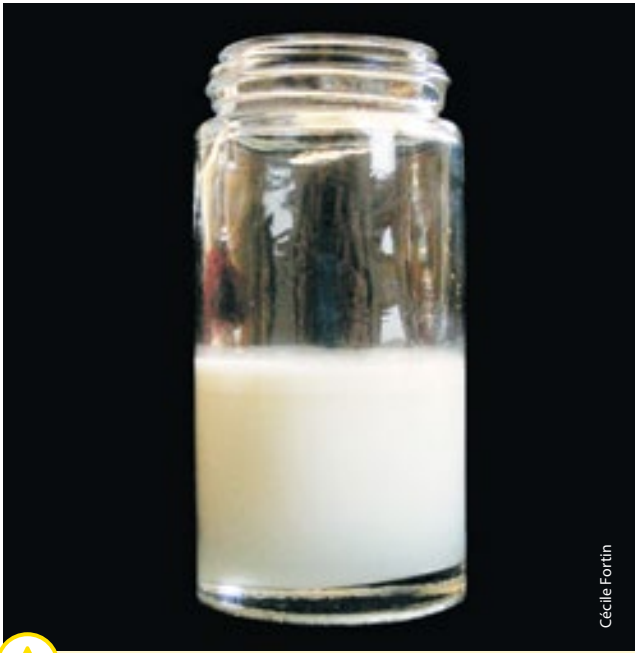
Storage times can't be added together. For example, you can't keep milk for 4 hours at room temperature, then put it in the refrigerator or freeze it.

Appearance of expressed milk

Expressed breast milk doesn't look like cow's milk or commercial infant formula. Since it's not homogenized, it separates after a while and the cream floats to the surface. Warm milk just needs a shake to mix it together again.

Human milk can have a whitish, bluish, yellowish or brownish tinge. The colour and smell of breast milk can vary

- From one mother to the next
- According to the mother's diet
- Depending on the baby's age
- Depending on whether the milk was expressed at the beginning or the end of a feeding



Expressed breast milk separates after a while and the cream floats to the surface. Don't throw it out—it's still good! The amount of cream varies from one time to the next and from one mother to another.

The smell and taste of some mother's milk changes when the milk is refrigerated or frozen. This is caused by lipase, an enzyme that helps babies digest fats. The digestive process can begin while the milk is still in its container. Don't worry—it's still good for your baby.

Some babies don't like the taste of refrigerated or frozen milk and refuse to drink it. Sometimes you can solve the problem by freezing your milk without refrigerating it first.

If that doesn't work, try

- Heating it to just below the boiling point
- Then, cool it off immediately
- And freeze it

This will deactivate the lipase.

Commercial infant formula (commercial milk)

The Canadian Paediatric Society, Dietitians of Canada, and Health Canada recommend that babies not fed on breast milk be given iron-enriched commercial infant formula up to the age of 9 to 12 months.

When properly prepared, commercial infant formula is a safe alternative to breast milk. Unlike cow's milk, goat's milk and soya drinks, commercial infant formula is adapted to meet infants' basic needs.

Pay attention to the expiration date: don't buy formula if the date on the can has passed. Return any dented, bulging, or abnormally shaped container to the store.

Which formula to choose?

To prevent **anemia**, it is recommended babies be fed iron-enriched formula right from birth.

Most parents wonder what brand of commercial infant formula is the best. Companies advertise their products extensively to parents, doctors, nurses, and nutritionists. Each sales representative will say that their product is better than the others or that it is closer to mother's milk. Additives and claims listed on product labels are only there to boost sales. They are of no benefit to your baby and can even be misleading.

Most babies have no problem changing brands, but others can be bothered by it, especially during the first few days. If this is the case with your baby, avoid changing brands too often.

To date, there is no proof that one brand is better than another. Commercial infant formulas are comparable in quality.

Ready-to-serve, liquid, or powdered

Commercial infant formula is sold in three forms:

- Ready-to-serve
- Concentrated liquid
- Powdered

The same brand of formula may look different in its ready-to-serve form than it does when prepared from concentrated liquid or powder, but the composition and nutritional value remain the same.

You can use any of these forms or alternate depending on the situation, (e.g., at home, on an outing). However, ready-to-serve and concentrated liquid baby formulas are preferred for premature, immunocompromised, and low-birth-weight babies because they are sterile at the time of purchase.

Characteristics of the different forms of commercial infant formula

Ready-to-Serve

- Sterile at time of purchase.
- Easiest to use.
- Is used as is.
- Very expensive.

Concentrated liquid

- Sterile at time of purchase.
- Easier to use and safer than powdered form.
- Must be diluted with water.
- Costs about the same as powder.

Powdered

- Not sterile at time of purchase.
- Greater risk of contamination because it requires more handling.
- Requires greater care during the dilution step than concentrated liquid.
- Costs about the same as concentrated liquid.

Read the label carefully to make sure you buy the desired product. It is easy to confuse concentrated liquid formula with the ready-to-serve variety. If you do, you run the risk of giving your baby undiluted concentrate, thinking it is a ready-to-serve product.

"Transition" formulas

There is a range of commercial infant formulas on the market for babies 6 months and over. There are even products for babies age 12 to 36 months. These products are cheaper than commercial infant formula, but much more expensive than cow's milk.

"Transition" formula is not suitable for babies under 6 months because it contains too much calcium.

Compared to commercial infant formula, transition products can be a cheaper alternative for babies age 6 to 12 months, but they are not necessary. You can continue using your regular formula until you start feeding your baby cow's milk around the age of 9 to 12 months. For babies over 9 months who eat a varied diet, transition formula is no better from a nutritional point of view than cow's milk.

Soy-based infant formula

Commercial infant formula made from soy protein is suitable for babies whose families don't consume dairy products or for babies with certain health problems.

However, using soy-based infant formula does not reduce excessive crying in infants.

Special infant formulas

In rare cases, babies fed with a commercial infant formula may have trouble tolerating formula. Talk to a doctor if this seems to be the case. The doctor can recommend a special formula for your baby.

Special formulas are intended for babies with specific problems, such as allergies or severe intolerances. Medical insurance plans reimburse the cost of certain products when purchased with a prescription.

If your baby has trouble tolerating commercial infant formula, you can also go back to breastfeeding (see Restarting milk production, page 451).

Handling commercial infant formula

Diluting commercial infant formula requires care and certain precautions. It is important to avoid mistakes so as not to contaminate the milk with bacteria.

Among the different types of commercial formulas, powdered products require the most care because they are not **sterile** and may contain bacteria. Bacteria may get into powdered formula at the factory where it was manufactured, or at home when you use the container and the measuring scoop provided. Some babies have gotten sick after drinking milk made from powdered formula contaminated with bacteria.

To avoid contamination, you can do two things:

- Destroy bacteria
- Prevent bacteria from developing and multiplying

For premature, immunocompromised, and low-birth-weight babies, it is recommended to destroy bacteria when preparing powdered formula. For term babies who are in good health, it is sufficient to prevent bacteria from developing, although you can also destroy bacteria if you wish.

To destroy bacteria, prepare the infant formula using very hot water. The World Health Organization (WHO) has recommended using boiled water cooled to 70°C or higher to prepare powdered formula. To ensure the water is hot enough, use it within less than 30 minutes after boiling. It is preferable to follow the WHO recommendations, even if they differ from the manufacturer's directions.

To prevent bacteria from developing, prepare the infant formula with boiled water that has been cooled to room temperature. Once the formula is prepared, it's best to serve it immediately. Formula that's prepared in advance can also be kept in the refrigerator at 4°C for a maximum of 24 hours.

Never use hot tap water to prepare infant formula because it is more likely to contain lead, contaminants, and bacteria. Until your baby is 4 months old, boil cold water.

First step
For all types of formula

Here's how to prepare infant baby formula. Regardless of the type of formula you use, the first step is always the same.

- Clean the work surface.
- Wash your hands thoroughly.
- Sterilize and assemble all the required equipment and utensils.*
- Clean the formula container with hot water before opening it with a clean can opener.

* For additional information on sterilizing and using baby bottles, see Cleaning bottles, nipples and breast pumps, page 507.

Second step
Depending on the type of formula

Concentrated liquid

For babies under 4 months:

- Fill a saucepan with cold tap water.
- Bring to a rolling boil for one minute.
- Mix equal quantities of boiled water and concentrated liquid formula.
- Stir to mix well.
- Cool the mixture rapidly in cold water before putting it in the refrigerator or feeding it to your baby.
- If any concentrated liquid formula remains in the can, cover the can and put it in the refrigerator.

For babies 4 months and over:

- Follow the same directions, but you can use cold, unboiled tap water.

Powder

Note: Follow the manufacturer's directions to the letter regarding the quantities of powdered formula and water to use.

For babies under 4 months:

- Fill a saucepan with cold tap water.
- Bring to a rolling boil for one minute.*
- Pour the recommended quantity of water into the baby bottle or other container.
- Measure the powdered formula with the measuring scoop provided; scoop size varies from one brand to the next.
- Add the required quantity of powdered formula to the water.
- Stir to mix well.
- If needed, cool the mixture rapidly in cold water before feeding it to your baby or putting it in the refrigerator.
- Wash the measuring scoop and put it away in a sealable bag or clean container to protect it from dust. Do not put it back in the can in order to avoid contamination.

For babies 4 months and over:

- Follow the same directions, but you can use cold, unboiled tap water.

Ready-to-serve

- Pour the formula into the baby bottles.
- Immediately put the nipples and caps back on the bottles.
- If any ready-to-serve formula remains in the can, cover the can and put it in the refrigerator.

* To know what temperature of water to use when preparing powdered formula, see page 403.

Always check the expiration date before giving commercial infant formula to your baby.

If you make a mistake when preparing the mixture (dilution error)

If you mix the wrong quantities of commercial infant formula and water, don't panic. First, observe your baby. Does he seem uncomfortable?

Most babies have no problem if a mistake like this is only made once or twice. If it happens more often, it can cause digestive or kidney problems, dehydration, or insufficient weight gain. If you are worried or your baby seems sick, see a doctor or call Info-Santé (8-1-1).

How long does commercial infant formula keep?

	Room temperature	Refrigerator	Freezer
Milk reconstituted from concentrated liquid or powder	Maximum 2 hours	24 hours Close the can properly	Do not freeze
Open can of liquid formula (concentrated liquid or ready-to-serve)	Maximum 2 hours	48 hours Close the can properly	Do not freeze
Open can of powder	1 month if kept dry	Unnecessary	Do not freeze

Marie-Christine Hogue

Other types of milk

Cow's milk

Cow's milk should not be given to a baby under 9 months old. It contains too much protein and too many minerals for the baby's kidneys to handle. Cow's milk does not provide the necessary elements for your baby to develop properly.

Cow's milk is not suitable for infants under 9 months old.

Before babies are 9 months old, cow's milk often causes **anemia** because it contains very little iron, and it reduces intake of other foods. Cow's milk can also cause light bleeding in the intestine and that bleeding is often invisible to the naked eye.

If you're having problems with breastfeeding or commercial infant formula, contact your CLSC for information about support available to you.

However, cow's milk can be used in recipes that will be given to your baby, such as muffins or pancakes. Other dairy products such as yogurt and cheese can also be given to your baby if she's started eating iron-rich foods twice a day (see Milk and dairy products, page 560).

Conditions for introducing cow's milk

Your child can start drinking cow's milk if:

- she is 9 months or older,
- her diet is varied, meaning she eats iron-rich foods (e.g., meat, meat alternatives, iron-enriched baby cereals) and vegetables and fruit every day.

Otherwise, wait till your baby is 12 months old before introducing cow's milk. If you have any concerns about your baby's diet, contact your healthcare provider.

How should I introduce cow's milk?

Once your child is 9 months old, you can gradually introduce cow's milk. For example, you can replace some of the breast milk or commercial infant formula with cow's milk. Then you can gradually increase the proportion of cow's milk at each feeding.

You can give your child up to 750 ml (25 oz) of cow's milk a day. Feeding more than that could reduce her appetite for other foods, including iron-rich foods.

What milk should I give?

If you give cow's milk to your child, choose pasteurized cow's milk with 3.25% milk fat. It can be:

- Ordinary homogenized milk, enriched with vitamin D

or

- Unsweetened evaporated milk, enriched with vitamins C and D, diluted in an equal quantity of water

Never serve sweetened concentrated milk.

Milk with fat

Young children need fat for growth and brain development. It's better to avoid giving them 2% milk before age 2. Do not serve 1% or skimmed milk to your child.

You can continue serving whole milk (3.25% milk fat) to your child throughout early childhood, up to school age.

Do not serve 2% or skimmed milk to young children.

Pasteurized milk
It is essential to pasteurize animal milk. In fact, the sale of unpasteurized milk is prohibited in Canada. Many diseases can be transmitted through raw or unpasteurized milk (e.g., salmonella, poliomyelitis).

Industrial pasteurization consists of heating the milk very rapidly to very high temperatures, and then cooling it equally rapidly. Dangerous microorganisms are destroyed. The pasteurized milk sold in food stores is just as nutritious as raw milk and poses no risks to your child's health.

It is not recommended to try to pasteurize milk at home.

! Do not give raw (unpasteurized) milk to your child, even if the milk comes from a perfectly healthy herd.

Pasteurized goat's milk

For babies less than 9 months old, goat's milk has the same disadvantages as cow's milk: It doesn't provide the necessary elements for proper development and can cause iron deficiency. You can start serving goat's milk to your child between the ages of 9 and 12 months. Choose pasteurized whole goat's milk (3.25% milk fat), and choose milk that's been fortified with folic acid and vitamin D.

Some people recommend goat's milk for preventing or treating allergies to the proteins in cow's milk. Unfortunately, goat's milk often causes the same reactions. Many children who are allergic to cow's milk are also allergic to goat's milk.

Enriched soy drinks

Enriched soy drinks are not suitable for infants and can hinder your baby's growth. They are incomplete and much less nutritious than breast milk or even commercial infant formulas.

Soy drinks contain fewer calories and less fat than whole cow's milk (3.25% milk fat). This is why it is recommended that you wait till your child has reached 2 years of age before serving her soy drinks.

Some parents want to serve soy drinks to younger children. You can give your child soy drinks after 1 year of age, as long as she eats a varied diet and is growing normally. Make sure that the soy drink you choose for your child over the age of one is labelled as follows:

- "Enriched," because drinks that are not enriched do not provide enough **nutrients** to meet the needs of a young child
- "Plain" or "Original," because "light" or flavoured drinks are not suitable

Shake the drink container well (around fifteen times) before serving to make sure the nutrients are well mixed, especially the calcium.

Breastfeeding your baby

René Dery

Health professionals all over the world recommend that babies be fed breast milk exclusively for the first six months of life. The Canadian Paediatric Society, Dieticians of Canada, and Health Canada all echo this recommendation. Once babies have started eating solid foods, it is recommended that they continue breastfeeding until the age of two years or more.

Human milk is unique and perfectly adapted to children's needs. It is the only milk that meets all of their nutritional and immunity requirements. Breastfeeding is more than a matter of ensuring baby is well nourished. It offers mother and child a moment of intimacy that provides baby with a feeling of warmth and security.

If you're sick, breastfeeding is still recommended. However, if you have a fever, cough, sore throat, or nasal congestion, you should take certain precautions. While your symptoms last, wear a medical mask, if possible, or a face covering while breastfeeding. Always wash your hands before feeding your child.

Breastfeeding promotes a closer mother-child bond.

Breastfeeding: A learned skill

Right after delivery, your baby will snuggle up to your breast and nurse for the first time. The act of nursing will soothe your baby and help stabilize his body temperature. Breastfeeding sustains the relationship that started between you and your baby during pregnancy.

The period when you start breastfeeding can be intense. While your milk will come in on its own, you will need to learn how to breastfeed.

The initial weeks of breastfeeding are a time of adaptation and learning. Mastering the technique of latching the baby to your breast can take a while at the beginning. Give yourself plenty of time and have confidence in yourself and your new baby.

As you gain experience, getting your baby to latch onto the breast will become easier. With time, you and your little one will come to enjoy the nursing experience more and more.

Learning to breastfeed is a little like learning to dance. At first, you focus on your steps, not the music. But with time and practice, you forget the technique and the music carries you away.

Getting help

Breastfeeding, like giving birth, is totally natural. And just as it's normal to have assistance during delivery, it's normal to need help with breastfeeding, especially at the beginning.

There are many resources for breastfeeding mothers. Depending on where you live, you may be able to find IBCLC (International Board Certified Lactation Consultants) or clinics or doctors that specialize in breastfeeding. You also might discover that your local CLSC or local breastfeeding mentor group has the best-trained breastfeeding resources in your area.

If you encounter problems, it's important to contact a person trained in breastfeeding. If that person can't help you, she will be able to suggest other resources that can.

Community breastfeeding support groups can provide a great deal of information and advice. They are run and led by women who have nursed one or more children. They keep their knowledge up-to-date and offer support at no charge. Most of these community groups hold information sessions to help parents and parents-to-be prepare for breastfeeding. A number of them also offer specialized services from IBCLC. Check with organizations in your area to find out what's available. Ask your CLSC for contact information.

The **Info-Santé** telephone helpline is staffed by nurses and is available 24 hours a day, 7 days a week, throughout the province. Just call 8-1-1.

Various **CLSC professionals**—like nurses or nutritionists—can also be of help. Nurses offer home visits after your baby arrives. Depending on where you live, these visits are either automatic or based on your needs. Your nurse can start helping you as soon as you return home, or later on. She can weigh your baby, check her overall health and help you with breastfeeding technique.

An **IBCLC (lactation consultant)** can help you deal with breastfeeding difficulties that you may experience. The IBCLC credential—for International Board Certified Lactation Consultant—certifies that they have the necessary skills. Some healthcare institutions and community breastfeeding support groups offer the services of IBCLC. Many of them are in private practice from either their homes or offices. To learn more or find the IBCLC nearest you, visit the Association québécoise des consultantes en lactation certifiées website at ibclc.qc.ca/en.

Breastfeeding clinics can be found in many areas. They offer more specialized services—from nurses, IBCLC (lactation consultants) and sometimes doctors—which may or may not be free. Clinics can be very helpful if you are experiencing problems.

Your doctor will examine your baby on a regular basis. If you're worried about your child's health, the best person to turn to is your doctor, who can also help if your breasts or nipples become infected.

Midwives provide followup for their patients up to six weeks after delivery.

If you have special problems, all of these individuals should be able to direct you to other sources of help.

Your breasts during nursing

Breast and nipple shape

Breast and nipple shape, size and colour vary from one woman to another, and sometimes even from one breast to the other. Most newborns adapt easily to their mothers' breasts. For unknown reasons, however, there are some babies who have more difficulty latching onto flat or inverted nipples.

Breast care

The breasts are often bigger and heavier during the first six weeks of breastfeeding. Whether or not you choose to wear a bra depends on your comfort. Nursing bras are usually more practical than regular bras, but you don't have to wear one. Regardless of what you choose, your bra should be comfortable and large enough to avoid squeezing your breasts. Don't hesitate to sleep barebreasted if you feel comfortable doing so.

If you use nursing pads, choose cotton or disposable ones without a plastic lining and be sure to change them often.

A daily shower or bath is all you need to keep your breasts clean. Creams, ointments and other products are not necessary. Washing your hands with soap and water before nursing is the best way to prevent infections.

When your milk comes in

Having your milk "come in" is a normal phase of milk production. Between the second and the fifth day after delivery, your breasts become warmer, the appearance of the milk changes and production increases rapidly. Most women also find that their breasts become larger.

Some women experience no discomfort when their milk comes in. But for most women it can be uncomfortable, especially if their breasts become engorged and firm to the touch. To ease the discomfort, which generally lasts from 24 to 48 hours, thorough and frequent feedings (8 times or more during a 24-hour period) are recommended at regular intervals, both day and night.

Your baby will generally want to nurse more often during this phase, which will ease the discomfort in your breasts and help him gain weight.

What if he has difficulty latching on because the breast is too firm, or your breasts become painful? You'll find advice in the table entitled Painful breast, page 488.

Milk leakage

Milk may leak from your breasts between feedings or during the night. This is normal. It's a natural mechanism that helps relieve pressure in your breasts.

If it bothers you, you can protect your bed with a towel at night. During your daily activities, you can wear absorbent cotton pads in your bra or a camisole with a built-in bra.

Producing a good supply of milk

Milk production is a matter of supply and demand: the more milk is removed from your breasts, the more milk they will produce.

To get milk production off to a good start during the first few days

- Encourage skin-to-skin contact at birth when possible by offering your baby the breast. Continue skin-to-skin contact regularly afterwards.
- Within an hour of your baby's birth, stimulate your breasts by nursing your baby or expressing milk if your condition allows. Breastfeeding or expressing milk within an hour of birth helps initiate breastfeeding. Afterwards, stimulate your breasts at least 8 times every 24 hours, day and night.
- Express your milk if your baby isn't sucking effectively or latching on properly. During the first few days, expressing manually is often more effective than using a breast pump.

Milk production fluctuates during the first 4 to 6 weeks, depending on demand. That's why it's important to stimulate the breasts during the day and at night during this phase.

Some women produce substantial milk. For others, however, milk production can be less reliable, decreasing as soon as stimulation lets up or becomes more infrequent. A person trained in breastfeeding can often help new mothers increase milk production, especially during the first weeks (see Insufficient milk production, page 475).

Let-down reflex

Stimulating the breasts also results in the release of **oxytocin** into the bloodstream. Oxytocin is a hormone that causes the breasts to contract and expel milk. This is known as the "let-down reflex."

This reflex might be triggered when you put your baby to your breast, or if you stimulate the nipple and **areola** when expressing milk. Just hearing your baby cry or thinking about him can trigger the let-down reflex, too. It ensures that milk will be available when your baby begins nursing.

It's not unusual to experience the let-down reflex several times while nursing. The results typically last from 30 seconds to 2 minutes. Some women feel a tightening or tingling in the breast; others feel no sensation. During the first few days after delivery, you may experience intense thirst and uterine contractions in conjunction with the let-down reflex.

During the let-down reflex, milk flows more rapidly and babies will swallow more quickly for several minutes. Sometimes the let-down reflex is so strong that your baby will need to let go of the breast to take a breath of air. Women expressing milk can see the pace quicken and even notice spurts during the let-down reflex.

Breastfeeding basics

This section outlines the basics of breastfeeding and explains what you can do to ensure your baby is feeding well and effectively. Whenever you feel breastfeeding-related difficulties or challenges arise, go back to these basics.

Over time, you and your baby will discover what works best for both of you.

Find the right time (signs of hunger)

It's hard to get a baby to nurse if she's asleep, she's crying or she's too hungry. As soon as you see signs that your baby is hungry, offer her your breast (see Hunger signs, page 367). That way she'll be more patient.

Getting settled for a feed

Take the time to settle in with everything you might need during feeding (e.g., glass of water, snack).

Finding a breastfeeding position that is comfortable for you and your baby is essential for enjoyable, pain-free feeding.

If you are sitting, support your back and keep your spine and shoulders aligned. Your elbows should rest close to your body. You can use one or more cushions for support. Your feet should be flat on the floor or on a small stool.

Your baby's body should be turned toward you and nestled against yours. Her head should be aligned with her body. Her hands should be on either side of your breast.

Position your baby so that her chin touches your breast, and your nipple is against her upper lip; this will make her open her mouth. Her head will be tilted back slightly, and her nose will be free of the breast.

There are several different breastfeeding positions. Here are some that are frequently used by mothers. Note that there are other possibilities (e.g., football hold, straddle hold). You don't have to master all the positions. One or two are often enough.

Laid-back position

In this position, you are lying back far enough that your baby won't slip off when lying on your stomach.

The laid-back (or back-lying) position can help babies latch onto the breast more effectively, slow the flow of milk if it flows fast, and be more comfortable for you and your baby.

Cradle position

In this position, you are seated. Your baby lies on her side, with her body facing you. You use the arm on the same side as the breast your baby is feeding from to support her body and head (e.g., if you are breastfeeding from the left breast, you support your baby with your left arm).

This position can be used to breastfeed anywhere.

Cross-cradle position

In this position, you are seated as well. You support your baby's body and head with the arm opposite the breast he is nursing from (e.g., if you are breastfeeding from the left breast, you support your baby with your right arm). The palm of your hand should be placed on his upper back, not on his head.

This position is often used in the early stages of breastfeeding. It can help your baby latch on to the breast better. Like the cradle position, the cross-cradle position can be used to breastfeed anywhere.

Lying-down position

In this position, you and your baby both lie on your side, facing each other. Your bodies are nestled against each other. You should offer the breast closest to the mattress. Your baby's head should be placed at breast height.

Breastfeeding while lying down can be enjoyable and can give you a chance to rest. If you tend to doze or sleep while nursing, follow the recommendations in Sleeping safely, page 295, to keep your baby safe.

Laid-back position

Cradle position

Cross-cradle position

Lying-down position

Place your hand on your baby's back to avoid putting pressure on her head.

Bringing baby to your breast

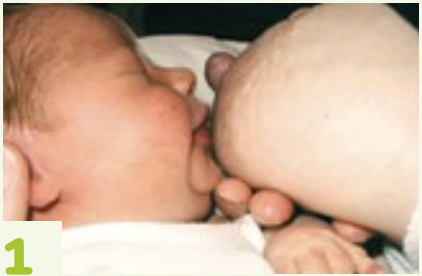
In the first few weeks of your baby's life, feeling the breast near her mouth stimulates her reflex to open her mouth and latch on. You therefore need to hold your baby close enough so that her chin touches your breast.

Place your hand on her back (see photo) and bring your baby to you instead of leaning towards her. This will be more comfortable.

Avoid putting pressure on her head with your fingers or the palm of your hand. Babies don't seem to like this. They draw their heads back and some may have difficulty latching back on. If this happens, readjust your position.

During the first few days, you may have to start over several times to get your baby to latch on properly.

How to bring your baby to your breast



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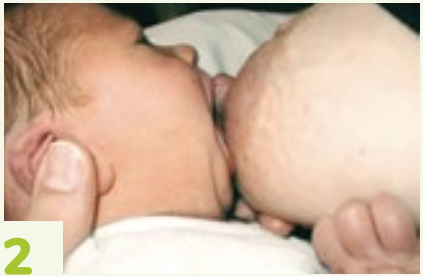
Once both of you are settled, you're ready to bring your baby to your breast.

When her chin touches your breast, place your nipple against her upper lip.



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Wait till she opens her mouth wide. Your nipple should point toward her palate, not her tongue.

3

Jean-Claude Mercier

When her mouth is open, guide her toward your breast by gently pressing against the top of her back with the palm of your hand:

- Her head should be tilted back slightly.
- Her chin should be firmly touching your breast and her nose should be clear.

With time and practice, you and your baby will become more comfortable with breastfeeding. Latching on will get easier.

Make sure your baby is latching on correctly

When your baby latches onto your breast, and not only the nipple, he will have a large part of the areola in his mouth. This makes it easier to get milk.

If your baby only sucks on the nipple, it can create pain for you, and she will get less milk. If this happens, some babies will ask to nurse very often, which irritates the nipples even more. Other babies get tired, cry or fall asleep before they're full.

Signs of a good latch:

- You don't have pain that lasts for the entire feeding.
- The baby's mouth is wide open.
- He latches onto a part of the areola, and not just the nipple.
- His lips are curled outward.
- His chin should be firmly touching your breast and his nose should be clear.

Latching on shouldn't be painful for you.

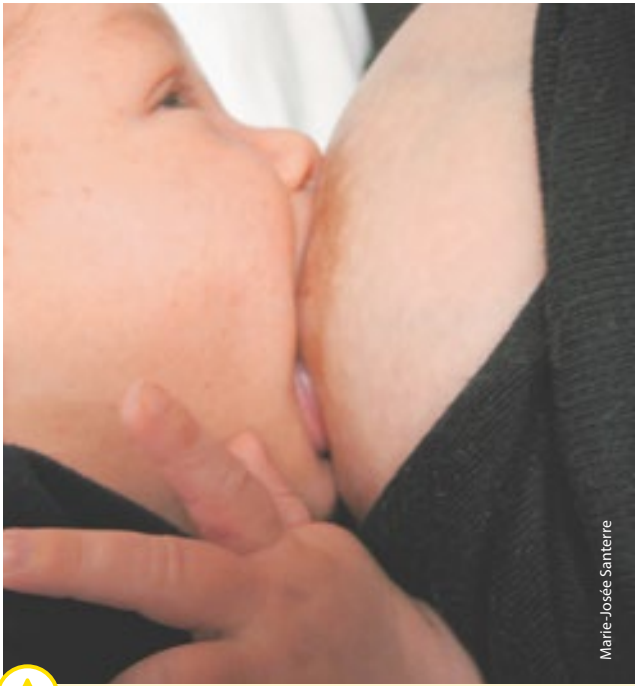
If you feel pain, you can try bringing your baby to your breast again by breaking the suction (see Breaking the suction, page 430). You can also try to improve your position (see Getting settled for a feed, page 422).

Is feeding still painful? Contact someone trained in breastfeeding and see Common difficulties on page 467.

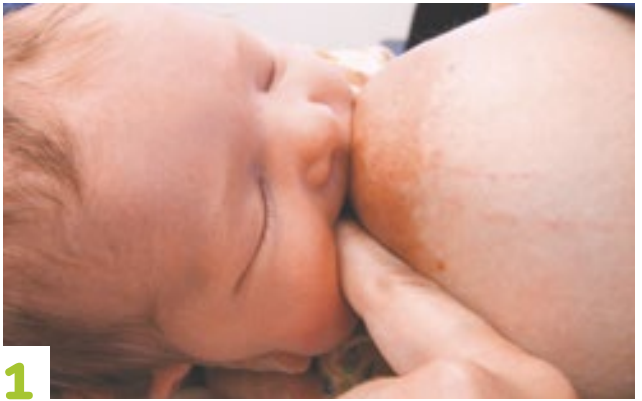
Ensuring your baby is sucking effectively and swallowing milk

When suction is effective, you can see jaw movements. When she first starts to nurse, the movements are quick and light. As milk starts flowing, the movements become slower and deeper. You can see and hear your baby swallow.

If your baby's breathing is noisy during nursing, free up her nose by pressing her bottom against you to bring her chin closer to your breast. You can also gently press against the top of her back to bring her chin closer to your breast. Her nose should be freer or her head tilted slightly back.



If you experience painful nipples, try to improve the baby's position and the latch. Latching on properly is the key to pain-free nursing!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Marie-Josée Santerre

Breaking the suction

It is important to break suction properly when you remove your baby from the breast to avoid nipple pain. To break the suction

1. Put your finger in the corner of your baby's mouth to let air in.

2. The nipple will release easily once the suction is broken.

Fact Sheet
For Nursing Mothers

Your Baby's Age	1 DAY	2 DAYS	3 DAYS	4 DAYS	5 DAYS	6 DAYS	7 DAYS	2 WEEKS	3 WEEKS
Your Baby's Average Tummy Size	Size of a cherry		Size of a walnut		Size of an apricot			Size of an egg	
Number of Feedings On average over 24 hours	8 times or more per day Your baby sucks vigorously and swallows often								
Number of Wet Diapers On average over 24 hours	At least 1 WET	At least 2 WET	At least 3 WET	At least 4 WET	At least 6 HEAVY WET WITH PALE YELLOW or CLEAR URINE				
Number of Soiled Diapers **Colour of Stools** On average over 24 hours	At least 1 to 2 BLACK OR DARK GREEN		At least 3 BROWN, GREEN OR YELLOW		At least 3 large, soft and seedy YELLOW				

Adapted and revised on October 2017 with permission from the Best Start Resource Centre.

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Québec

How often to nurse—and how long?

How often you nurse varies a great deal from one baby to another. What's important is that your baby latches on properly, nurses effectively and swallows your milk.

Mother's milk is rapidly digested, and infants' stomachs are small, so it's normal to breastfeed frequently during the first weeks of life. When you're at the learning stage, the process of nursing, stimulating, burping and diaper-changing can take from 45 to 90 minutes. With time, as your baby develops the ability to nurse more effectively, breastfeedings will become shorter and less frequent.

During growth spurts, your baby will nurse more frequently during the day and at night—sometimes as often as every hour. Frequent breastfeeding increases milk production. This is a passing phase, but it's a very intense one for moms. Family support can be very important during these periods.

Giving your baby commercial infant formula or baby cereal results in less stimulation for your breasts and may interfere with milk production.

Does your baby seem satisfied after nursing, only to seek your breast 15 or 20 minutes later? That's completely normal, especially during the first weeks. Don't hesitate to nurse again for a little "dessert".

When you're breastfeeding, don't watch the clock—watch your little one. Trying to nurse on a schedule won't protect against irritated nipples and could deprive your baby of needed nourishment. Better to watch your baby for signs of hunger and satisfaction!

Cluster feeding

Feedings are more frequent at certain hours of the day and less frequent at other times. Evenings can be a challenging time because most babies tend to get cranky and nurse a lot. They sleep a bit, cry a bit, nurse a bit and need comforting. Some babies may want to nurse almost non-stop for a few hours. They may then sleep for longer periods. "Cluster feeding" is normal, although it can leave you with the impression you don't have enough milk because your breasts are soft and have less time to produce new milk.

One breast or two? Or more?

The number of times that your baby will want to change breasts during a feeding will depend on

- The quantity of milk accumulated in the breast
- His appetite and age
- The time of day

Your baby might nurse from one breast or both during a feeding, and you should go along with his preference. Let him nurse from the first breast until he's full. When he starts to let go or becomes drowsy, try burping him. Then offer the other breast: he'll take it if he's still hungry.

You can change breasts more than once during a feeding. Some babies release the breast as the flow of milk slows. Offering the second breast gives the milk glands in the first breast a chance to refill. If your baby isn't full after nursing at the second breast, he can return to the first one. And if he's still hungry, change once more to give him the second breast again.

At the next feeding, start with the breast that was offered last or the one your baby nursed from least. If you don't remember, offer the breast that feels heavier.

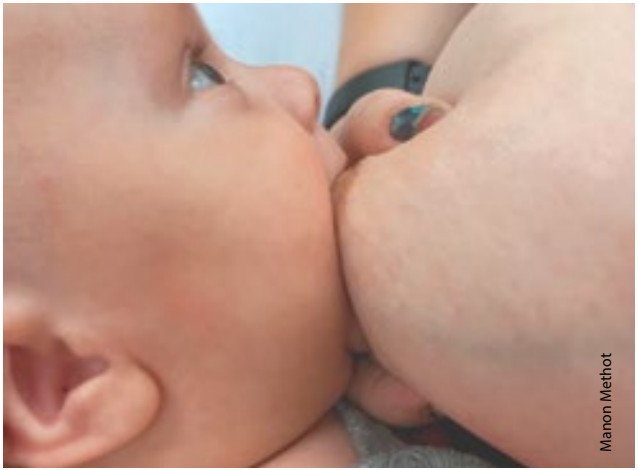
Breast compression

Breast compression is a technique you can use if your baby has trouble getting the milk he needs. It increases milk flow. Use this technique if your baby

- Falls asleep quickly when nursing
- Isn't gaining enough weight
- Wants to nurse very often or for long periods
- Seems dissatisfied after feeding

It's also a very good way to get your baby drinking colostrum during the first few days of life.

Position your thumb on one side of your breast and your fingers on the other in a squeeze position. Place your fingers close to the **areola**, but far enough away that you don't interfere with your baby's suction. Squeeze the breast with your whole hand without moving your fingers. This should not be painful or stretch the areola.


Manon Methot

Maintain pressure for 5 to 10 seconds or as long as your baby continues swallowing. Release the pressure as soon as he stops drinking, then start again, continuing until he stops swallowing. Offer the other breast in the same way if your baby seems to want it. You can return to the first breast—and the second one again—if needed. You can stop using this technique once your baby starts drinking enough.

Comfort nursing

Breastfeeding is more than a way to provide your baby with nourishment. Letting your baby nurse for comfort won't create bad habits. In many cultures, breastfeeding is used as much to calm infants as it is to nourish them.

In addition to nursing your baby to comfort him, you can provide skin-to-skin contact, rock him, or carry him in your arms to soothe him.

Some parents also give their children a pacifier (soother) to comfort them.

The Canadian Paediatric Society makes the following recommendations about pacifiers:

- "It's best not to start using a pacifier until breastfeeding is going well. Talk to your doctor or lactation specialist if you feel your baby needs to use one at this early stage. One exception is for premature or sick babies in the hospital who can benefit from using one for comfort."
- "Always see if your baby is hungry, tired or bored before giving him the pacifier. Try solving these things first".

Breastfeeding phases

A nursing woman's breasts undergo changes as her milk supply fluctuates in response to her baby's needs. As children get older, their behaviour changes too—they'll state their needs more and more clearly. Everything seems to get easier with time.

Breastfeeding with your baby snuggled in your arms comforts him and helps meet many of his important needs.

The table below provides an overview of breastfeeding phases between birth and the age of 6 months, describing your baby's behaviour and what may happen at feedings.

Right after birth: Mother and child get acquainted

Your baby

- Will instinctually seek your breast within an hour of birth.
- Will then sleep for several hours.
- May find it harder to breastfeed if she has taken more time to recover from delivery.

Feedings

- Offer baby your breast if she seems interested.
- If she doesn't nurse right away, hold her close until she shows interest.
- The interval between the first two feedings can vary.
- If necessary:
  - Let a few drops of milk drip onto her mouth, but don't insist if she refuses—be patient;
  - Express milk and give it to her from a spoon or small cup. Avoid bottles for the time being.

The first 14 days: A time of learning for mother and child

Your baby

- May be drowsy, especially if she is jaundiced.
- May sleep so much that you need to waken her up to ensure she gets enough nourishment, i.e., 8 times or more per day (24 hours).
- Tends to fall asleep at your breast as soon as the flow of milk slows, even if she hasn't drunk enough.

Feedings

- It can take a long time to get ready and latching on may be difficult. A feeding session (breastfeeding, stimulation, burping and diaper-changing) may take between 45 and 90 minutes.
- The number and length of feedings is less important than the quality of the latch and effectiveness of the sucking. Babies who suck effectively spend less time at the breast and are less likely to hurt your nipples.
- If your baby falls asleep while you breastfeed, try tickling her, uncovering her, holding her close or talking to her. Make sure she latches on properly. Try using the breast compression technique.

2 to 8 weeks: Mother and child are more comfortable with each other

Your baby

- Awakens on her own for feeding and stays awake for longer periods.

Feedings

- You're getting better at latching on and feeling more at ease as you get to know your little one better.
- Between weeks 6 and 8, your breasts produce as much milk as before but become softer to the touch and smaller in size as they adjust to your baby's needs.

From 2 to 6 months: Mother and child have their own routine

Your baby

- Expresses her needs more readily—for example, when she wants to change breasts.
- Needs more stimulation; it's not always easy to know if she's hungry or wants to do something different.

Feedings

- Feedings are shorter.
- At 3 months, baby tends to look around her while nursing.
- At 4 months, baby's appetite changes: she may ask for the breast more often. She may still wake up at night for feeding—or start doing so again.

Breastfeeding an older baby (6 months and up)

Breastfeeding an older baby and a newborn are two very different things. Once children start eating other foods at around 6 months of age, the rhythm of breastfeeding gradually changes as your baby adapts to the family's mealtime routine. But you and your child can still benefit from the advantages of breastfeeding, which will continue as long as you carry on nursing.

As your child gets older, he will start to show curiosity and initiative, and this can carry over into breastfeeding. His newfound independence may sometimes pose problems—he might ask for your breast at inconvenient times. But trust yourself: in breastfeeding, as in parenting in general, you'll learn to set limits on what you consider to be acceptable or not. Your baby will learn to be a bit more patient and will get used to breastfeeding on your terms.

As children near one year of age, they typically breastfeed only a few times per day, although some may still do so more frequently. At this age, the number of feedings varies from one day to the next, depending on the child's activities and mood.

In Québec, an increasing number of women are continuing to breastfeed beyond age 1—even if only once a day—because it helps prolong the special mother–child relationship they cherish. Breastfeeding for a longer period has ongoing health benefits for the baby. Many find that breastfeeding in the evening is an enjoyable part of the bed-time ritual. Support group volunteers are very comfortable with the idea of breastfeeding a toddler. Feel free to discuss it with them.

Breastfeeding in public

More and more women are breastfeeding in public. It's your right to breastfeed your child, regardless of the location. In Québec, that right is protected by law. Breastfeed with self-confidence and simplicity. To make things easier, try wearing layered garments (for example, a T-shirt and sweater) or a blouse. Some places provide special breastfeeding and baby care areas for parents who don't feel comfortable nursing in public.

Breastfeeding and mother–child separation

One practical side of breastfeeding is that it makes family outings easier. However, your personal or professional activities may also require you to be separated from your child.

Breastfeeding makes it easier for a family to get out and about! Night or day, milk is always handy—whether you're at the movies, outdoors, visiting or traveling.

You can continue breastfeeding even if you're not always with your child. You'll need to consider

- The child's age
- His preferences, and yours
- The length and frequency of separation

Once babies reach 6 months of age, they don't necessarily need to be bottle-fed when you're away; they can learn to satisfy their thirst by drinking from a cup.

Occasional separations

Need to go out for a few hours? If you breastfeed your baby before you leave and once you return, it may not be necessary for anyone to bottle-feed him while you're out.

If you know that you're going out for a while, you can **express** milk that your baby can drink from a cup or bottle, depending on his age and abilities. He may only drink a small amount—that happens sometimes. But don't worry—he'll probably have a "full-course meal" once you return.

And while you're out, you may need to express milk in order to relieve breast discomfort. Take along what you need (for instance, a cooler and ice packs) to keep the milk cool until you return home.

Returning to work or school

Returning to work or school will require you to be away from your baby on a regular basis for longer periods. Yet many women in this situation continue breastfeeding. A number of them talk about the pleasure they get from snuggling up with their nursing babies before they go out or after they return.

Once expressed, breast milk can be refrigerated or frozen, then given to your child in a cup or bottle in keeping with his age and abilities. This way you continue to provide excellent nourishment that will help your infant develop and stay healthy—whether you're by his side or not.

At age 6 months or so, it's not unusual for some babies who are separated from their moms to prefer food until they can breastfeed. They may drink very little while their mothers are away, but make up for this by nursing more heavily the rest of the time.

You may also decide to breastfeed when you're with your child and to provide another type of age-appropriate milk for him when you're not around. Your milk production will adjust if you opt for what is called "mixed feeding".

This special relationship can be continued as long as you and your child wish.

Is breastfeeding still possible?

If you've had a Caesarean section

Whether you planned to have a C-section or not, there's nothing to prevent you from breastfeeding soon after your baby is born. Most C-sections are done with an epidural, in which anaesthesia (freezing) is injected near the base of the spine. So you should be able to breastfeed soon after, ideally within an hour of delivery, even if you're still feeling the effects of the epidural. If you have a general anaesthetic (you are put to sleep during the operation), you'll be able to breastfeed as soon as you are completely conscious and feeling comfortable. Many hospitals encourage new mothers to nurse for the first time while in the operating room or recovery room.

To keep your baby in your room, you need to have your spouse or someone close to you on hand. The hospital staff can help you start nursing, if necessary. Soon you'll be able to take care of your baby by yourself. Many dads also enjoy holding the new baby skin-to-skin on their chest. It's a good way to get the father–child relationship off to a warm start.

If your baby is premature

Premature babies have special needs and benefit even more from mother's milk. Breast milk is ideally suited for meeting a premature baby's needs, and you alone can provide this made-to-order nourishment!

Depending on how far along the pregnancy was at the time of birth, your baby may be fully able to nurse or only able to breastfeed a little bit, if at all. If he's not yet capable of sucking, the nurses will use a very thin tube to get your milk directly into his stomach.

If your baby's health allows, hold him often and for long periods with his skin against yours. Your little one will get used to you and your smell, which will make it easier to get him to nurse once he's ready. This intimate contact has been shown to be beneficial for both babies and their parents. In fact, it is considered as valuable for newborns as the food they receive.

While waiting until your baby is able to breastfeed on his own, you'll need to use a breast pump to get your milk production started and keep the supply ongoing. Breast pumps are often available in intensive care units, or you can rent one if necessary from a drug store or certain breastfeeding support groups.

You can breastfeed even if your baby is premature.

The milk that you **express** can be refrigerated or even frozen until your baby is ready for it. When it's fed to him, hospital staff may add nutritional supplements, if necessary.

Various factors influence how long it takes before a premature baby is ready to start breastfeeding. Your doctor or nurses will tell you when your child is ready. At first, he may not be able to nurse for very long, so it will probably be a good idea to express milk afterward in order to relieve your breasts and sustain milk production. Little by little, your baby will nurse more effectively and you'll be able to do without the breast pump.

You'll need lots of patience and perseverance during this phase: premature babies need time to learn to breastfeed. Most of them become more skilled at it once they reach their original due dates.

A person trained in breastfeeding can provide invaluable support and encouragement. Préma-Québec, an organization for parents of premature infants, may also be able to help.

Préma-Québec
1-888-651-4909 / 450-651-4909
premaquebec.com

Laura Ottereyes

If you have twins

New mothers of twins are happy to receive help early on with nursing their babies and caring for them between feedings. The most demanding aspect of mothering twins isn't breastfeeding itself, but the challenge of caring for two newborns at the same time. So accept all the help you can get!

It's possible to feed your two babies exclusively on breast milk. The more your breasts are stimulated, the more milk they produce.

If your twins are born prematurely, they'll benefit even more from your milk. You should pump milk while waiting for your twins to be able to nurse. This will ensure that there's enough milk for both of them. With twins, one baby is often ready to nurse before the other one is, so keep expressing milk for the second child.

Breastfeeding both twins at once can be practical.

Some women prefer to breastfeed each baby separately. Others find it more practical to nurse both twins at the same time. Most women use a combination of these two approaches.

Generally, mothers of twins nurse each baby at one breast for one feeding and change to the other breast for the next feeding. As babies' appetites and sucking capacities will vary, this allows equal stimulation for both breasts. There are other approaches that may be more suitable in certain situations.

Some women use mixed feeding, a combination of breastfeeding and bottle-feeding using expressed breast milk and commercial infant formula. A person trained in breastfeeding can put you in contact with a mother who has breastfed twins.

There are organizations or resources that can help you, regardless of where you live.

Mamans Pieuvres
mamanspieuvres.com/allaitement (in French only)

La Leche League
llli.org/news/two-breastfeeding-twins-2/

If you've had breast surgery

Milk production varies among women, regardless of whether they have had breast surgery. The impact of such surgery on milk supply also varies from one woman to another. Whatever your situation, learning about breastfeeding and having support can help you get off to a successful start.

Breast reduction (surgery to make the breasts smaller) appears to decrease the breast's capacity to produce milk. That said, some women who have undergone reductive procedures produce enough milk to breastfeed their babies exclusively for several weeks or more. It may be necessary to monitor the baby's weight more often during her first weeks of life to make sure that she's receiving enough milk.

If you aren't producing enough milk to meet all your newborn's nutritional needs, you'll need to supplement feeding with a commercial infant formula.

Breast augmentation appears to have less impact on breastfeeding.

Restarting milk production

If you've stopped breastfeeding, didn't breastfeed your child at birth, or are finding that your baby has trouble tolerating commercial infant formulas, it's possible to resume breastfeeding regardless of your baby's age.

With determination—and support from someone trained in breastfeeding—you'll be able to resume lactation, even if you never nursed your baby.

You've adopted a baby? It's even possible to begin producing milk without having gone through a pregnancy.

If you're breastfeeding—and pregnant

If you're newly pregnant and have been breastfeeding, you can continue to nurse. It's safe for both your **fetus** and your nursing baby.

If your baby is less than 6 months old, you may not produce enough milk to satisfy her nutritional needs, a situation that could affect her growth. In this case, you may have to supplement feeding with a commercial infant formula.

The hormonal changes that occur in pregnancy affect the composition of milk (reversion to colostrum) and can also reduce your milk supply. Some older babies don't like these changes and lose interest in breastfeeding.

Expressing milk

Pumping or manually extracting breast milk lets your baby enjoy your milk when you're not there to feed her, or if she is premature or sick. Expressing milk not only allows you to maintain your milk supply, but also helps relieve the effects of engorged breasts.

Tips to keep your milk flowing

Your baby's nursing stimulates the let-down reflex, which increases milk flow. It's sometimes harder to stimulate this reflex when you're expressing milk by hand or with a breast pump, especially on your first attempts. With a little practice, you'll become good at it.

Depending on what you prefer, you can use any of the following methods to stimulate the let-down reflex

- Self relaxation
- Breast massage
- Warm compresses
- Visualization of your baby nursing
- Thinking about your baby
- Distracting yourself with another activity (for instance, watching television)

Choosing a method for expressing milk

Breast milk can be expressed in a number of ways. Your choice of method will depend on

- The situation
- How frequently you express milk
- How you are feeding your baby—that is, breastfeeding or not
- And of course, your own preference

Regardless of the method you choose, it's important to handle your breasts gently and to wash your hands before expressing milk.

How to do a “gentle massage”

When your breasts feel heavy and tight (engorged), or you feel pain in one or both of them, a “gentle massage” can help reduce the swelling and pain.

To do this, gently stroke your breast, moving from the nipple toward your armpit (under your arm). Stroking stimulates liquid circulation and reduces swelling. Do not press hard. Deep massage could cause injury.

How to express milk by hand

Manual expression is a technique every mother should know. It’s the most effective way to express colostrum, you can use it any time, anywhere to relieve an engorged breast, and it’s free.

This technique is easier than it sounds. Ask hospital staff, your midwife, or a CLSC nurse to teach it to you.

- Wash your hands.
- Use a large, clean container.
- To prompt the let-down reflex, massage your breast gently.
- Lean forward slightly so the milk can flow into the container.

- Place your thumb and index finger on each side of the areola, 2 to 5 cm (1 to 2 inches) from the nipple. With practice, you'll find the best distance (see **photo no. 1**).
- Press your fingers into your breast, pushing horizontally toward the ribs (see **photo no. 2**).
- While maintaining pressure on your fingers, pinch your thumb and index finger together as if they were a pair of pliers. You don't need to press hard. This motion shouldn't leave any mark on your breast or cause any pain (see **photo no. 2**).
- Repeat this pinching motion several times, reproducing the same rhythmic movements your baby uses when nursing.
- Be careful not to slide your fingers along your breast. Maintain firm pressure on your breast without stretching the nipple, which is painful and not very effective.
- Work your way around the breast with your fingers until it's emptied.

Your milk will flow drop by drop at first, then begin to spurt. With practice, you'll be able to work more efficiently and quickly.


1


2

Jean-Claude Mercier

Choosing a breast pump

It is not always necessary to buy a breast pump. Many women prefer to use one, however, especially if they have to express their milk on a regular basis. To find a breast pump that suits your needs, contact a community breastfeeding support group or a person trained in breastfeeding.

A number of models are available on the market:

- Manual breast pumps
- Various types of electric breast pumps, including some that allow you to express milk from both breasts at the same time

You should also consider the following factors:

Quality – A poor quality breast pump may hurt you or reduce your milk production.

The number of sucking movements per minute – Choose a breast pump that allows for 60 to 70 sucking movements or cycles per minute so that it imitates as closely as possible the rhythm and strength of your baby's sucking.

Suction – A breast pump with insufficient suction reduces the quantity of the milk expressed, whereas suction that is too strong and prolonged irritates the nipples.

Size and shape of the cup – The breast pump's cup, which fits on the nipple and areola, must be properly adjusted to your nipples to avoid injuring them. Some companies offer a number of models and sizes.

Characteristics of any good breast pump

- Be leakproof and maintain proper suction
- Fit your nipples properly
- Protect your nipples by avoiding suction that is too strong or prolonged

Caracteristic of a good electric breast pump

- Create and release suction at 60 to 70 cycles per minute

Caracteristic of a good manual breast pump

- Be comfortable and not tire your hand

Regardless of the type of breast pump you choose, it is important to clean it properly. It also needs to be disinfected before the first use (see Cleaning bottles, nipples and breast pumps, page 507).

Second-hand breast pumps

Most breast pumps, whether manual or electric, are intended to be used by only one mother. They must therefore be considered as a personal item, just like a toothbrush or underwear. Breast milk can transmit diseases like HIV and hepatitis, or less serious infections like thrush. Boiling a second-hand breast pump does not make it safe, even if it does reduce the risk of disease transmission.

Hospital-grade electric breast pumps are, however, designed to be used by multiple mothers. You can rent hospital-grade electric breast pumps from community breastfeeding support groups and some drugstores. These breast pumps are sturdy and high quality. They are intended to be used by many people, so they are designed in such a way that the pump motor never comes into contact with the milk. In fact, it is the motor you rent: each woman must buy a new set of tubes, which includes all parts that come in contact with the milk.

If you buy a second-hand breast pump that is not hospital grade, keep in mind that there may be milk remaining in the motor. Since there is no way to check this or to clean the motor, there is a risk of contamination, even though the risk is low. For this reason, it is recommended that you not buy a second-hand breast pump. If you decide to do so, be sure to buy a new set of tubes.

Expressing milk occasionally or regularly

If you breastfeed, your milk production has adjusted to your baby's demand. So it is normal to **express** only a few drops on your first few attempts. Be patient.

There is no ideal time to express your milk. The ideal moment is the one that suits you the best! Try these suggestions:

- When your baby has fed at only one breast
- In the morning
- When your breasts are engorged
- Between feedings
- While your baby is feeding at your other breast
- When you skip a feeding

If you express milk between feedings, you will probably get only a small amount of milk. You will get more if you express the milk from a breast that your baby has not fed from for some time.

Expressing milk without breastfeeding

Some women express milk for a baby who won't breastfeed. Others simply prefer this method. Depending on your situation, you can express your milk for several days, weeks, months, or throughout the entire period you feed your baby breast milk.

It is normal to get only a few drops the first few times you express your milk. The more you stimulate your breasts, the more milk they will produce.

During the first month, many babies who did not breastfeed at birth succeed in doing so if your milk production is high. Don't hesitate to ask for help if you want to try breastfeeding again.

Remember that premature babies are smaller and their intestines are not yet fully developed. In the first few days, or even weeks, they only drink a little if at all and they do not suck as effectively. However, to get your milk production off to a good start, it's better to express your milk as if your baby were full term.

The way you express your milk when not breastfeeding will change as your milk production gets going and adapts to your baby's individual needs.

Feeding your baby with your milk without breastfeeding

Before your milk comes in

Frequency

- If possible, start stimulating your breasts within 6 hours after the birth.
- Express your milk 6 to 8 times a day.
- Use the breast pump at least once every 6 hours, even at night.

Duration

- After expressing the colostrum by hand, use the breast pump for 5 to 10 minutes.

Quantity

- You will produce from a few drops to several milliliters. The colostrum (first milk) is thicker.
- Expressing milk by hand seems to produce more milk than the breast pump during the first 24 to 48 hours. As your milk changes, it will become easier to express with the breast pump.
- The quantity of milk usually increases from 48 to 72 hours after the birth.

When your milk comes in

Frequency

- Express your milk as often as necessary for comfort's sake, but at least 8 times a day.
- Use the breast pump at least once every 4 hours, even at night.

Duration

- Express your milk until your breasts are soft and comfortable.

Quantity

- The quantity of milk increases rapidly. Take advantage of this period to get your milk production off to a good start, even if your baby drinks much less that you express. Stock up.
- Mothers who express at least 500 ml of milk per 24 hours after the first week seem to produce more milk afterwards.

1 to 6 weeks

Frequency

- Express your milk 6 to 8 times a day.
- Use the breast pump at least once every 6 hours, even at night.

Duration

- Express your milk until the milk has stopped flowing for about 2 minutes.

Quantity

- Try to express a little more milk than your baby drinks. That way you will always stay ahead of her needs, which will increase rapidly.
- It's normal that the quantity of milk you express varies each time.
- Mothers who express at least 750 ml per 24 hours after two weeks seem to produce more milk afterwards.

After 6 weeks

Frequency

- Depending on how much milk you produce, you can adapt to your baby's needs.
- Some women can stop expressing milk at night, and others not.

Duration

- Express your milk until you have have the quantity of milk your baby needs.

Quantity

- Adjust the quantity of milk you express according to your baby's needs.
- Ideally, try to express a little more milk than your baby drinks in order to stay ahead.

Bottle-feeding your breastfed baby

If you supplement your baby's diet with bottle feeding, it's preferable to use expressed (pumped) breast milk. Also, if you feed your baby commercial infant formula, it's a good idea to express your milk each time you do so as not to interfere with milk production.

To suck from a bottle or from your breasts is not the same. Here are the main differences:

- Your baby has to open her mouth wide to latch onto the breast properly, whereas this is not as important with a bottle.
- Milk flows from your breast at different speeds, but flows at the same rate from a bottle.
- Most bottles will drip into your baby's mouth even when she doesn't suck, which is not the case when she drinks from the breast.

Some babies easily switch from breast to bottle and bottle to breast. For others, it's more difficult.

When bottle feeding:

- Opt for a slow-flow bottle nipple.
- Hold your baby in a stable position with her head tilted back slightly.
- Place the nipple against her upper lip and wait until she opens her mouth wide before giving her the bottle.
- Hold the bottle horizontally to slow the flow of milk and respect your baby's pace.
- Observe your baby and take breaks as needed by tilting the bottle down or removing it from her mouth.

Partial or mixed breastfeeding

Although exclusive breastfeeding is the best way to feed your baby, you may find yourself in a situation where partial breastfeeding is the only way you can continue nursing. This approach may allow you and your baby to enjoy breastfeeding longer. Some babies adapt well to this type of breastfeeding while others don't.

Partial (or mixed) breastfeeding is when your baby drinks both breast milk and commercial infant formula every day.

Women may choose partial breastfeeding for a number of reasons, and for different periods of time. However, whatever your reason for choosing partial breastfeeding, you should be aware of the following:

- The more your baby nurses, the longer your milk production will last.
- If you feed your baby commercial infant formula every day, your milk production will drop because your breasts are less stimulated.
- Some babies gradually lose interest in breastfeeding when milk production drops.
- Some babies may prefer the bottle and lose interest in the breast, even if your milk supply is plentiful.
- Complete **weaning** may occur earlier than anticipated.

If your baby refuses the bottle

Some babies, regardless of their age, simply don't like drinking from a bottle. This is perfectly normal; after all, bottle and breast are quite different. Occasionally, babies who have had no problem drinking from both breast and bottle may suddenly start refusing the bottle after a few months. As they grow, babies learn to **express** their preferences better, and some make their choice perfectly clear!

This can be a difficult situation for parents, especially if the mother feels trapped or obliged to breastfeed. Be patient, and don't force your baby one way or the other. He is not likely to accept something new if he's frustrated.

Here are a few tips to help ease the introduction of the bottle:

- Wait until your baby is in a good mood and not too hungry before making the change.
- Introduce the bottle for a milk "snack." Your baby will probably drink very little to start with.
- Get the father to give the bottle. Discreetly leave the room at feeding time.
- Try with breast milk first, then with commercial infant formula.
- Try giving the bottle differently from the way you present the baby your breast. Change routines.
- Patience! If it doesn't work the first time, try again a few days later.

If you have tried these tips and your baby still refuses to take the bottle, you can try giving him some milk in a little cup. He may be more willing to take it.

Julie Desrosiers

Teaming up with the other parent or someone close to you can be a big help.

Breastfeeding challenges

Giving birth and caring for a baby can be one of the most intense experiences you'll ever have.

In the first few weeks, fatigue and hormonal changes can sometimes lead to tears. Likewise, breastfeeding challenges can also bring along their share of emotions.

Learning how to nurse your baby takes practice. Early on, it's normal to feel awkward and experience some discomfort. As the days go by, you and your baby will figure it out together, and breastfeeding will go more smoothly. The adjustment period can take up to six weeks, so give yourself some time, go easy on yourself, and don't be afraid to talk about it.

Common difficulties

Moms who breastfeed may experience some difficulties, especially in the first few weeks. Fortunately, you can overcome several of them.

In the following pages, you'll read about the most common difficulties and several suggestions for dealing with them. You can also refer to the table Breastfeeding difficulties, page 478 for suggestions suitable to your situation. The key to overcoming most of the hurdles along the way is to go back to the basics (see Breastfeeding basics, page 421).

When to get help

It is better to consult a person trained in breastfeeding or a healthcare professional (see Getting help, page 416) if

- Your baby has difficulty latching on or is not actively sucking or regularly swallowing, even after you have followed the suggestions in this section (pages 468 to 481)
- You have nipple or breast pain or damage that doesn't heal or get better even after you have followed the suggestions in this section (pages 483–490)
- Your baby pees less and has fewer bowel movements than is normal or isn't putting on weight as expected for his age (see Is your baby drinking enough milk?, page 370)
- You're worried about how much your baby is drinking or whether he is gaining weight
- You don't notice a rapid increase in milk production between the 2th and the 5th day after your baby is born (see When your milk comes in, page 419)

If your baby still has dark, sticky stools (meconium) on the 5th day, see a health professional that same day.

You can call Info-Santé (8-1-1) at any time if you have any concerns.


Cécile Fortin

At all times, skin-to-skin contact can help babies regain their natural sucking reflex. Strip your baby down to her diaper, remove your bra, and lay her skin-to-skin between your breasts. Place a blanket over her. Wait until she starts seeking out the breast, then gently guide her.

Remember, it's normal for babies to cry (see Crying, page 282). It is also normal for your little one's sleep pattern to be different from yours (see Sleep in the first weeks, page 301). This doesn't mean that breastfeeding isn't satisfying your baby.

Your baby has trouble latching on

Newborns don't all develop at the same pace. Some take longer to learn how to latch on properly. If your baby cries and pushes on your breast, it's because she's hungry and can't latch on. Don't worry, she is not rejecting you.

Sometimes your baby won't nurse because she can't latch on. There can be a number of reasons for this, such as:

- You and your baby need to be better positioned (see Getting settled for a feed, page 422)
- You have
  - firm, heavy, and tight (engorged) breasts
  - flat or inverted nipples

- Your baby
  - has difficulty sucking (e.g., a tight lingual frenum)
  - has pain from the delivery (e.g., head, neck, collarbone)
  - has had unpleasant experiences while breastfeeding (e.g., pressure on head, being forced to nurse)

In other cases, babies latch on but then let go. They don't breastfeed long enough to get the milk they need. There are a number of reasons why your baby might have difficulty breastfeeding. For example

- She has jaundice that puts her to sleep
- She's used to a bottle that flows faster
- You're not producing enough milk, and she finds that the milk doesn't flow fast enough

Most of the time, a combination of causes explains why your baby isn't able to latch on.

What to do?

See the table Breastfeeding difficulties, page 478, for suggestions specific to your situation.

Even if your baby can't breastfeed right away, you can give her milk that you've expressed. During the first few days of learning to breastfeed, you can offer milk from a spoon or a little cup (see Offering milk from a spoon or cup, page 470). As the amount of milk she drinks increases, you can try giving a bottle (see Bottle-feeding your breastfed baby, page 462).

Counter pressure is another technique that can help your baby latch on if your breast is heavy, firm and tight (engorged) or if your nipple is flat or inverted (see Counter pressure, page 470).

Most babies will eventually learn to latch on, especially if you're producing enough milk. Don't hesitate to contact a trained breastfeeding support person for help (see Getting help, page 416).

If your baby isn't getting enough milk from your breasts, you can use a cup.

Offering milk from a spoon or cup

Before you give your baby milk from a spoon or small cup, make sure she is awake and calm. Hold her on your lap and support her head. Bring the cup (or spoon) to her bottom lip and tilt it toward her tongue. Do not pour the milk in her mouth. The important thing is to follow your baby's pace and appetite.

A trained breastfeeding support person can show you what to do and answer your questions.

Counter pressure

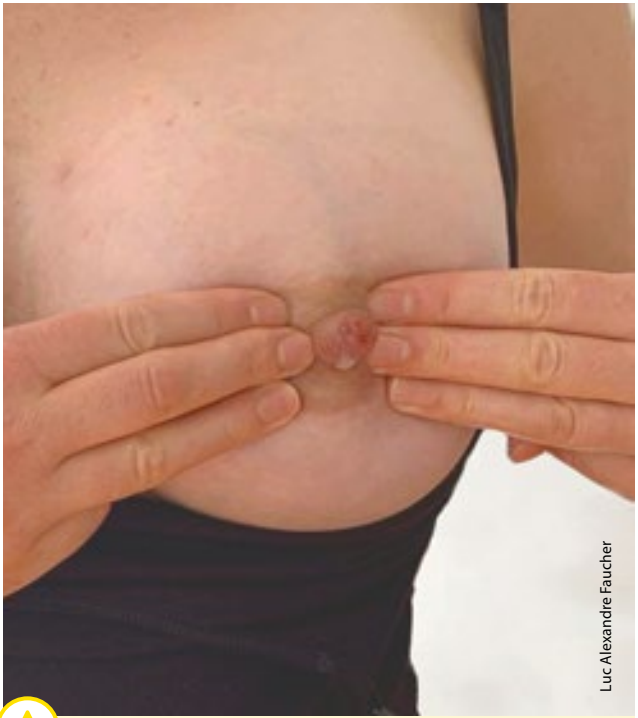
Counter pressure can also help your baby latch on if your breast is firm, heavy and tight (engorged) or if your nipple is flat or inverted. Counter pressure involves gently pressing on the **areola** below the nipple just before feeding. Press with your fingertips for about one minute. Repeat by placing your fingers elsewhere on the areola to soften the whole area. You shouldn't feel any pain.

Your baby used to nurse, but won't anymore

Sometimes a baby who breastfed easily won't nurse anymore. This can happen all of a sudden or come about gradually as he nurses less and less frequently.

If you know your baby is hungry, but he can't seem to latch on or simply won't take the breast, there are various possible explanations, such as:

- Your milk supply has decreased and your milk doesn't flow fast enough for your baby.
- Your baby increasingly prefers the bottle, which flows faster.
- Your breasts are firm, heavy, and tight (engorged), and your baby has trouble latching on.
- You have an abundant supply of milk, and it flows very quickly.
- Your baby is sick or has a stuffy nose.
- Your baby is experiencing temporary discomfort (e.g., teething, stiff neck).



Counter pressure involves pressing on the **areola** just before a feed.

What to do?

See the table Breastfeeding difficulties, page 478, for suggestions specific to your situation.

To compensate for the breastfeeding sessions he is skipping, you can continue to give him breast milk by expressing it. Try offering milk from a spoon or cup for the first few days (see Offering milk from a spoon or cup, page 470) or by bottle once he starts drinking larger quantities (see Bottle-feeding your breastfed baby, page 462).

If things aren't back to normal after a few more attempts at breastfeeding, contact a trained breastfeeding support person (see Getting help, page 416).

Your baby only takes one breast

Some newborns feed more easily from one breast or seem to prefer one breast over the other. This is common, and quite often temporary.

It's possible that

- Your baby has some minor pain or discomfort related to the delivery (e.g., head, neck, collarbone) and might be less comfortable feeding on one side
- Your milk supply or milk flow is different in each breast
- Your nipples are different

What to do?

See the table Breastfeeding difficulties, page 478, for suggestions specific to your situation.

It is preferable for your baby to take both breasts so she can drink as much milk as she needs. It's therefore recommended that you

- Keep breastfeeding on the side where your baby is most comfortable
- Continue to offer the breast she seems to like least, without forcing her
- **Express** milk from the breast your baby takes less easily, to keep her fed and maintain your supply

Your baby sleeps a lot: should you wake him up for a feed?

Some babies sleep a lot and skip feedings, especially in the first 2–3 weeks. This makes it difficult for them to get all the milk they need.

If your baby sleeps a lot, you can let him sleep if he

- Wakes on his own to nurse 8 or more times every 24 hours
- Sucks actively and swallows regularly while at the breast
- Pees enough and passes enough stools per day (see Is your baby drinking enough milk?, page 370)
- Regains his birth weight within the first 2 weeks of life (see Weight gain, page 371)

If, on the contrary, your baby does not show these signs, wake him up to feed.

What to do?

If you have to wake your baby to nurse, start by placing him skin-to-skin with you.

Is he moving in his sleep, making sucking motions, or moving his eyes beneath his eyelids? These are signs that he is in a light sleep phase. Now is a good time to nurse him.

Your baby is not drinking enough milk during feedings

If your baby isn't peeing enough or passing enough stools for her age, and especially if she isn't gaining enough weight (see Is your baby drinking enough milk?, page 370), it might be a sign that she isn't drinking enough breast milk. Consequently, she's not getting enough nutrition.

There are a variety of possible reasons:

- She doesn't nurse frequently enough or long enough.
- She sucks at the breast but doesn't swallow enough milk.

What to do?

Make sure she nurses often enough, in other words at least 8 times every 24 hours, day and night.

You can express your milk so you can continue giving her breast milk. You can offer milk from a spoon or cup for the first few days (see Offering milk from a spoon or cup, page 470) or from a bottle once she starts drinking larger quantities (see Bottle-feeding your breastfed baby, page 462).

Contact a trained breastfeeding support person if things don't quickly get better or if you have concerns (see Getting help, page 416).

You may need to supplement feedings with commercial infant formula to meet all your baby's milk requirements.

To maintain breastfeeding despite the use of commercial infant formula, it is important to express milk to stimulate or increase your production. It's a good idea to use a pump to **express** your milk every time you feed your baby with commercial infant formula.

Insufficient milk production

Many mothers think they don't have enough milk, especially when their baby cries and wants to nurse often and for long periods. Remember, newborns cry for all kinds of reasons (see Crying, page 282). It is also normal for babies to nurse frequently (8 or more times per 24 hours) and even more frequently during a growth spurt (see Growth spurts, page 372).

Your breasts will become softer at the end of the day or after a few weeks of breastfeeding. This doesn't mean you have less milk.

If your baby is peeing enough and passing enough stools and especially if he is gaining enough weight (see Is your baby drinking enough milk?, page 370), you can be sure that he is getting enough milk and that you are producing enough.

Sometimes, however, milk production is low right from the start of breastfeeding. In other cases, it can suddenly drop. This may or may not be temporary, and can be due to a number of different reasons:

- Your breasts are understimulated because:
  - the number of feedings or expressing of milk is not enough in 24 hours (less than 8 times)
  - there is a period of several hours (e.g., at night) when your breasts are not stimulated
  - your baby's suction is not strong enough
  - the pump you've chosen doesn't suit you or isn't being used effectively
  - your baby regularly takes a bottle
  - your baby regularly drinks commercial infant formula
- You've had breast surgery (see If you've had breast surgery, page 451)
- You have a health problem (e.g., hormone disorder)

- You're pregnant again (see If you're breastfeeding—and pregnant, page 452)
- You're taking oral contraceptives or a decongestant containing pseudoephedrin

Good to know

Regardless of how much breast milk you produce, the quality of your milk is always excellent. Even in small amounts, breast milk provides your baby with a host of nutritional and immune elements that are not found in commercial infant formula.

What to do?

See the table Breastfeeding difficulties, page 478, for suggestions specific to your situation.

Make sure your baby is well fed and continues to gain weight. Give him expressed milk or commercial infant formula. Even if you use infant formula, you can continue breastfeeding.

Generally speaking, the basic principle for maintaining or increasing your milk supply is to remove milk from the breasts at least 8 times every 24 hours, day and night. Some women need to get their milk out even more frequently. You can remove milk from your breasts by nursing your baby or expressing milk.

You can also talk to a trained breastfeeding support person who will help you assess your milk supply and determine how you can produce more, if you need to (see Getting help, page 416).

You have more milk than your baby needs (overproduction)

Once breastfeeding is established, some women produce more milk than their babies need. Even after feeding, their breasts are heavy and tight (engorged). There can be various reasons for an **overproduction of milk**. It may be related to factors such as

- The mother's personal characteristics (e.g., having multiple children, being able to produce an abundance of milk)
- Regular expression of milk that the baby doesn't need in addition to feedings

What to do?

Avoid expressing more milk than your baby needs.

Contact a trained breastfeeding support person (see Getting help, page 416). Overproduction can create difficulties.

Very fast milk flow (strong let-down reflex)

A few seconds after your baby starts nursing, you can hear her swallowing loudly. She may even choke a little, fuss or stop nursing and start crying as milk runs onto her face. Your baby is upset because the milk is flowing too quickly.

What to do?

If your milk starts flowing too fast, remove your baby from your breast for a few seconds and put her back on once the let-down reflex has passed.

Try different positions to see if there is one that suits you and your baby better. You can try laid-back position (see Getting settled for a feed, page 422). The milk will flow more slowly into your baby's mouth in this position.

Breastfeeding difficulties

You	What to do?
Are having difficulties finding the right position and bringing your baby to your breast	See Getting settled for a feed, page 422, and Bringing baby to your breast, page 426.
Have firm, heavy and tight (engorged) breast	• Before feeding, gently press the **areola** near the nipple with your fingertips (see Counter pressure, page 470). • You can also do a "gentle massage" to reduce swelling (see How to do a "gentle massage", page 454). • If necessary, relax the breasts by expressing milk.
Have flat or inverted nipples	• Before feeding, gently press the areola near the nipple with your fingertips (see Counter pressure, page 470). • Favour the laid-back position (see Getting settled for a feed, page 422). • Make sure your baby opens his mouth wide and takes the nipple far into his mouth. • As you nurse your baby, squeeze your breast to increase the flow of milk (see Breast compression, page 435).

You	What to do?
Have insufficient milk supply	• As you nurse your baby, squeeze your breast to increase the flow of milk and continue offering one or both breasts again (see Breast compression, page 435). • To boost milk production, remove milk from your breasts by nursing your baby or expressing milk frequently, at least 8 times every 24 hours, day and night. See Producing a good supply of milk, page 420.

Your baby	What to do?
Has jaundice (see Newborn jaundice, page 625)	• Make sure he is drinking enough milk. • You can increase the number of feedings (see Is your baby drinking enough milk?, page 370) or, if necessary, offer milk from a spoon or cup after he nurses (see Offering milk from a spoon or cup, page 470).
Has a tight lingual frenum that seems to be causing problems	• Consult a trained breastfeeding support person for an assessment. • Adjust your baby's position, or try a different one (see Getting settled for a feed, page 422). • Adjust how he latches on (see Make sure your baby is latching on correctly, page 428). • While you wait to see the specialist, you can try using a nipple shield (see Nipple shields, page 491).

Your baby	What to do?
Is experiencing pain or discomfort from the delivery (e.g., head, collarbone, tight neck muscles)	• Adjust your baby's position, or try a different one (see Getting settled for a feed, page 422). • Consult a muscle pain specialist (e.g., physiotherapist).
Has had unpleasant experiences at the breast	• Make skin-to-skin contact with your baby. • Favour the laid-back position (see Getting settled for a feed, page 422). • Avoid placing your hand on your baby's head while you are breastfeeding.
Nurses without swallowing	• Adjust your baby's position, or try a different one (see Getting settled for a feed, page 422). • Adjust how he latches on (see Make sure your baby is latching on correctly, page 428). • As you nurse your baby, squeeze your breast to increase the flow of milk (see Breast compression, page 435). • As soon as your baby stops actively nursing, change breasts. You can offer both breasts several times during each feeding. • Try to boost your milk supply. To do this, remove milk from your breasts by nursing your baby or expressing milk frequently, at least 8 times every 24 hours, day and night (see Producing a good supply of milk, page 420).

Your baby	What to do?
Has grown accustomed to bottle feeding	• See Bottle-feeding your breastfed baby, page 462. • Try bringing baby to your breast whenever he's due for a feed, but don't force him if he doesn't want to latch on. • As you nurse your baby, squeeze your breast to increase the flow of milk (see Breast compression, page 435). • To boost milk production, remove milk from your breasts by nursing your baby or expressing milk frequently, at least 8 times every 24 hours, day and night (see Producing a good supply of milk, page 420). • In addition, each time your baby feeds from a bottle, express your milk to maintain or increase your supply.
Cries while breastfeeding	• Make skin-to-skin contact with your baby. • Offer your baby the breast before he gets too agitated. Watch for signs that he's hungry (see Hunger signs, page 367). • If he seems too hungry, first offer a little milk from a spoon or cup to calm her down (see Offering milk from a spoon or cup, page 470). • Bring your baby to the breast for short periods of just a few minutes when he is calm and less hungry. • If your milk flows quickly, see Very fast milk flow (strong let-down reflex), page 477. • If your milk flows slowly, see Insufficient milk production, page 475.

Your baby	What to do?
Falls asleep or takes long breaks while breastfeeding	• As you nurse your baby, squeeze your breast to increase the flow (see Breast compression, page 435). • Stimulate your baby so that he sucks and swallows regularly for the whole feed (e.g., talk to her, massage the palm of her hands or the soles of her feet). • Switch breasts whenever your baby stops swallowing despite your use of compression.
Is sick or has a stuffy nose	• Clear your baby's nose before you start feeding (see Stuffed-up or runny nose, page 656, and Nasal irrigation, page 603).
Is experiencing temporary discomfort (e.g., teething, stiff neck)	• Find the cause of the discomfort and eliminate or reduce it, if possible. • Use your baby's favourite position and offer the breast, but don't force him to feed. • Offer the breast when your baby is sleeping lightly.

Painful nipples

Your nipples may be sensitive for the first few days, especially at the beginning of a feeding. Baby and mom are still in the learning period. After a few days, breastfeeding should not hurt.

Are you feeling pain after the first 30 seconds of breastfeeding or are you afraid to nurse your baby because of the pain? The most common cause of pain is a poor latch. Improving how your baby latches on can significantly reduce nipple pain and damage (see Make sure your baby is latching on correctly, page 428).

Persistent pain or damage is one of the main reasons why women decide to stop nursing. Any pain or discomfort deserves attention. If you need to, contact a trained breastfeeding support person (see Getting help, page 416).

For many years, women with nipple pain were assumed to have thrush or a fungal infection. These days, nipple pain is usually associated with vasospasms (see page 486) or muscle pain (see Muscle pain, page 490).

Painful nipples

What you notice	What it might be	What to do?
Red or cracked nipples or a sore spot that sometimes bleeds	Sore or cracked nipples	• Vary breastfeeding positions (see Getting settled for a feed, page 422). • Try to improve how your baby latches on (see Bringing baby to your breast, page 426). If you need to reposition your baby, gently break the suction (see Breaking the suction, page 430). • Start nursing with the less sensitive breast. • Take pain medication such as acetaminophen. A pharmacist can help you. • If nursing is too painful, you can **express** your milk to feed your baby. Expressing milk also prevents engorged breasts and maintains your milk supply. Consult a trained breastfeeding support person if the problem persists (see Getting help, page 416). Over-the-counter ointments, balms, and creams won't solve the problem, but may provide some relief.

What you notice	What it might be	What to do?
An unpleasant sensation (e.g., burning, itching) and redness on your nipples The sensation often persists between feedings and is more common in women who have eczema.	A skin reaction to a new product or to moisture	• Use washable nursing pads and avoid using disposable ones. • Change the pads as soon as they are damp. Wash the pads in mild, unscented detergent. • Stop applying creams, lotions, lanolin or other products on your nipples as you may be reacting to these products. • Apply a thin layer of over-the-counter 0.5% hydrocortisone after every feeding for 3 to 5 days. There is no need to remove the product before you feed your baby. Ask your pharmacist for advice. Consult a trained breastfeeding support person if the problem persists (see Getting help, page 416).

What you notice	What it might be	What to do?
An unpleasant sensation (e.g., burning, pinching) in the nipple or throughout the breast, and your nipple changes colour (blue, white, or red) This type of pain can occur after a feeding, between feedings, or upon contact with cold (e.g., getting out of the shower, grocery shopping in the frozen food aisle). Nicotine, caffeine, and certain medications can aggravate the problem.	A vasospasm	• Check and correct the latch as needed (see Make sure your baby is latching on correctly, page 428). • Keep your breasts and your body warm (e.g., dress warmly). • Apply dry heat, such as the palm of your hand or a reusable heat pack, to the nipple immediately after feeding or when you see a change in colour. Consult a trained breastfeeding support person if the problem persists (see Getting help, page 416).
A thin layer of skin or a small white dot on the nipple that blocks your milk You may also have intense pain in the nipple and sometimes throughout your breast, especially at the beginning of a feeding.	A blister	• Avoid touching or scratching it (with your fingers or a needle). • Continue to nurse. Your baby might pierce the blister as she feeds. Consult a trained breastfeeding support person if you feel any pain or if the problem persists (see Getting help, page 416).

Painful breast

For a long time, mothers were advised to "empty" their breasts when the breasts were engorged or in the presence of redness or a lump or hard area on the breast. We now know that it is better not to "empty" the breasts to avoid **overproduction of milk**.

Breast pain is often accompanied by redness or a lump or hard area on the breast. Any pain or discomfort warrants attention.

Some types of discomfort are associated with your milk coming in (see When your milk comes in, page 419) and with a normal level of engorgement during the first days or weeks of breastfeeding. Nursing effectively, frequently (8 or more times per 24 hours), and regularly (day and night) helps relieve discomfort, which typically lasts 24 to 48 hours.

Breast pain can affect breastfeeding and is one of the main reasons why women decide to wean their baby.

The following table shows the types of pain that lactating women may feel on one or both breasts, and some suggestions for relieving the pain.

Painful breast

What you notice	What it might be	What to do?	
Tight, heavy breast **Can be painful**	Engorgement caused by excess milk or swelling	Nurse your baby according to his needs.	• If your baby hasn't drunk very much and you are uncomfortable, express a little milk after the feeding. Express just enough to be comfortable, without trying to empty your breasts. • If your baby has difficulty latching on, express a little milk manually to soften the areola. • Try to relax your breast by pressing on the areola near the nipple (see Counter pressure, page 470).
A bump or hard or red area on the breast	Obstruction of one or more milk ducts caused by excess milk or swelling		If you are uncomfortable after the feeding, express a little milk. Express just enough to be comfortable, without trying to empty your breasts.
A bump or a hard, swollen, or red area on the breast; fever and flu symptoms (e.g., aches, chills)	Inflammation or infection (**mastitis**)	• Nurse your baby according to his needs. • Continue breastfeeding with the infected breast if you can; the milk is fine.	If your baby hasn't drunk very much and you are uncomfortable, express a little milk. Express just enough to be comfortable, without trying to empty your breasts.

			When to see a healthcare professional (see Getting help, page 416)
	• Apply cold (e.g., ice or a cold washcloth) for 10 to 15 minutes every 1 to 2 hours between feedings to help reduce swelling and pain. Avoid heat. • Massage your breasts lightly and gently (see How to do a "gentle massage", page 454). Avoid deep massage, which can injure the breasts.		
		• If needed, take ibuprofen (e.g., Advil®, Motrin®) to reduce redness, swelling, and pain. • Acetaminophen (e.g., Tylenol®) may reduce pain. Ask your pharmacist for advice.	
		• Take ibuprofen (e.g., Advil®, Motrin®) as needed to reduce redness, swelling, pain and fever. • Acetaminophen (e.g., Tylenol®) may also reduce pain and fever. Ask your pharmacist for advice.	• Your symptoms have not started to improve after 24 hours. • The situation is getting worse (e.g., the redness spreads, the skin texture changes, the hard area becomes very painful, fever lasts more than 24 hours or increases). You may require antibiotics.

Muscle pain

You might experience pain in the breasts or nipples if you have or have had problems with your back, ribs, neck, or shoulders. Why? Because the nerves in those parts of the body are the same ones that govern sensations in the breasts and nipples.

What to do?

When you breastfeed, take the time to get comfortable. Support your back and keep your elbows close to your body. Your feet are flat on the floor or on a low stool.

You can also get settled in a laid-back or lying down position (see Getting settled for a feed, page 422).

Keep your spine and shoulders aligned at all times. Always try to sit on both buttocks.

Avoid

- leaning on the armrest and crossing your legs
- leaning forward by turning your body
- carrying your baby on one hip while moving around with him

If the pain persists, consult a muscle specialist (e.g., physiotherapist).

Breastfeeding accessories

There is an ever-expanding array of breastfeeding accessories on the market—from breast pumps, nursing bras, and pillows to nursing pads and more. None of them are essential, and some can even interfere with breastfeeding.

However, reusable or disposable nursing pads may be useful if your breast milk leaks. A nursing bra isn't necessary either, but can be very practical. If you're thinking about getting a breast pump, community breastfeeding support organizations are an excellent source of information when the time comes to choose one.

If you experience breastfeeding difficulties, accessories such as nipple shields or a lactation aid might be suggested.

Nipple shields

Nipple shields are a silicone breastfeeding accessory designed to go over the nipple. They come in various models and sizes.

They are sometimes recommended when the baby does not take the breast or when the mother's nipples are painful.

If nipple shields seem to be the solution for you:

- Contact a trained breastfeeding support person for guidance (see Getting help, page 416)
- Choose the size that best matches your nipple
- If you are only having problems with one breast, use a shield on that side only
- Use it for part of the feed only, if possible
- Express your milk after each feeding several times a day to maintain your milk supply
- Clean the shield according to the manufacturer's instructions

Nipple shields are generally for temporary use. You should stop using yours as soon as the problem is solved. Long-term use of a nipple shield may make it difficult for your baby to nurse without one and may also reduce your milk supply.

If you're finding it hard to discontinue using nipple shields, talk to a trained breastfeeding support person (see Getting help, page 416).

In some situations, nipple shields can be used until your baby is weaned.

Lactation aid

A lactation aid is a small tube placed on the breast while you nurse. These types of aids can help you continue to breastfeed while stimulating milk production.

If you need a lactation aid, your midwife, a nurse at your CLSC, or a trained breastfeeding support person can supply the tubes and show you how to use them.

When breastfeeding doesn't go as planned

Breastfeeding is not always easy, and for some women it can be downright difficult. Even with excellent support and specialized assistance, your breastfeeding experience might not live up to your expectations. Some women cope well with these difficulties, while others feel sad and frustrated or even guilty because they cannot achieve the goals they set for themselves. Successful breastfeeding depends on a number of factors that you can't always control.

It's good to be able to talk about it with someone you trust and who will lend an ear. Every birth and breastfeeding story is unique.

Discouraged and thinking of weaning your baby?

When breastfeeding doesn't go as planned, many mothers will think about **weaning** their baby, even if they were originally very determined to breastfeed. This situation may lead you to experience different emotions, some even contradictory.

Before making a hasty decision, you can

- Talk to a trained breastfeeding support person (see Getting help, page 416).
- **Express** milk to reduce or stop nursing from one or both breasts either temporarily or permanently.
- Opt for partial (or mixed) breastfeeding by introducing commercial infant formula.

Jean-Claude Mercier

If you don't think you can continue breastfeeding and are considering weaning your baby, consult a trained breastfeeding support person (see Getting help, page 416).

Weaning

Weaning age varies from one child to another. Whether it's the mother or child who initiates the process, various factors affect weaning: the child's age and temperament, the mother's feelings and the approach used.

Give yourself time. Be attentive to your child's reaction and stay flexible. If possible, it's better to delay weaning a sick child. She needs her mother's milk and the comfort she gets from breastfeeding.

Weaning babies under 9 months old

Milk production declines gradually as breast stimulation is reduced. Gradual weaning helps you to avoid engorged breasts and reduces the possibility of **mastitis**. The time it takes to stop producing milk altogether varies from one woman to another, however it generally takes about four weeks to wean your baby completely. This gives your child time to adapt. Weaning faster may be hard on both you and your baby.

Start by replacing one daily breastfeeding with an iron-enriched commercial infant formula served in a baby bottle or cup. Between feedings you can empty your breasts by expressing some milk or letting it flow under a hot shower.

Once your breasts no longer feel engorged, replace a second feeding when you're ready. At first, don't skip two breastfeedings in a row. You can gradually replace as many breastfeedings as you want. Many mothers continue the main bedtime and morning feedings.

Some mothers will feel their breasts engorged with milk for a few days after the "last" breastfeeding. Don't hesitate to **express** some milk to ease the discomfort. You can also let your baby breastfeed for a few minutes.

At about the age of 6 months your baby can start drinking from a regular cup. At first, he will probably only drink a small amount of milk. This is perfectly normal. Finish up with a baby bottle if needed. Offer him the cup often, and make sure he's getting enough milk—it will remain his primary food for his first full year of life, providing the calcium and protein he needs to grow.

Weaning babies older than 9 months

As your child gets older, you can decide how quickly you wish to wean her. Gradually encourage her to develop other ways of satisfying her needs for nutrition and contact. Many children lose interest in the breast when they lose the need to suck.

For older babies, breastfeeding is often a moment of comforting contact. If you're trying to wean your child, it's a good idea to introduce other such moments—rocking, massage, back-rubs and so on. You will breastfeed less and less as your baby eventually starts going days at a time without wanting to nurse.

By about 9 months, provided she is eating a balanced diet, your baby can start to drink 3.25% homogenized milk instead of breast milk.

Here are a few suggestions to ease the transition:

- Don't refuse your baby the breast if she wants it, but gradually stop offering it.
- Delay feedings if she's not too impatient so they are spaced further apart and reduced in number.
- Offer her a nutritious snack.
- Distract her with a game or other stimulating activity.
- Reduce the length of feedings.
- Change your daily habits, e.g., don't sit in the chair you usually use to breastfeed her.

Consult a community breastfeeding support group, if needed.

Bottle-feeding your baby

Nathalie Vandal

Bottle-feeding is important. Bottles can be used to feed your baby expressed breast milk or commercial infant formula. Regardless of the type of milk you're using, you'll need to prepare and use baby bottles in a similar way. This chapter contains information on:

- Choosing bottles and nipples
- Bottle-feeding your baby
- Food-related problems for bottle-fed babies
- Cleaning bottles, nipples and breast pumps

You'll find everything you need to know about milk types and choices in the Milk chapter on page 382.

General information on feeding your baby (burping, gas, eating behaviour, feeding schedule, etc.) can be found in the Feeding your baby chapter on page 366.

If you are breastfeeding your baby, be aware that some babies find it hard to return to the breast after drinking from a bottle a few times. Bottle-feeding is also associated with shorter nursing periods, particularly when using commercial infant formula. Keep an eye on your baby's behaviour.

Choosing baby bottles and nipples

There are a number of types of baby bottles and nipples. Most companies try to sell their products by claiming they "prevent colic" or are "closer to the breast." Such marketing claims have not been scientifically proven.

Bottles

Various types of bottles are available: glass, plastic or with disposable bags. Broadly speaking, they come in two sizes: 150 ml to 180 ml (5 to 6 ounces) and 240 ml to 270 ml (8 to 9 ounces). Each bottle type has its own advantages and disadvantages. Choose the type that best suits you.

Bottles currently on sale in Canada do not contain polycarbonate, a hard, transparent plastic that can release bisphenol A when it comes into contact with hot or boiling liquids. The Canadian government recently banned the sale and import of polycarbonate bottles to protect the health of newborn babies and nursing infants, even though it acknowledges that the quantities of bisphenol A released by bottles are not sufficient to cause harm. All the same, it's best to buy new bottles and avoid using second-hand ones.

Nipples

Every baby is unique. Your baby might prefer one kind of nipple, and your neighbour's baby might prefer another. No nipple really resembles the breast; nor can it guarantee that the breast/bottle combination will work for all babies.

Nipples come in different shapes, sizes, materials (latex or silicone) and degrees of firmness. There is no scientific evidence that one type of nipple is better than another for your baby. Some babies find it easier to drink with one particular type of nipple, while others have no trouble adapting to any kind. You will probably have to try a few different types before you find the one that works best for your baby.

Most companies sell nipples with different flow speeds. For newborns, a slow-flow nipple is best, because your baby is still learning. Many newborns tend to choke when milk flows into their mouth too quickly. As your baby gets older, you can choose a faster-flowing nipple.

How much milk?

The amount of milk consumed varies widely from one baby to the next, and from one day to another. Over the first few days, your baby will drink only a small amount because his stomach is still very small. This amount will increase gradually.

Your baby may be very hungry in the evening and less so in the morning. It's best to observe and watch for signs of hunger or fullness and let him decide how much milk he needs. Respect your baby's appetite!

No research has been conducted into how much milk babies need at a given age. The information in the table on the following page is only meant to illustrate how much a baby may drink in a day.


Maroussia Beaulieu

Your baby is unique. Watch him and he'll let you know if he has had enough to drink.

Daily amount of milk: an illustration

Age	Daily amount (24 hours)
Within the 1st week	Steady increase from 180 ml to 600 ml
1st week until the end of the 1st month	450 ml to 800 ml
2nd and 3rd months	500 ml to 900 ml
4th, 5th and 6th months	850 ml to 1,000 ml
7th to 12th months	750 ml to 850 ml

1 oz = 30 ml 1 cup = 250 ml

Remember that tables don't take into account the individual needs of your baby, who is unique. Observing your baby will likely teach you much more than reading this table. You can also ask a doctor, midwife or CLSC nurse for advice, if you feel the need.

Warming milk

There is no nutritional reason to heat milk, but most babies prefer it lukewarm. Children usually begin drinking refrigerated drinks like milk, water and juice at 10 to 12 months, but if your child doesn't like cold milk, you can continue warming it up. To reheat milk:

- Put the milk container in warm water for a few minutes until lukewarm.
- Shake gently. Disposable bags heat more quickly than plastic or glass bottles.
- To check the temperature, pour a few drops on the back of your hand or the inside of your wrist. The milk should be neither hot nor cold to the touch.

To thaw or reheat frozen breast milk:

- Run cold water over the container, then gradually add hot water until the milk is lukewarm.
- Or put the milk in the refrigerator for 10 to 12 hours, then warm it in hot water.
- Stir, check the temperature and feed it to your baby.

Do not warm milk in a microwave oven. Microwaves heat unevenly, often at dangerously high temperatures.

Do not warm a bottle of milk in boiling water on the stove. All foods—both liquid and solid—lose some of their nutritional value when overheated. And babies have been accidentally burned with milk that was too hot or was heated in a microwave oven.

Microwave ovens are also unsuitable because there is a risk that bags and glass bottles might explode. Also breast milk loses some of its vitamins and **antibodies** when reheated in the microwave.

Don't leave reheated milk for more than two hours at room temperature. Throw it away if it is left out for this long because bacteria multiply quickly and could cause diarrhea.

Bottle-feeding your baby

Feeding will go more smoothly if you bottle-feed your baby as soon as he shows signs of hunger.

Make yourself comfortable. If need be, slide a pillow under the arm holding your baby. Tilt the bottle slightly to keep the neck full of milk and to make sure your baby doesn't swallow any air. Change positions between feedings, moving your baby from one side to the other. This will help your baby's eyesight develop. It's sometimes a good idea to take a break or two while feeding, especially in the first few months.

Feeding time is a great opportunity to bond with your little one. Don't hesitate to make skin-to-skin contact with your baby. This makes him feel safe and warm. Taking time to relax while feeding your baby in your arms is good for both of you. It's not advisable to let your baby hold the bottle by himself in his bed or baby chair because he may choke while drinking.

Feeding your baby is something you learn how to do gradually. Give yourself time and learn to trust yourself!

Bottle-feeding problems

Babies can sometimes have trouble feeding. Usually, the problem is temporary. The first thing to do is observe your baby. Try to get a feel for her temperament as well as her feeding and sleeping routine.

Your baby sleeps a lot

If your baby sleeps a lot, you probably wonder whether you should wake her to feed. Knowing what's best isn't always easy. You can follow her routine and let her sleep if she

- Wakes up on her own to feed
- Is an active and effective feeder
- Pees at least 6 times and passes at least 3 stools a day
- Is calm and seems satisfied after feeding
- Has regained her birth weight and continues to put on weight

You may need to wake your baby up to feed her if she sleeps a lot.

In this case, there is nothing to worry about. Babies each have their own routine that develops over time.

Some babies sleep so much they may skip some feedings, especially during the first 2 to 3 weeks. This means they will have a hard time getting all the milk they need. If your baby sleeps a lot and doesn't show the signs described above, you need to stimulate her to drink more.

What to do?

- Keep an eye out for signs that she's sleeping lightly (she's moving, making sucking motions, or moving her eyes beneath her eyelids) when it will be easier to wake her up.
- Stimulate her: talk to her, massage her back, legs, arms, etc.
- Leave her in an undershirt or diaper: babies drink less when they are warm.
- See a professional if you're worried or see no improvement after a few days.

Your baby drinks very slowly

Babies can't always suck effectively at the start. This is more common among babies who were born a few weeks prematurely (between 35 and 37 weeks of pregnancy). Even full-term babies may need a few days or weeks to get the hang of things. This situation usually improves with time. Be patient: your baby is learning. Some babies, however, will continue to drink slowly even as they get older.

What to do?

- Change to a faster nipple.
- Stimulate your baby as she feeds by rubbing her feet and tickling her back and sides.
- Run your finger under her chin and across her cheeks to stimulate her.
- Change her diaper or change her position for a few minutes.

Your baby often chokes while drinking

If the nipple you are using flows too quickly and your baby has too much milk in her mouth, she may choke (i.e., she swallows noisily, coughs and spits up a little milk).

What to do?

- Change to a slower nipple.
- Take short feeding breaks.
- Avoid laying your baby on her back during feeding since milk will flow into her mouth even when she's not sucking. Try to feed her in a near-sitting position so that the bottle is tilted only slightly downward (just enough for the nipple to fill with milk and not air). Your baby will then be able to drink at her own pace.

Your baby regurgitates a lot

As long as your baby is happy and putting on weight, regurgitation ("spitting up") is generally nothing to worry about (see Regurgitation, page 374).

Some babies drink very fast, and their stomachs expand too quickly. This makes it easier for them to regurgitate, especially if they are very active and start moving around right after feeding.

If milk is coming out of the bottle too quickly, your baby will drink too much just to satisfy her need to suck. If she regurgitates a lot, the nipple on the bottle may be too fast.

What to do?

If your baby is in good spirits and gaining weight, there's nothing to worry about. You don't need to do anything.

If regurgitation seems to be bothering her, watch her drink. If necessary, try these strategies:

- Change to a slower nipple.
- Take short feeding breaks.
- Try to burp her more.
- Avoid laying your baby on her back during feeding. Try to feed her in a near–sitting position so that milk will flow into her mouth more slowly.
- Try to keep activity to a minimum right after feeding.

It's best to see a doctor if your baby

- Seems to be in pain
- Projectile vomits several times a day
- Wets fewer diapers
- Isn't putting on enough weight

Your baby refuses the bottle

Your baby normally breastfeeds, and you want to bottle-feed her? If she has trouble bottle-feeding or refuses to altogether, see Bottle-feeding your breastfed baby, page 462.

Cleaning bottles, nipples and breast pumps

Breast pumps and baby bottles need to be kept very clean when feeding your baby breast milk or commercial infant formula.

Cleaning recommendations for bottles and nipples are slightly different depending on which milk you use. Breast milk contains white blood cells and other components that prevent bacteria from growing for a while. Commercial infant formulas contain no such components and may also have been contaminated during preparation.

Inspect the nipples regularly. They will wear out over time due to the effects of suction, heat, contact with milk and exposure to sunlight. Replace them before they become soft or sticky, and throw them away immediately if they have holes, are torn or change texture.

Disposable bags are too flimsy to be reused. Don't pour hot milk into them either as they could burst.

It is important to thoroughly wash baby bottles, nipples, breast pumps, and other items used for feedings to prevent gastro-enteritis and the development of thrush in your baby's mouth.

Care and cleaning recommendations for baby bottles, nipples and breast pumps

Germs, particularly bacteria, may develop and survive in milk, so be sure to remove all traces of milk from bottles, nipples and breast pumps every time you use them.

Cleaning is the most important step in caring for these items.

Cleaning

When:

- After every feeding, clean everything thoroughly no matter what type of milk you use.

How:

- Immediately after feeding, take everything apart.
- Rinse the bottle, nipple and cap or breast pump in cold water. Be sure to run water through the hole in the nipple to remove surplus milk.
- Use hot, soapy water and a nipple and bottle brush. Scrub the bottle and nipple well, inside and out. Make sure to thoroughly clean all grooves on both the plastic ring and the bottle.
- Rinse in warm tap water.
- Drain and cover with a clean towel.

Once the bottles and nipples are clean, you can disinfect them to reduce the number of remaining bacteria.

Disinfection (sterilization)

When:

- Disinfect everything before using it for the first time, whether it's for breast milk or commercial infant formula.
- If you're using commercial infant formula, disinfect your material after every feeding until your baby is 4 months old. You can disinfect all your bottles and nipples once a day if you have enough of them to use for a full day's feeding.

How:

In boiling water

- Take everything apart, clean all parts thoroughly and put them in a large saucepan.
- Cover in water, taking care there are no bubbles trapped in the bottles.
- Cover the saucepan to prevent too much water evaporating.
- Bring the water to a boil and boil for at least 5 to 10 minutes.
- Let cool and remove the items with clean hands.
- Drain and cover with a clean towel.

In the dishwasher

To disinfect items in the dishwasher, your dishwasher must have a high-temperature washing and drying cycle.

- Choose this cycle, not the energy-saving cycle.
- Take everything apart and clean thoroughly.
- Put bottles and rings on the upper rack. You can also put nipples in the dishwasher provided they are made of silicone. Latex (rubber) nipples must be sterilized in boiling water since they are not dishwasher safe.

With an appliance sold to disinfect baby bottles and nipples

- Follow the manufacturer's guidelines.

Water

Julie Ward

When to give your baby water

Babies fed with their mother's milk quench their thirst naturally. They don't need to drink water between feedings.

Babies fed with commercial infant formula generally don't need water between feedings if the formula has been prepared according to the manufacturer's instructions.

Around 6 months of age, when your baby starts to eat foods, offer her a small amount of water at a time in a cup.

Boil water for babies under 4 months

All water given to babies under 4 months old must be boiled no matter where it comes from, whether a municipal system, private well, bulk container, or bottle.

You must also sterilize the containers in which you store boiled water, the same way you do baby bottles (see Cleaning bottles, nipples and breast pumps, page 507).

How to prepare and store boiled water:

- Fill a pot with water.
- Boil at a full rolling boil for at least 1 minute.
- Cool the water before giving it to your baby (do not add ice cubes to boiling water to cool it).
- Transfer the boiled and cooled water into sterilized containers.


Pascale Turcotte

If you give your baby water before she is 4 months old, make sure it has boiled thoroughly for 1 minute, no matter where it comes from, whether a municipal system, private well, bulk container, or bottle.

You can also use a kettle, but make sure it doesn't have an automatic shutoff, because the water must boil for 1 full minute.

Boiled water can be kept in sterilized, properly sealed containers in the refrigerator for 3 days or for 24 hours if kept at room temperature out of direct sunlight.

From 4 months on, your baby can drink unboiled water.

Choosing the right water

Some micro-organisms that are harmless to adults can cause diarrhea or other illnesses in young children. That's why the water you give your infant, whether in a cup or mixed in formula or purées, must always be good quality. Plus, it must not contain high levels of mineral salts.

Water recommended for infants	Water not recommended for infants
Municipal tap water	Water from lakes or rivers
Water from a private well that meets quality standards	Water from a natural source whose quality is not tested regularly
Commercial bottled or bulk-packaged water (excluding mineral or mineralized water)	Mineral or mineralized water

If you are unsure of the quality of your water or if there is a public advisory against drinking or cooking with your water, do not give it to your baby. Give your baby water from some other source that has been recommended for babies (see table above).

If a public water advisory has been issued about your water (e.g., boil water advisory), follow the instructions provided.

Municipal tap water

Water from municipal water supplies is subject to quality control. If water quality is not good enough for the water to be consumed, the public is immediately notified and recommendations are issued through various outlets: radio, newspapers, personal advisories, etc.

! Do not drink warm tap water and do not use it to prepare your baby's bottles or for cooking as it may contain more lead, contaminants, and bacteria than cold water.


Geneviève Colpron

Before using tap water for consumption, let it run until the water gets cold, then let it continue to run for a minute or two. This gets rid of any accumulated lead or copper, as well as certain bacteria that are sometimes found in pipes.

Private well water

You can use water from a private well (surface or artesian well) as long as recent tests show that it meets quality standards. If it is a new well, the water should be tested for chemicals and bacteria by a lab accredited by Ministère de l'Environnement et de la Lutte contre les changements climatiques. If you own a private well, it is recommended that you have your well water tested at least twice a year.

For the names of accredited labs in your area, visit ceaeq.gouv.qc.ca/accreditation/PALA/lla03.htm (in French only).

Tests can detect undesirable elements in your water (e.g., chemicals or microbial contaminants and bacteria such as E. coli).

In general, when concentrations of chemical substances in drinking water exceed allowable levels, you must use another source of drinking water, like bottled water. When a microbial contaminant is found in the water, you usually need to either boil and cool it before consumption or use another source of water.

For more information, visit environnement.gouv.qc.ca/eau/potable/depliant/index-en.htm.

If you have doubts about the quality of well water in your area, you can contact

- A local well digger
- Your municipality

For more information, contact

- The Ministère de l'Environnement et de la Lutte contre les changements climatiques branch responsible for your region
- Your local public health department
- A lab in your area accredited by Ministère de l'Environnement et de la Lutte contre les changements climatiques.

You can also visit quebec.ca/en/agriculture-environment-and-natural-resources/drinking-water/contaminants-in-drinking-water-wells.

Do not drink warm tap water and do not use it to prepare your baby's bottles or for cooking as it may contain more lead, contaminants, and bacteria than cold water.

Bottled water

Only two types of bottled water are suitable for your baby.

Spring water comes from an underground spring and contains low mineral levels. It is tested twice for quality—once at the spring and again at the bottling plant. Spring water that is labelled "natural" has not been treated or modified in any way. That said, all spring water (with or without a "natural" label) is good for your baby. Generally speaking, water bottled in Québec is disinfected with ozone or UV rays to ensure its microbiological quality.

Non-mineralized treated water is tap water that has been filtered and purified to resemble spring water. It does not contain any added mineral salts.

Bulk water

If you drink bulk-packaged water, be sure to get it from a recognized or reliable location (e.g., a grocery store). To reduce the risk of contamination, the containers you use to collect bulk water should be washed in hot soapy water and rinsed well. In addition, be sure to follow the distributor's instructions when filling containers.

Water coolers

If you use a water cooler, be sure to clean it regularly according to the manufacturer's recommendations. Also, be sure to keep the cooler spout very clean, as it can be easily soiled by children or adults with dirty hands or by pets.

Water treatment devices

Some people use home water treatment devices to make water potable or improve its aesthetic quality (taste, odour, colour). These devices must be certified. They must also be used and maintained according to the manufacturer's recommendations. It's best not to give water treated with these devices to a baby under the age of 6 months.

Despite their effectiveness, here are a few known issues related to some of these devices:

- Water softeners increase the amount of **sodium** (salt) in the water.
- Charcoal filters (with or without silver) can increase the quantity of certain bacteria if they are not used, maintained, or replaced according to the manufacturer's recommendations.
- Some of these devices can be difficult to clean.

If you use one of these devices for your family, in addition to cleaning it properly, you need to remember to change the filter or membrane regularly, according to the manufacturer's instructions.

Water problems

Water can change colour, smell, and taste. Got doubts about the quality of your water?

- If you are connected to a municipal water supply, contact the municipality or waterworks operator.
- If you are connected to a private well, contact your local municipality, a local well specialist, or a laboratory accredited by Ministère de l'Environnement et de la Lutte contre les changements climatiques at 1-800-561-1616 or visit ceaeq.gouv.qc.ca/accreditation/PALA/lla03.htm (in French only).

As a last resort, you can contact the regional office of the Ministère de l'Environnement et de la Lutte contre les changements climatiques or your regional public health department.

Foods

Martin Chénier

Your baby's first taste of food will be a whole new experience. It takes time to get used to eating foods. Gradually, your baby will develop a taste for new foods and textures. By age 1 or so, she will be eating most of the same foods as the rest of the family.

The foods presented in this chapter include all foods other than breast milk and infant formula, which are described in the chapter Milk (page 382). Introduce them while respecting your baby's own pace and needs.

Breast milk or infant formula will be your baby's main food during the first year of life. Foods, introduced at about 6 months, can complement—but not replace—milk.

When should I introduce foods?

Before 6 months, most babies meet all their nutritional needs with their milk. However, their nutritional needs change as they grow.

At about six months of age, it becomes necessary to introduce foods into your baby's diet. Your baby needs more energy and **nutrients** to grow and develop. The foods you introduce ensure these needs are met.

Good to know...

If you introduce foods earlier, they will replace milk instead of complementing it. What's more, before the age of 4 months, your baby's digestive system is not mature enough for any food except for milk.

And if you wait until later, your baby may not be getting enough nutrients, and he could have more trouble adjusting to solid food.

How do I know my baby is ready?

It's not always easy to determine the best time to introduce foods to your baby. But it is possible. Here's how to tell she's ready:

- Your baby is around 6 months old.
- Your baby can sit in a high chair without support.
- Your baby has good control of her head and can turn away to indicate refusal.

She may also try to bring food to her mouth.

Good to know...

There are additional conditions to be met before you start baby-led weaning (see Baby-led weaning (BLW), page 540).

A baby under 6 months old isn't necessarily ready for foods just because she nurses more often for several days.

Some babies may need to start eating foods a little earlier than 6 months. However, a baby under 6 months old isn't necessarily ready for foods just because she nurses more often for several days. This could be due to a growth spurt or a temporary need for more milk (see Growth spurts, page 372).

Even if your baby is not ready for solid food yet, you can bring her close to the table at mealtimes. Watching you eat will spark her interest in food and family meals.

Contrary to popular belief, eating cereal at supper does not help infants sleep through the night. How long they sleep at night depends on their biological rhythm and temperament.

Interest in food varies greatly from one baby to another. Some need several tries before they get used to solid food, while others like it the first time they try it.

What about premature babies?

Premature babies are introduced to foods the same way as term babies are—with one key difference. You should assess your baby's readiness based on his corrected age (see For premature babies (born before the 37th week of pregnancy), page 333).

When a premature baby is around 6 months old (corrected age), his digestive system is mature enough for foods. Make sure that the other criteria listed on the previous page are met as well (see How do I know my baby is ready?, page 520).

Jean-Claude Mercier

Once your baby starts eating foods, continue breastfeeding as often as he wants. If you feed your baby commercial infant formula, give him at least 750 ml (25 oz) of milk a day.

How should I introduce foods?

Parents choose different ways to introduce solid food depending on their preferences, their family circumstances, and their baby's characteristics.

Most parents introduce solids in the form of purée, which they give to their baby with a spoon. Over time they gradually introduce food with other textures.

Other parents prefer to start with food in pieces, letting the baby feed himself. This method is known as baby-led weaning (or BLW).

For more information on these two methods, see Baby food basics (page 532) and Baby-led weaning (BLW) (page 540).

Some advice applies to all babies, regardless of how solid food is introduced. See, for example, the information on pages 523 to 531.

Order of introduction

The important thing is to start with iron-rich foods, then continue with a nutritious variety of foods.

The order in which foods are introduced varies from country to country, depending on customs and culture.

However, it is recommended to start with iron-rich foods, then to continue with nutritious and varied foods (see Start with iron-rich foods, page 545).

Good to know...

Cow's milk should not be introduced before 9 to 12 months.

New foods

You can add new foods to your baby's diet on a daily basis for several days in a row. There's no need to wait a few days between two new foods.

When introducing new foods, continue to give your baby the foods she already knows on a regular basis.

Don't insist if your baby refuses a new food for a few days. Try introducing it again later. You may have to present a food a number of times (up to 10 and sometimes even more) before your baby accepts it. This is how she learns to like new flavours.

A word about food allergies

The foods most likely to cause allergies are eggs (see Eggs, page 552), peanuts and other nuts (see Peanut and nut butters, page 553), fish and seafood (see Fish, page 551) and foods that contain cow's milk protein (see Milk and dairy products, page 560).

In the past, it was recommended that parents wait until their babies had reached a certain age before introducing foods more likely to cause allergies. We now know that it's best to introduce these types of foods at the same time as other solids.

When your baby tries a new food that could cause an allergy, watch her. To learn about the signs of an allergic reaction and what to do, see Food allergies, page 571. If she tolerates the new food, continue to offer it several times a week, in normal quantities for her age.

To find out if your baby has a higher risk of developing a food allergy or to learn more about food allergies, see Food allergies, page 571.

Food quality

Over time, solids will become more and more important in meeting your baby's nutritional needs. That's why the food you offer should be nutritious and varied.

The foods you add to your baby's diet can often be the same as what the rest of the family eats. For ideas on nutritious foods to offer your baby, see 6 to 12 months—Your baby's first foods, page 545.

However, it's best not to give foods containing added salt or sugar to your baby until she's at least one year old.

Quantity and frequency

Your baby has a small stomach, so he needs to eat small portions several times a day. At first, your baby will probably eat the equivalent of a few small spoonfuls once or more during the day.

Little by little, the amount of food and the number of meals and snacks will increase. Let yourself be guided by his appetite, which will vary depending on how much milk he drinks and his growth rate.

Your baby's appetite is your best guide to knowing how much food he needs. The quantity will depend on how much milk he drinks and will vary depending on his rate of growth.

You could, for example, start by giving him two or three meals a day. Then depending on how much he eats, you could add snacks in between meals.

By around 1 year of age, your child will be able to adopt a more regular schedule for meals (breakfast, lunch, supper) and snacks (between meals and at night, as needed).

Good to know...

When your baby starts eating foods, the number of breast or bottle feedings will generally stay the same. The amount of milk he drinks will not decrease by much. At around 8 or 9 months, he will gradually start drinking less.

Your baby can have his milk before or after foods, or you can give him some before and some after.

Appetite

A baby's appetite is like an adult's: it can vary from one day to the next. It's normal for babies to sometimes eat less, and it's possible that they may not like certain foods or textures.

By watching your baby for specific signals, you'll learn to know her appetite. If your baby shows interest in the food you give, it's because she is still hungry, and you can continue feeding her without hesitation. However, if she closes her mouth, refuses to eat, pushes her spoon away, turns her head, cries, or plays with her food, she is signalling that she has had enough to eat.

It's possible that your child will eat less when she starts eating independently. Don't insist: she is learning about foods and getting to know her own appetite. This will allow her to develop a healthy relationship with food.

Trust your baby: she knows when she's hungry and when she's full.

Independence

Babies love bringing food and objects to their mouths. Let your child start eating with her fingers as soon as possible. It's messier and often takes more time, but it's a lot more fun!

Eating with her fingers also helps develop her motor skills (see Fine motor skills, page 341). Encourage her, because that's how she learns to eat by herself—it's an important step to becoming more independent!

Even if she eats on her own, your baby should be supervised at all times during meals.

First meals

While some babies have no trouble adapting to meals, others find it difficult. To make things easier, choose a time when your baby is in a good mood.

The movements involved in eating are very different from those your baby uses for nursing. It takes time to learn. Your baby will need several weeks of practice to develop his abilities.

My baby refuses to eat

If your baby refuses to eat, she may not be ready. If you're not sure, see How do I know my baby is ready?, page 520.

If you think your baby is ready, but she still refuses to eat, try again at the next meal and keep trying for one or two more days. You can also offer her a different food: maybe she didn't like what you served.

If your baby is over 6 months and still refuses to eat after repeated attempts, consult a health professional.

By around 1 year of age, your child should be able to eat foods in a variety of textures.

Your baby needs time to develop her sense of taste and adapt to change.

Gagging

When your baby starts eating, small amounts of food may lodge in his throat without being swallowed. This can cause your baby to gag, as if he were about to vomit.

Your baby will cough and spit up the food he was given. Don't worry, this is a normal reaction (gag reflex) that protects against choking.

However, if this happens at every meal for several days in a row, see a doctor.

Choking risk: Be extra careful until age 4

For your baby's safety, keep a close eye on her at all times during a meal.

Certain foods can become stuck in your child's throat or block her airway. Many children choke on food each year.

Foods that are hard, small and round, smooth and sticky present the greatest risk.

Certain foods require careful preparation. To prevent the risk of choking, be sure to

- Remove bones from meat and fish
- Remove cores and pits from fruit
- Cut grapes into quarters
- Grate raw hard vegetables and fruits like carrots, turnips, and apples

To prevent choking, be sure to take certain precautions when preparing food.

Belt your child into the high chair so she cannot slide out or climb over the backrest or the tray. This also helps her maintain good posture while eating.

Toward age 2, you can start giving your child whole apples (peeled) and whole small fruit, except for grapes, which you should continue cutting into quarters.

Certain foods present a choking risk for your child up until the age of 4: peanuts, nuts, seeds, hard candy, cough drops, popcorn, chewing gum, whole grapes, raisins, sliced sausage, raw carrots or celery, food on toothpicks or skewers, ice cubes, etc.

Rules to prevent choking

- Make sure your child is always supervised when eating.
- Sit your child in a high chair (see High chair, page 686).
- Don't let your child walk or run with food in her mouth.
- Avoid feeding your child in the car.
- Keep dangerous foods out of reach.

Ask older children to follow these rules.

A first aid course will teach you what to do if your child is choking (see Choking, page 723).

Honey—never for babies under age 1

Never give honey to a child before the age of 1, use it in recipes or cooking. Both pasteurized and unpasteurized honey can cause a serious form of food poisoning known as infant botulism.

After age 1, healthy children run very little risk of contracting infant botulism because their intestines contain useful bacteria that protect against the disease.

Never add honey to any food for a baby under age 1—not even during cooking!

Baby food basics

In this section, you'll find information about introducing pureed foods and moving on to other textures. You'll learn how to prepare homemade baby purées and purchase commercial baby food. You'll also see how to warm and store purées.

Remember that your baby will learn quite quickly to eat foods of varied textures. There's no need to stock up on large quantities of baby food!

Progression of textures

When first introducing foods, you can start by giving your baby smooth purées.

Some babies will be ready right away for thicker, lumpier purées blended for only a short time or mashed with a fork. Others will find it more difficult to adapt, in which case you can gradually alter the texture from one meal to the next.

Some babies will rapidly accept food that is finely chopped or cut into small, soft pieces. There is no need to wait until your child has teeth, since he can already chew with his gums and enjoys doing so.

The goal is to progress so that by around 1 year of age, your baby is able to eat foods in a variety of textures. But be careful with foods that present a risk of choking (see Choking risk: Be extra careful until age 4, page 529).

Homemade baby food

Homemade baby food provides excellent nutritional value. It is fresher, more varied, better tasting, and less expensive than commercial baby food. What's more, it has the advantage of containing only the ingredients you choose.

Purchasing foods

Select the freshest fruits and vegetables possible. Buy lean meat whenever possible.

If you use frozen foods, make sure they don't contain any sugar, salt, sauce, or seasoning. If you opt for canned foods, make sure they don't contain added salt or sugar. You can rely on the ingredients listed on the label.

Hygiene

Wash your hands and clean your cooking utensils and work area carefully before you start preparing baby food, as well as each time you change foods.

Pascale Turcotte

Your baby can gradually start eating soft foods mashed with a fork or cut into small, soft pieces.

How to prepare vegetable and fruit purées


1

Sarah Witty


2

Amélie Bourret


3

Sarah Witty

Preparing fruit and vegetable purées is quite a simple task.

- Wash all fruits and vegetables before cooking.
- If necessary, remove peels, cores, pits, and seeds.
- Cut the fruits and vegetables into pieces.
- If necessary, cook the ingredients. It's best to steam (in a vegetable steamer, for example) or cook them in the microwave.
- Check if it is done. You should be able to stick a fork into it easily.

Adding salt or sugar is not recommended.

- Purée the food using a fork, blender or food processor. You can add liquid to obtain the desired texture, e.g., fresh water or cooking water.

How to prepare meat, poultry, and fish purées

Preparing meat and poultry purées

Take certain precautions when cooking meat or poultry for your child.

- Remove skin from poultry and any visible fat from meat.
- Cut meat or poultry into pieces.
- Cook in plenty of water. Meat is cooked enough when you can easily cut through it with a fork.
- Remove bones.
- Put the meat or poultry in a blender.
- Purée, adding enough cooking liquid to obtain the desired texture.

Preparing fish purées

Certain precautions should also be taken when preparing fish purées:

- Cook fish in water on the stove or in the microwave.
- Carefully remove any bones.
- Break up the fish with a fork or purée it with the cooking liquid.

Don't add salt during or after cooking.

How to freeze homemade purées

If you want to make purées in advance, it's best to freeze them immediately after preparation. To do so:

- Pour the purée into ice cube trays while it is still warm.
- Cover and cool in the refrigerator.
- Put the ice cube trays in the freezer for 8 to 12 hours.
- Transfer the frozen purée cubes to a freezer bag.
- Remove the air from the bag.
- Write the name of the food and the cooking date on the bag and then put it in the freezer.

To find out how long you can keep purées, see Storing baby food, page 540.

Commercial baby food

Whether jarred or frozen, commercial baby food has good nutritional value. It's very practical since it's always ready to eat, but it costs more than homemade baby food. Some commercial baby food contains unnecessary ingredients like starch, sugar, flour, tapioca, or cream that decrease the nutritional value. Read the list of ingredients on the packaging to choose products without unnecessary additions.

Purchasing commercial baby food

There are many kinds of puree available. Purées containing only meat or vegetables may be easier to use as they allow you to better assess the amount of meat and vegetables your child is eating.

Vegetable-meat combinations – These can be handy on occasion, but don't contain very much meat. Frozen products generally contain more meat than jarred ones.

"Junior" purées – These purées contain small pieces of food designed to facilitate the transition from baby food to regular food that the family eats. However, they are of limited benefit because you can achieve the same results by mashing foods with a fork.

There are also ready-to-eat meals. These products contain salt and should not be given to children under 12 months old. After this age, your child can simply start sharing meals with the family.

Handling commercial baby food

Here are a few steps to take in order to eliminate the risk of food poisoning:

- Throw out or return any jars that have rusted lids or chipped glass, or do not make a popping noise when you open them.
- Store unopened jars according to the best-before date and use the jars with the closest date first.
- Put only as much food as you will use in a small bowl and refrigerate the rest immediately.

Commercial baby food can be frozen for the period indicated in the Storing baby food table on page 540.

Pascale Turcotte

Make sure family members and babysitters fully understand how to warm baby food.

Serving baby food

Warming baby food

To warm fresh or refrigerated baby food, you can use one of the following three methods:

- Put the purée on the stovetop in a small saucepan or double boiler and warm over low heat.
- Put a small amount of food in a glass bowl and let it warm slowly in hot water for a few minutes.
- Put the food on a small plate and heat it in the microwave. Carefully read the section on microwave precautions.

Whenever possible, warm only as much baby food as you will need. Before feeding your child, always check the temperature using the inside of your wrist or the back of your hand.

To limit the risk of contamination, throw out any leftover baby food.

Microwave precautions

Microwaves do not heat food evenly. That's why it is important to take certain precautions:

- Warm the baby food in a small, microwave-safe dish.
- Stir it well once it is warm.
- Wait around 30 seconds. Before serving the purée, check the temperature using the back of your hand or the inside of your wrist.

How much to serve?

Start by offering your baby 3 to 5 ml (½ to 1 teaspoon) of purée. If she readily accepts it, continue until she is satisfied. Let her appetite be your guide.

As you introduce new foods, you can offer different types of purées at the same meal.

Gradually increase the quantity over time.

Storing baby food

Homemade and commercial baby food can be stored according to the storage life indicated in the table below:

Type of food	Refrigerator	Freezer
Vegetables and fruit	2 to 3 days	2 to 3 months
Meat, poultry, fish	1 to 2 days	1 to 2 months
Meat with vegetables	1 to 2 days	1 to 2 months

Do not refreeze thawed food.

Baby-led weaning (BLW)

Some parents choose to introduce solids by letting their baby eat pieces of food on their own. This practice is called baby-led weaning, or BLW, and it can work for most babies. However, certain criteria must be met before you start. Your baby must be

- At least 6 months old (for premature babies, use the corrected age)
- Healthy and developing normally for her age
- Able to sit in a high chair without support for the duration of a meal (about 15 to 20 minutes)
- Able to pick up an object, bring it to her mouth, and let go of it

Not sure if your child is ready? Don't hesitate to talk to your baby's healthcare professional.

Which foods to offer?

The order for introducing solids is the same for all babies, regardless of how you choose to do it. Start with iron-rich foods and move on to a variety of other nutritious foods (see 6 to 12 months—Your baby's first foods, page 545).

Families who practise BLW usually find it easier to feed their baby the same foods as the rest of the family. But your baby's portion should be made without salt or sugar.

Good to know...

When your baby eats food cut into pieces, his mouth and tongue movements are not the same as when he eats pureed food. For this reason, it's best not to offer both textures at the same meal.

The key is to start with iron-rich foods and then continue with nutritious and varied foods.

How to prepare food for BLW

For your baby's safety, avoid foods that are a choking hazard. Foods that are hard, small and round, smooth and sticky present the greatest risk. See Choking risk: Be extra careful until age 4, page 529.

Texture

The food you offer your baby must be soft in texture. She must be able to mash food against her palate with her tongue.

Some foods that are naturally soft (e.g., ripe bananas, pears, and peaches) can be served raw. Be sure to wash raw food thoroughly before offering it to your child.

Other foods, such as meats, fish, and certain fruits and vegetables, must be cooked first. Grains and legumes can be used in recipes (e.g., muffins, pancakes) or served as spreads.

Size and shap

Offer pieces large enough for your baby to hold in one hand and bring to her mouth. The pieces must be long enough to extend past her closed fist (e.g., large strips of chicken or sticks of tofu). Over time, your baby will become more skilled and able to handle shorter pieces or other shapes.


Florence Dion-Morin

Babies who feed themselves are no more at risk of choking than babies fed on purées. However, they may gag more often (see Gagging, page 528).

How much does my baby eat?

Some parents worry about the amount of food their baby eats once she starts feeding herself.

Rest assured, your baby knows her appetite better than anyone. To learn how to recognize her signals, see Appetite (page 526). Keep in mind that milk will still be her main source of nutrition until she is about 1 year old.

At your childcare centre

Some childcare centres are receptive to BLW, but that's not always the case. Ask the people in charge at your centre what their practices are.

Babies who feed themselves can take a long time to finish a meal. That's normal; they're learning to become independent. If you're short on time at one of your baby's meals, you can spoonfeed her for that meal and continue with BLW next time.

If you have questions about BLW, you can check with your CLSC about the resources available in your area.

Élyse Pruneau Beaudry

6 to 12 months—Your baby's first foods

Start with iron-rich foods

Your baby's first foods should be rich in iron. Why? Because iron plays a number of key roles in her development.

Iron is found in

- Iron-enriched baby cereal
- Meat and poultry
- Fish
- Tofu
- Legumes
- Eggs

Choose foods based on your baby's preferences. Give her iron-rich foods at least twice a day.

A vegetarian diet may be suitable for your baby if it is well balanced. However, if too many foods are excluded, your baby's diet may be lacking in certain **nutrients**. It's best to see a nutritionist about this.

Between 6 months and 1 year, give iron-rich foods to your baby at least twice a day. Afterwards, serve some at each meal.

Good to know...

Fruits and vegetables are rich in vitamin C, which helps the body absorb iron. Introduce them early into your baby's diet.

Continue with a variety of foods

After your baby has been eating one or more iron-rich foods for several days, it's time to add a growing variety of foods into her diet.

You can introduce new foods in whatever order you please. Remember, however, that your baby should not drink cow's milk before the age of 9 months.

You don't need to introduce all of the foods from the same food group before starting on the next group. For ideas on foods to give your baby, see Food ideas for your baby on page 562. A tear-off version of this table can be found after page 576.

Ideally, your baby will be eating foods from all the food groups within a few weeks.

Toward the age of 1 year, your child will be eating a wide variety of foods.

In the upcoming pages, you'll find practical information about the four food groups:

- Grain products
- Meat and alternatives
- Vegetables and fruit
- Milk and alternatives

Grain products

This food group includes grains like oats, wheat, barley, rice, buckwheat, rye, millet, and quinoa. It also includes pasta and bread.

Iron-enriched cereals

Iron-enriched baby cereals not only contain iron, but several vitamins and minerals as well. They are among the first foods that should be introduced.

How to choose cereal

Start by giving cereals containing only one type of grain (e.g., barley).

At the beginning, opt for cereals containing no fruit, vegetables, or other additions.

Choose sugar-free cereals. Carefully read the ingredients list on the packaging. Sugar hides behind many names, including dextrose, maltose, sucrose, inverted sugar, glucose polymers, fructose, syrup, and honey.

As time goes on, you can add fruit to baby cereals or buy a variety of cereal mixes.

Iron-enriched baby cereals are among the first foods you should introduce to your baby.

How to prepare cereal

To prepare cereal, use breast milk or infant formula. Some cereals already contain powdered milk, in which case all you have to do is add water.

It's important not to add sugar to cereal.

Serving cereal or any other food in a baby bottle is not recommended.

Other grain products

Once your baby is eating iron-rich foods at least twice a day and has a varied diet, you can introduce other grain products.

It's best to opt for whole grain products like whole wheat bread and pasta. They contain more fibre, which ensures your baby has regular bowel movements. To help you choose, read the list of ingredients: the first ingredient must be a whole grain (e.g., whole grain oats or whole wheat flour).

If your baby accepts different textures, offer her foods like toast, pita bread, naan bread or chapati, tortillas, breadsticks, unsalted crackers, unsweetened oat ring cereal, and all types of pasta.

Be careful with rice because your child can choke on it. It's best to start with sticky, short-grain rice and mash it with a fork.

Meat and alternatives

This food group is made up of foods that are rich in proteins: meat, poultry, fish, and alternatives such as legumes, tofu, and eggs. Since they're also rich in iron, they're among the first foods you should offer.

Meat and alternatives are rich in iron. They are among the first foods you should introduce to your baby.

Meat and poultry

Meat (beef, pork, veal, lamb, etc.) and poultry (chicken, turkey, etc.) provide protein. They also provide vitamins and certain minerals, especially iron and zinc.

All meat and poultry must be thoroughly cooked before being given to babies. Bones must also be removed.

Game meat

You can also serve game meat, though it's preferable to serve game killed with lead-free ammunition. Lead can negatively affect children's development.

Do not give your child organ meats (e.g., liver, heart) from game animals, as they are often contaminated.

Deli meats

It's best to avoid deli meats (e.g., ham, sausage, pâtés, salami, bologna, mock chicken, bacon) because they contain nitrates, and nitrites that can be harmful to your child's health.

Fish

Fish is a source of protein, iron, vitamin D, and good fat. Don't hesitate to make fish a regular part of your baby's diet.

Are you concerned about allergies? Read A word about food allergies on page 524.

You can serve your baby many of the types of fish available at the supermarket and in fish markets. See Fish and seafood, page 88.

All fish must be thoroughly cooked before being given to children. Bones must also be removed.

Don't give raw or smoked fish to your child, since young children are more sensitive to the parasites they sometimes contain.

Canned fish is usually very salty. However, you can occasionally serve unsalted canned fish like salmon or light tuna (but not white tuna).

Legumes and tofu

Legumes and tofu are nutritious. They provide plant protein and iron. Legumes are also rich in fibre. These foods are both environmentally friendly and inexpensive.

There are many kinds of legumes, including lentils, chickpeas, kidney beans, black beans, white beans, etc. You can offer them as puree, mash them with a fork, or add them to soup or other dishes.

Opt for regular tofu (firm, semi firm, or extra firm) rather than soft tofu. Soft tofu contains more water, and therefore has less protein and iron.

Tofu can be easily mashed with a fork, crumbled and mixed with vegetables, or cooked and served as sticks.

Eggs

Eggs are nutritious, convenient, and inexpensive.

Serve them hard-boiled, poached, scrambled, or as an omelette. Eggs must be thoroughly cooked, never raw or runny.

Worried about allergies? You can read A word about food allergies, page 524.

Peanut and nut butters

Peanut and nut butters are convenient and nutritious.

You can serve your child smooth nut butters, spread thinly on warm toast.

Crunchy nut butters, peanuts, and nuts should not be given to children under age 4 because they present a choking hazard. It is not safe to give your child nut butter by the spoonful either.

Worried about allergies? You can read A word about food allergies, on page 524.

Peanut and nut butters are convenient and nutritious.

Once your baby is eating iron-rich foods every day, you can add fruits and vegetables to her diet.

Vegetables and fruit

Vegetables and fruit are vital for good health. Not only do they add a wide variety of flavours to your baby's diet, they also provide minerals and vitamins like vitamin C. They are rich in fibre, too, which helps your baby have regular bowel movements.

After a certain time, you can make fruits and vegetables a part of every meal. For example you can serve vegetables at lunch and supper, and give your baby fruit at breakfast and for dessert. Fruits and vegetables also make good snacks.

Vegetables

Give your baby a variety of vegetables. Their colour indicates what kind of **nutrients** they contain. That's why experts recommend adding fruits and vegetables of all different colours to your baby's diet. For example, try vegetables that are orange (e.g., carrots, squash, sweet potatoes) or dark green (e.g., broccoli, peas, green beans, bell pepper, okra).

You can serve frozen or canned vegetables, but make sure they don't contain salt, sauce, or seasoning. You can rely on the ingredients listed on the label. Frozen vegetables must be cooked first.

Give your child a variety of vegetables.

Give your child a variety of fruits.

Fruit

Give your child a variety of fruits. You can use fresh or frozen fruit. Commercial canned fruit and compotes are also convenient. Choose brands without added sugar and don't add sugar if you prepare fruit.

How to prepare fruit

Berries like strawberries, raspberries, blueberries and blackberries can also be mashed with a fork or cut into small pieces.

Later on, you can serve your baby firmer fruits like melon, plums, or cherries cut into small pieces. You can also give your child grapes cut into quarters, small pieces of orange, grapefruit, or clementine, and grated or lightly cooked apples.

What about fruit juice?

To quench your child's thirst between feedings, water is the best choice. In fact, fruit juice is not essential. Unlike fruit, it doesn't contain fibre and is not as nutritious.

Fruit juice is not essential. To quench your child's thirst between feedings, water is the best choice.

Good to know...

Fruit juice has a number of disadvantages:

- It increases the risk of early childhood tooth decay, since it naturally contains sugar.
- There is a risk of it replacing milk and foods essential to your child's health and development if given in too great a quantity.
- It can spoil your child's appetite if served within an hour of mealtime.
- It can cause diarrhea if it is served in too great a quantity.

If you give your child fruit juice…

Here are a few helpful tips:

- Wait until your child is at least 1 year old and limit the quantity of juice to a maximum of 125 to 175 ml (4 to 6 oz) per day.
- Never serve juice in a baby bottle.
- Don't let your child drink juice for prolonged periods. This will help protect her teeth.
- Serve juice no more than once or twice a day.

Choose pasteurized, 100% pure fruit juice with no added sugar. There's no need to buy special juice for babies, since it's the same as regular juice only more expensive. Avoid fruit drinks, cocktails and punches, as well as fruit-flavoured powders—they are made with sugar.

Avoid unpasteurized juice. Freshly squeezed juice bought directly from the producer is not pasteurized. Certain chilled juices sold in the grocery store are not pasteurized either. They may contain harmful bacteria. Young children are very sensitive to these bacteria.

Avoid giving your child unpasteurized juices.

Does your child like juice too much? See Sugar on page 608.


Nicole April

Milk and dairy products

This section covers cow's milk, yogurt, and cheese. Breastmilk, commercial infant formula, and other milks are covered in the first chapters of Feeding your child.

Milk, yogurt, and cheese contain protein and minerals, including calcium. They help build and maintain healthy bones and teeth. Cow's milk is also enriched with vitamin D, which helps the body use calcium more efficiently.

Choose high-fat milk and dairy products rather than "light" or low fat options. Your child needs these fats to grow and develop properly. Make sure that milk and dairy products are pasteurized (see What milk should I give?, page 411).

Cow's milk: not before 9 months

Between 9 and 12 months, once your baby is eating a varied diet including iron-rich foods, she can gradually start drinking pasteurized 3.25% cow's milk (3.25% milk fat). For more information, see Anemia, page 580.

Yogurt and cheese

You can give your baby yogurt and cheese once she has started eating iron-rich foods at least twice a day. Choose pasteurized yogurts and cheeses.

It's best to choose plain yogurt, to which you can add pureed fruit or pieces of fresh fruit. Commercial fruit yogurt contains added sugar or sugar substitutes.

As with all dairy products, opt for high-fat yogurt and cheese. Low-fat and fat-free yogurt and cheese are not suitable for the needs of young children.

If you make your own yogurt, use whole milk (3.25% milk fat).

Fats

Fats and oils are essential to your child's development. There is no need to limit them in his diet.

For cooking and food preparation, it's best to use vegetable oils like olive or canola oil, or nonhydrogenated margarine.

Sophie Charest

Since cow's milk can reduce your baby's appetite for other foods, including iron-rich foods, don't give her more than 750 ml (25 oz) per day.

Food ideas for your baby

Grain products

Iron-enriched baby cereals

- ☐ Oat
- ☐ Barley
- ☐ Rice
- ☐ Soy
- ☐ Mixed (multigrain)

Other grain products

- ☐ Barley
- ☐ Chapati, naan bread, pita bread, tortillas
- ☐ Couscous
- ☐ Cream of wheat
- ☐ Millet
- ☐ Oatmeal
- ☐ Quinoa
- ☐ Pasta
- ☐ Short grain sticky rice
- ☐ Toasted bread
- ☐ Unsalted crackers
- ☐ Unsweetened oat ring cereal

Other

- ☐ _____
- ☐ _____
- ☐ _____

Meat and alternatives

- ☐ **Eggs**

Fish

- ☐ Brook trout and other trout
- ☐ Cod
- ☐ Haddock
- ☐ Halibut
- ☐ Salmon
- ☐ Sole
- ☐ Tilapia

Meat and poultry

- ☐ Beef
- ☐ Chicken
- ☐ Lamb
- ☐ Pork
- ☐ Turkey
- ☐ Veal

- ☐ **Tofu**

Legumes

- ☐ Chickpeas
- ☐ Edamame (soy beans)
- ☐ Lentils
- ☐ White, black, or kidney beans

Smooth nut butters, plain

- ☐ Peanut butter
- ☐ Almond butter

Other

- ☐ _____
- ☐ _____
- ☐ _____

Note: Generally speaking, the foods in this table are presented in alphabetical order and not in order of introduction.

Find the tear-off version of this table after page 576

Vegetables and fruit

Vegetables

- ☐ Asparagus
- ☐ Avocado
- ☐ Broccoli
- ☐ Brussels sprouts
- ☐ Carrots
- ☐ Cauliflower
- ☐ Corn
- ☐ Mushrooms
- ☐ Onions
- ☐ Peas (baby peas)
- ☐ Peppers
- ☐ Potatoes
- ☐ Squash
- ☐ Sweet potatoes
- ☐ Tomatoes
- ☐ Turnip
- ☐ Yellow and green beans
- ☐ Zucchini

Fruit

- ☐ Apricots
- ☐ Apples
- ☐ Bananas
- ☐ Blackberries
- ☐ Blueberries
- ☐ Cantaloupe
- ☐ Cherries
- ☐ Clementines
- ☐ Grapefruit
- ☐ Grapes
- ☐ Mangos
- ☐ Melons
- ☐ Oranges
- ☐ Peaches
- ☐ Pears
- ☐ Plums, prunes
- ☐ Raspberries
- ☐ Strawberries

Other

- ☐ _____
- ☐ _____
- ☐ _____

Milk and dairy products

Fresh cheese

- ☐ Cottage
- ☐ Ricotta

Mild hard cheese

- ☐ Cheddar
- ☐ Gouda

- ☐ **Kefir**
- ☐ **Plain yogurt**

Can be introduced between 9 and 12 months

- ☐ Pasteurized cow's milk or goat's milk (3.25% milk fat)

Other

- ☐ _____
- ☐ _____
- ☐ _____

From 1 year onward—Sharing meals with the family

By age 1 or so, he will be eating most of the same foods as the rest of the family.

Your child now has a highly varied diet that includes almost all the same foods your family eats. He shares the three main meals of the day with you and probably needs one or two snacks as well.

At this age the growth rate starts to slow down a bit. His appetite may decrease or vary from day to day.

Because your child loves to explore and play, he may also be less interested in food. Although this change worries many parents, there is no need for concern as long as your child is healthy and happy, having fun, and developing normally.

Developing good habits

As much as possible, accustom your child to eating the same meals as the rest of the family. You can start giving him homemade foods and dishes containing a little bit of salt (e.g., spaghetti sauce) or sugar (e.g., muffins).

One good way to provide a balanced diet: at every meal, try to include foods from at least three of the four food groups shown on the preceding pages.

What matters is to adapt food quantities to your child's needs, based on his preferences and appetite.

You can take inspiration from the *Food Guide Snapshot*, which presents balanced meal ideas for the whole family: food-guide.canada.ca/en/food-guide-snapshot/.

Good to know...

Cow's milk is enriched with vitamin D. At around 1 year, children should drink 500 ml (16 oz.) of whole cow's milk (3.25% milk fat) a day to get part of the vitamin D they need (see Vitamin D: Not your ordinary vitamin!, page 380).

But don't serve more than 750 ml (25 oz.) of milk a day or you risk spoiling your child's appetite for other foods.

Ingredients to limit

Some ingredients can be bad for your baby and other family members if consumed in excess. Limit consumption of the following:

- Salt
- All forms of sugar (sucrose, glucose, fructose, etc.)
- Sugar substitutes (e.g., aspartame, sucralose)
- Fats and oils containing harmful fats (shortening, hydrogenated oils, coconut oil, palm oil, palm kernel oil, etc.)

It's best to prepare homemade meals using simple, minimally processed ingredients. For example, choose plain rice instead of prepared rice containing added ingredients.

Making family meals easier

- At mealtime, avoid distractions such as electronic devices and toys. They may take your child's attention away from eating.
- Serve small portions to keep your child from getting discouraged.
- Don't force your child to eat everything on the plate.
- Wait until your child has finished the main course before serving dessert to other family members. This will help maintain interest in the meal.
- Serve nutritious desserts like fruit salad and stewed fruit, yogurt, homemade cookies and muffins, and milk desserts.

CLSC services

CSLCs may offer various nutrition and diet-related services for children under 2 years of age. To find out about the services available in your area, contact your local CLSC.

The pleasure of eating together!

Cécile Fortin

Food-related problems

Caroline Cloutier

Food allergies

When a child's **immune system** reacts to a particular food that he eats, he is said to suffer from a food allergy. Some allergies are permanent and very serious. A child with a known allergy to a particular food must never eat that food. It's important to always take allergies seriously.

Some children may not be able to tolerate certain foods, but are not necessarily allergic to them. This is known as a food intolerance. The difference between food intolerance and food allergy is that food intolerances do not trigger an immune system reaction.

Is my child at risk of developing a food allergy?

A child is at greater risk of developing a food allergy if

- A member of his immediate family (mother, father, brother, or sister) has an **allergic disorder**

or

- The child suffers from severe eczema (shows signs of eczema most of the time)

Talk to your doctor.

Preventing allergies

In the past, it was recommended that parents wait until their babies had reached a certain age before introducing foods more likely to cause allergies. We now know that it's best to introduce these types of foods at the same time as other solids (see A word about food allergies, page 524).

Don't hesitate to consult a doctor if you have concerns.

How do I recognize allergies?

An allergic reaction can be sudden and severe, or it can be delayed.

Sudden and severe reactions (known as anaphylaxis) usually occur anywhere from a few minutes to two hours after eating the food in question. Such reactions are rare. See the red box (page 573) for the most common symptoms.

Delayed reactions can occur several days after eating the food in question. They are harder to diagnose. The most common symptoms include diarrhea, blood in the stools, and excessive irritability.

Any child can experience these symptoms at times, but they last longer in children with allergies. If you suspect that your child has a food allergy, stop giving him the food in question and consult a doctor.

Call 9-1-1 if your child develops

- Red patches on the skin

AND one or more of the following:

- Sudden and severe change in her general condition (e.g., irritability, drowsiness, loss of consciousness)
- Swollen lips or tongue
- Difficulty breathing
- Sudden vomiting

She could be having a severe allergic reaction.

Breastfed babies and allergies

There is no evidence linking the food breastfeeding mothers eat with the risk that their babies develop food allergies. Even if other members of the family have food allergies, you don't need to stop eating allergy-causing foods when you're breastfeeding.

Babies are not allergic to breast milk, since it is perfectly adapted for their intestines. In rare cases, however, some babies may have an allergy to protein from a food their mother is eating that passes through their milk. Such proteins can come from a variety of foods, most often dairy products.

If your breastfed baby has certain symptoms (e.g., excessive crying, blood in stools, repeated refusal to feed), she may be intolerant or allergic to something you eat (see How do I recognize allergies?, page 572).

What to do?

If your baby reacts to your breast milk after you eat a particular food, he will feel better as soon as you eliminate it from your diet, but will react if you eat the same food again. Try proceeding by elimination to see whether your baby is allergic:

- Stop eating the suspected food for 7 days.
- Keep an eye on your baby's behaviour.
- If your baby is feeling better after 7 days, try eating the food in question again.
- Keep an eye on your baby's behaviour.
- If the symptoms reappear, it means your baby is reacting to that particular food. Refrain from eating it.
- If you need to make changes to what you eat, consult a nutritionist. She can advise you.

If there is no real improvement after you eliminate the food, it's best to consult a doctor.

Severe allergies

If your child has a severe allergy, you will have to be very vigilant. If you buy prepared meals, read ingredient lists carefully to be sure they don't contain the product your child is allergic to. When dining out, ask what's in the dishes you order for your child.

For more information contact Allergies Québec at 1-800-990-2575 / 514-990-2575 or visit allergies-alimentaires.org/en/.

If your child has an epinephrine injector (e.g., EpiPen®), make sure you know when and how to use it. Explain the allergy symptoms to babysitters and post the emergency procedure to be followed in a visible location. Have your child carry a card or wear a bracelet (e.g., MedicAlert®) indicating her allergy.

Amélie Bourret

Lactose intolerance

Lactose intolerance is one form of food intolerance that we hear a lot about.

Lactose is a sugar present in all milk—breast milk, cow's milk and commercial infant formula. It contributes to the development of children's nervous systems and to the absorption of calcium.

Lactose intolerance is rare in children under 3. There is no need to buy lactose-free products unless a doctor confirms the intolerance.

Lactose intolerance is rare in children under 3.

Anemia

Iron deficiency **anemia** is a fairly common problem among babies between the ages of 6 and 24 months. It must be treated as it can harm your baby's health and development.

To prevent anemia, make sure your child's diet includes iron-rich foods at each meal. Iron supplements are not necessary, except in the case of premature babies.

Symptoms of iron deficiency in children include lack of energy, poor appetite, irritability, difficulty concentrating, slow weight gain and recurrent infections. However, these symptoms can also indicate other health problems. When in doubt, consult a doctor.

Warning about cow's milk

Babies who are fed cow's milk before the age of 9 months can become anemic because

- Cow's milk can cause blood loss in the delicate intestines of infants.
- Cow's milk reduces absorption of iron from other foods.
- Cow's milk in your baby's diet reduces intake of other foods rich in iron.

Once your baby is over 9 months and is eating a variety of foods, she can drink cow's milk without the risk of developing anemia. However, she should not drink more than 750 ml (25 oz) of cow's milk per day.

Preventing anemia

Your baby's daily diet should contain foods rich in iron. The following foods are the best sources of iron:

- Iron-enriched baby cereal
- Meat and poultry
- Fish
- Tofu
- Legumes
- Eggs

Vitamin C helps the body absorb iron from foods. It's a good idea to serve foods that are rich in vitamin C at every meal. The following fruits and vegetables are good sources of vitamin C:

- Citrus fruits (orange, grapefruit, clementine, tangerine, mandarin orange)
- Strawberries, cantaloupe, cloudberries, mango, kiwi, pineapple
- Pepper (green, red or yellow), snow peas, broccoli, Brussels sprouts

If your child refuses to eat baby cereal, try different kinds or add fruit.

If she accepts different textures, you can also try giving her cereal O's for children.

You can also add baby cereal to recipes for pancakes, muffins, cookies and other baked goods by replacing half of the flour with iron-enriched dry cereal, like in the recipe below.

Baby-cereal cookies
(for ages 1 and over)

- 125 ml (½ cup) butter, margarine or oil
- 125 ml (½ cup) sugar or fruit purée (e.g., apple, date, banana)
- 10 ml (2 tsp.) vanilla
- 1 egg, beaten
- 150 ml (⅔ cup) white or whole wheat flour
- 150 ml (⅔ cup) iron-enriched baby cereal
- 5 ml (1 tsp.) baking powder
- 1 pinch of salt
- 30 ml (2 tbsp.) cocoa powder (optional)

Preheat oven to 190°C (375°F). Grease two cookie sheets. Cream butter with sugar or fruit purée. Gradually add vanilla and beaten egg. In another bowl, mix remaining ingredients. Carefully add the dry ingredients to the liquid ingredients. Shape into 24 balls and place on cookie sheets. Flatten with a fork.

Bake for 10 minutes.

Poor appetite

Children, like adults, may have periods when they experience reduced appetite. Sometimes the reason is discomfort caused by sore throat, teething or the effect of medication. Other times, poor appetite in children can be due to overexcitement, fascination with new discoveries, fatigue or a normal slowing of growth.

Serious food-related problems are rare. So long as your child is growing normally, he is eating enough to satisfy his needs. It is more important to make family mealtime fun than to insist that your child eat a specific amount of food.

What to do?

Take the time to observe what's going on in your child's life. The older he gets, the more he wants to do things by himself. Learn to accept his pace, his clumsiness and a bit of wasted food without scolding him.

Give your child small servings of age-appropriate healthy foods. Let him choose how much he wants to eat and in what order. Milk can be served at the end of the meal. If your child hasn't eaten anything after a certain time, simply remove his plate without scolding him or making a big deal of it, then let him leave the table.

Offer snacks between meals, but keep serving sizes small so you don't spoil your child's appetite for the next meal. Serve fruit, vegetables, cheese and water. Avoid giving too much juice or milk between meals.

Normally, your baby shouldn't need vitamin or mineral supplements. When in doubt, ask your doctor or a nutritionist whether your child's nutritional requirements are being met.

Chubby babies

There is no evidence to suggest that chubby babies become obese adults. In most cases, baby fat will disappear as your baby grows. Don't worry if people comment on your baby's plumpness.

And don't worry either if your breastfed baby seems chubby during the first few months. It won't last!

In fact, breastfeeding actually reduces the risk of obesity in children. Continue breastfeeding as long as you like.

Take the time to observe your baby. Learn to recognize her needs (often emotional) and fulfill them with other means than food. Try not to reward or punish your baby with food.

François Laplante

Stools and foods

Babies who eat a variety of foods will pass stools that vary in colour and consistency, depending on what they have eaten. New foods such as fruits or vegetables may result in soft stools for a few days if the food is not completely digested, and they may be a different colour than usual. For example, a baby who eats green vegetables may pass green stools.

Don't worry if your baby's diaper contains bits of vegetable or fruit. This is common and normal.

Constipation

If your baby has infrequent bowel movements during her first few weeks of life, she may not be drinking enough milk.

After the age of 6 weeks, babies don't absolutely have to have a bowel movement every 24 hours. Your baby may sometimes go several days without a bowel movement. If this is the case and her stools are soft, everything is normal and there is no cause for concern.

Does your baby strain and turn red during bowel movements? If her stools appear normal, there's no need to worry, either.

However, if she is in pain and her stools are small, hard and dry, she is probably constipated.

Hard stools can cause anal fissures (small tears), which can further complicate the problem.

Good to know...

Iron contained in commercial infant formula does not cause constipation.

Introducing food or juice before the age of 6 months or so does not prevent constipation.

Babies under 6 months who are exclusively milk-fed (breast milk or commercial infant formula)

What to do?

If your baby appears to be suffering, try the following helpful tips:

- Make sure your baby is drinking enough breast milk or commercial infant formula (see Is your baby drinking enough milk?, page 370).
- If your baby is being fed with commercial infant formula, make sure you are diluting the formula with the proper amount of water, as recommended on the label.

Whether you are breastfeeding or using commercial infant formula, giving your baby water before the age of about 6 months is not recommended (see When to give your baby water, page 511).

See a doctor if you don't think your baby is getting any relief.

Babies 6 months and older who are eating food

No single food causes constipation. It's usually the lack of fibre in food that is responsible.

What to do?

If your baby appears to be suffering, try the following helpful tips:

- Give your child foods that are rich in fibre:
  - Fruits (including prunes, pears, and apples)
  - Vegetables
  - Whole grain products
  - Legumes
- Give her water in addition to milk. This is especially important if you are giving her more fibre.

If the constipation persists, your baby vomits, has blood in her stools, or is not gaining enough weight, see a doctor.

Never give your baby a laxative or commercial fibre supplement without medical advice.

Linda Perron

Karine Pinard

A healthy baby

Véronique Michon

Most of the time your baby is perfectly healthy. Your daily care, presence, love and affection enable her to flourish. Little by little, you get to know her needs, behaviour, and habits. If she's not feeling well, you notice it quickly and do what you can to make her feel better right away.

There are plenty of ways to help keep your little one stay healthy. And, remember, there are health professionals available to help you.

Before taking care of your baby (e.g., feeding, changing diapers), wash your hands to reduce the risk of transmitting an infection (see How to do a good hand washing, page 640). This is especially important if you are sick.

If you have a fever, cough, sore throat, or nasal congestion, you should take certain precautions. While your symptoms last, wear a medical mask, if possible, or a face covering when caring for your baby.

Holding your newborn

Until your baby is about 3 months old, his neck muscles are not strong enough for him to hold up his head by himself. It's important to always support his head and back when you pick him up. That way you prevent his head from wobbling and causing injury.

You may choose to swaddle your newborn in a blanket when you hold him, because some babies like to feel bundled up. However, make sure that he's not too hot and the blanket isn't too tight.

Carrying and hugging your baby stimulates him and helps him develop. You won't "spoil" a child by giving him the comfort and love he needs. On the contrary! Hold your baby in your arms as often as you want, whether it's because he's crying or not feeling well, or just to give him a cuddle.

Holding your baby in your arms is one way to spend some quality time with him.

Babies like to be carried and rocked. Carrying your baby in a baby carrier (see Baby carriers, page 763) or rocking him in your arms is a wonderful way to spend some quality time with him. These intimate moments help your baby develop the feeling of confidence that is so essential for establishing and maintaining the attachment bond.

Don't worry, your baby is less fragile than he looks. He just needs to be handled gently and lovingly.

Caring for the umbilical cord

The umbilical cord is white at birth, but darkens as it dries. It drops off by itself between the 5th and 21st day.

Gently clean around the umbilical cord (the folds) every day until it drops off and the belly button is healed.

Here are a few tips for cleaning the umbilical cord and keeping it dry:

- Gently clean the area with a cotton swab (Q-Tips®) soaked in warm water. Don't use alcohol because it delays the cord dropping off.
- Dry with another cotton swab. Rub the cotton swab around the umbilical cord.
- Avoid covering the cord with the diaper or a compress. It must always stay dry. Fold the diaper under the belly button to prevent irritation.

Clean around the umbilical cord every day until it drops off and the belly button is healed. Don't worry, this doesn't hurt your baby.

Remember to dry around the cord after bathing your baby.

The cord may remain half attached for 2 to 3 days. Don't try to pull it off. It can also leave traces of blood on your baby's diaper or clothes. Once the cord has fallen off, a few drops of blood may flow from the scar. This isn't dangerous; the belly button will heal on its own.

Talk to a health professional if:

- Redness appears or becomes more intense.
- The belly button oozes fluid.
- The belly button smells bad.
- You have any other concerns.


Joanne Aubé-Maurice

Bathing your baby

Most children love bath time. It's a special moment with mommy or daddy. It's also enjoyable and relaxing. These private moments will help you get to know your baby. With time you'll become more and more sure of yourself.

The ideal moment

You can bathe your baby at any time of day. There's no ideal time. It's really a matter of when your baby appears willing. Bath time will be less pleasant if your baby is hungry or tired. You'll get to know when the ideal moment is for your baby.

Frequency

There's no need to bathe your baby every day.

However, some parts of the body do need to be cleaned daily. Use a damp washcloth to wash your baby's face and neck. Add a little soap to clean the hands, genitals, and bottom.

Getting ready

Gather together all the items you need before undressing your baby. Do not leave her side during bath time. Being prepared is essential for making sure your baby's safe and comfortable.

Here are a few items you might need:

- Washcloth and towel
- Mild, unscented soap and baby shampoo
- Clean clothes
- One or two diapers
- One or two cotton swabs for cleaning her belly button
- Small nail scissors or a nail clipper and nail file
- Zinc oxide ointment for her bottom
- Unscented moisturizing cream or lotion (for places where her skin is dry)
- Brush or comb

Adjust the room temperature if you can, ideally to 22 to 24°C.

Soap: mild and unscented

Children, especially newborns, have sensitive skin. Soap removes the natural protection of your baby's skin and can irritate it. So it's best to use mild, unscented soaps.

Use a small amount of soap and apply it only to your baby's hands, bottom, and genitals. The rest of her body doesn't need soap.

Avoid antibacterial soaps because they contain alcohol. Scented products such as bubble bath and bath oils are unnecessary and can cause irritation.

Bathing

You can wash your baby in an ordinary bathtub, a baby bath, or the bathroom or kitchen sink if it's clean. You may also choose to take her in the bath with you. If so, put a nonskid bath mat in the bottom of the bath tub to reduce the risk of slipping.

Health Canada advises against using bath seats to ensure the safety of babies in a bath tub. They give adults a false sense of security, which can lead to drowning.

Illustration: Santé Canada

A few centimetres of water in the tub are enough to wash your baby. For older children, the water level in the tub should not be higher than their belly button when they're seated.

Run the hot and cold water at the same time. The water should be warm, i.e., at your body temperature (34 to 37°C). To avoid burning your baby, always check the water temperature with your elbow or wrist.

Undress your baby only when everything's ready so she doesn't get cold. Put her slowly in the water, starting with her feet. Then gently immerse the rest of her body. Hold her head, supporting her neck with your forearm and sliding your hand under her armpit (see picture page 601).

How to bathe baby

Whether you wash your baby with a washcloth or in a tub, here are a few practical tips.

- Clean her face first with a wet washcloth:
  - Clean her eyes starting from the inside corner (near the nose) toward the outside corner. Use a different corner of the washcloth for each eye.
  - With another corner of the moistened washcloth, gently clean outside and behind her ears. Avoid going too far inside the ear. Don't use cotton swabs (Q-Tips®), because they can injure the eardrum and push earwax even farther into the ear.
- Then carefully wash all the folds of the body:
  - Don't forget the folds of the neck, armpits, thighs, and bottom. Rinse well.
- Wash the genitals and bottom last:
  - **For baby girls**, gently wash the vulva by separating the outer lips. Wipe from front to back. That way you avoid traces of fecal matter from coming in contact with the entrance to the vagina and urethra. Rinse well.
  - **For baby boys**, wash the penis and scrotum. Rinse well. The foreskin is not detached from the tip of the penis at birth. Avoid doing anything that will detach it. It's not necessary to dilate it to clean it.
- After the bath, dry your baby well without rubbing. Dry all the folds well to prevent redness and dampness. Remember also to dry around the umbilical cord. It's not a good idea to use powder because it can cause breathing problems.

If the baby is still covered in *vernix caseosa*, you don't need to rub it off. It will be reabsorbed within a few days.

Never leave your baby alone in the bath, for whatever reason, even for just a second. A baby can drown in as little as 2.5 cm (1 in.) of water. If the telephone or doorbell rings, take your baby with you. You can also simply choose not to answer.

Hair

You don't need to wash your baby's hair every day. Once or twice a week is enough. Avoid rubbing when using shampoo, and be gentle over the fontanelle (soft spot). Then rinse well with clean water and gently pat it dry.

When you bathe your newborn, hold her head, supporting her neck with your forearm and sliding your hand under her armpit.

Nasal irrigation

Babies and young children can't blow their noses properly. Nasal irrigation is a technique that involves slowly rinsing the nostrils with saline solution (salt water) to clear the nose.

The solution can be homemade (see Saline solution (salt water) recipe to treat stuffy noses) or purchased from your local pharmacy. It is important to get saline solution and not medicated nasal drops or sprays (such as decongestants). Ask a pharmacist for advice if necessary.

Some parents use nasal irrigation when their children have nasal congestion or cold symptoms (see Stuffed-up or runny nose, page 656).

There are several techniques for doing nasal irrigation. You can talk to your healthcare provider for more information.

Saline solution (salt water) recipe to treat stuffy noses

There are several recipes for saline solution (salt water) for the nose. Here is one:

Add 10 ml (2 tsp.) of iodine-free salt (sea or pickling salt) and 2.5 ml (½ tsp.) of baking soda to 1 L (4 cups) of cooled boiled water.

Store the solution in the fridge in a sealed glass container for up to 7 days. Take the desired amount out of the fridge and let it come up to room temperature before using. Do not rinse your child's nose with cold water.

Baby's teeth

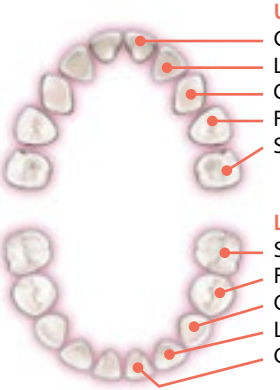
Your baby's teeth start to form during pregnancy. At birth, she has 20 baby teeth, or primary teeth, that are still growing under the gums.

The formation of baby teeth and permanent teeth is influenced by diet in early childhood and by the mother's diet during pregnancy.

Teething

Teeth grow gradually until they break through the gums. It is known as tooth eruption.

First teeth



Upper jaw	Tooth eruption
Central incisor	6–12 months
Lateral incisor	8–13 months
Canine	16–22 months
First molar	11–19 months
Second molar	20–33 months

Lower jaw	Tooth eruption
Second molar	20–31 months
First molar	11–19 months
Canine	16–23 months
Lateral incisor	7–16 months
Central incisor	5–10 months

Illustration: Bertrand Lachance

Baby teeth generally appear at around 6 months. But they can come in earlier or later, even as late as 12 months. The lower front teeth (incisors) usually break through first.

Teething may go unnoticed or may cause discomfort. When your baby is teething, she may drool more and feel the need to chew on something.

Your baby may also have red or irritated skin on the face and may fret more than usual or refuse to eat.

In some babies a blue swelling (known as an eruption cyst) appears on the gum up to two months before the tooth breaks through. This cyst usually needs no treatment.

Don't immediately assume that your baby's fever, diarrhea, and red bottom are related to teething. Even if these symptoms occur at the same time, they are often caused by something else. For more information, see Fever, page 643; Diarrhea, page 662; and Redness on the bottom (diaper rash), page 630.

What to do during teething

If necessary, give your baby a clean washcloth soaked in cold water or a teething ring. You can cool the teething ring in the refrigerator, but don't freeze it: your baby could injure her mouth.

You can also rub her gums with a clean finger.

Give her acetaminophen, if needed (see First choice: acetaminophen, page 650).

If your child is in serious discomfort, contact a health professional. You can also call Info-Santé at any time by dialing 8-1-1.

Teething necklaces, syrups, and gels pose serious risks to your baby's health.

Products to avoid

Various products are available to relieve the discomfort of teething. However, they have not been shown to be effective and can be dangerous:

- Teething necklaces: Babies can choke on the wooden beads or other parts of a teething necklace, or can strangle themselves with it.
- Teething syrups and gels: These products contain an ingredient that can increase the risk of developing a serious blood condition. They also increase the risk of choking.
- Natural and homeopathic health products (e.g., belladonna): The exact contents of these products are not always clearly indicated on the packaging.
- Teething biscuits: These products do not relieve your baby's discomfort. What's more, they contain sugar and can therefore cause tooth decay (see Tooth decay, page 609).
- Certain pieces of raw fruit or vegetables can also be a choking hazard if given to baby to chew on (see Choking risk: Be extra careful until age 4, page 529).

Brushing

Even before the first tooth appears, you can gently rub your baby's gums with a clean, moist washcloth. This cleans your baby's mouth and gets her accustomed to the brushing to come.

As soon as the first tooth starts to show, start brushing at least twice a day using fluoride toothpaste. Fluoride toothpaste helps prevent cavities.

Before bed is the most important time to brush your baby's teeth. Ideally, a toothbrush should be the last thing to come in contact with your baby's mouth before bedtime. There is less saliva in your baby's mouth when she's sleeping, which means tooth decay can develop and progress more easily.

If your child wants to brush her teeth by herself, encourage her, and then do a final brushing. Since children love to imitate, you can also brush your teeth at the same time.

Toothbrush

- Use a children's toothbrush with soft bristles. Change it as soon as the bristles start to bend.
- Rinse the toothbrush after every use.
- Let it air dry upright. Do not put a cap on it.
- To prevent the spread of germs, make sure it doesn't touch other toothbrushes.
- Make sure your child has her own toothbrush and doesn't share it with anyone.

Toothpaste

As soon as you start brushing your child's teeth, you can use the toothpaste of your choice as long as it:

- Contains fluoride, an effective protection against cavities.
- Is recommended for children under 6.

As soon as the first teeth appear, brush them at least twice a day. Brushing before bed is the most important time to brush.

Since children tend to swallow toothpaste, use only a very small amount, about the size of a grain of rice.

To prevent children from ingesting too much toothpaste, store it out of their reach.

Sugar

Sugars occur naturally in fruits, juices, and milk (e.g., breast milk, commercial infant formula, and cow's milk). Sugar is often added to drinks, food, and drugs for children.

The more your child's teeth are in contact with sugar, the more your child risks developing cavities.

Baby bottle

Prolonged contact between your child's teeth and her bottle containing milk or sweet liquids can cause tooth decay.

Don't let your baby drink from or suck on her bottle for long periods of time. Don't let her sleep with or carry around a bottle or sippy cup containing juice or any other liquid except water.

Use only a small amount of fluoride toothpaste: the size of a grain of rice is enough.

If your baby has gotten into one of these habits, gradually dilute the contents of the bottle or cup with water until it contains nothing else. To reduce the risk of tooth decay, it's best to wean her off the bottle when she's about a year old.

Pacifier

Don't dip your baby's pacifier in honey, corn syrup, or any other sweet product.

Tooth decay

Tooth decay (also known as cavities or dental caries) can occur when your child is small, even before age 2. Once it appears, it can quickly get worse. The decay is caused by bacteria producing acid that attacks the structure of the tooth. It can cause pain and may interfere with your child's sleep or feeding.

If you see dull white, yellowish, or brownish stains on your child's teeth, it is advisable to see a dentist or dental hygienist. It could be the start of tooth decay. It's important for the health of young children to have tooth decay treated, even though they will eventually lose their baby teeth.

Visits to the dentist

It's a good idea to schedule a first visit to the dentist for your child after her first birthday.

Régie de l'assurance maladie du Québec covers the cost of dental exams and some treatments for children under 10.

Cutting your baby's nails

During the first week of life, your baby's nails are stuck to the skin. Don't try to cut them because you could hurt him. The tips of the nails will come away from the skin after a few days. When his fingernails are long enough for him to scratch himself, they will need to be trimmed or gently filed.

You can trim or file your baby's nails after his bath, when they're softened by the water, or when he's sleeping. Try to cut his toenails straight across with small scissors or a nail clipper. This will prevent the nails from piercing the skin (becoming what are known as ingrown toenails). However, it's better to trim fingernails around the curve of the finger to prevent scratches.

Nails grow quickly, so you will need to trim or file them regularly.

Choosing diapers

Diapers will be part of your baby's wardrobe until he's potty trained. Disposable or cloth diapers? It's a matter of choice. Opt for the ones that work best for your baby's skin and fit best with your values, needs, budget, and situation.

Disposable diapers

Disposable diapers come in a variety of brands, sizes, and types (e.g., regular and overnight).

These diapers contain crystals that safely transform urine into a gel and separate it from the stool. This eliminates the mix of urine and stool that can irritate your baby's skin.

Some disposable diapers contain perfume, which can also be irritating for your baby's skin.

Cloth diapers

Cloth diapers are available in a wide variety of styles that fit well and are easy to use and care for.

Some brands offer extra-absorbent nighttime models or allow you to insert a second absorbent pad.

It's important to follow the manufacturer's instructions (e.g., some recommend soaking before washing) to keep cloth diapers in good condition.

Various organizations and specialty shops can answer any questions you may have.

To encourage parents to make this environmentally friendly choice, some municipalities provide financial assistance to buy cloth diapers. Check with your municipality.

Delphine Descamps

How to change diapers

Whether you're using disposable or cloth diapers, it's important to change your baby on a regular basis, and right away after she poops. Changing her diaper regularly helps prevent irritation.

To change a diaper

- Remove the soiled diaper.
- Wash your baby's genitals and bottom with soap and water, whether he's a newborn or older (see Genitals, page 276).
  - If soap and water are not readily available, use disposable wet wipes. It's best to use wipes only if your baby's skin is healthy. Choose unscented wipes to avoid irritating your baby's skin.
- Dry your baby's bottom before putting on the new diaper.
- Put your baby down in a safe place and wash your hands.

You don't need to apply a protective cream to prevent irritation. If her skin is irritated, you can apply a layer of zinc oxide ointment (see Redness on the bottom (diaper rash), page 630).

Be careful your baby doesn't fall! Never leave your child unattended on the changing table. Always keep one hand on him if you need to reach for something. You can also change him on a towel or mat on the floor.

Livia Pinheiro Carvalho

Most newborns need frequent diaper changes. So why not make it a fun and enjoyable time for you and your baby?

Medical checkups

Regular checkups with a doctor or nurse allow you to discuss your child's health and development. These checkups are also an opportunity to ask questions about her growth, feeding, vaccination, or any other subject concerning your child's health.

To find a family doctor for your child, you can put her on the waiting list using the *Québec Family Doctor Finder*.

Québec Family Doctor Finder
quebec.ca/en/health/finding-a-resource/registering-with-a-family-doctor

Friends, family members, or other health professionals you're already seeing can also guide you in your search.

Consulting health professionals

Your CLSC is the gateway to a number of services including vaccination, breastfeeding clinics, and referrals to other resources. It can also provide information on available services and explanations on how to access services elsewhere, if necessary.

When you want to make an appointment with a health professional for your child, contact the child's family doctor. If the doctor isn't available, ask to see another doctor or health professional at the same clinic.

You can also get an appointment the same day or the next day using the *Québec Medical Appointment Scheduler*. This service is available for children who don't have a family doctor or whose doctor is unavailable.

Québec Medical Appointment Scheduler
rvsq.gouv.qc.ca/accueil/index-en.html

When your child is not doing well or if you're worried, it can be hard to know where to turn. Here's a tip: Start by calling Info-Santé or Info-Social (8-1-1). These services are available 24 hours a day, 7 days a week. You can talk to a health professional, who will evaluate the situation with you.

If necessary, the Info-Santé or Info-Social health professional can help direct you to a clinic or hospital where you can take your baby.

Info-Santé and Info-Social services are available throughout Québec by dialing 8-1-1, except in certain remote regions. In these areas, your healthcare professional can tell you the local number to call.

In case of emergency, call 9-1-1.

If your child is not doing well or if you are worried, you can call Info-Santé (8-1-1) 24 hours a day, 7 days a week to speak to a nurse.

Baby's growth

A variety of factors can influence the speed at which a child grows, including gender, diet, and genetic makeup. Your baby is unique, and will grow at his own pace. He may be bigger or smaller than other babies his age.

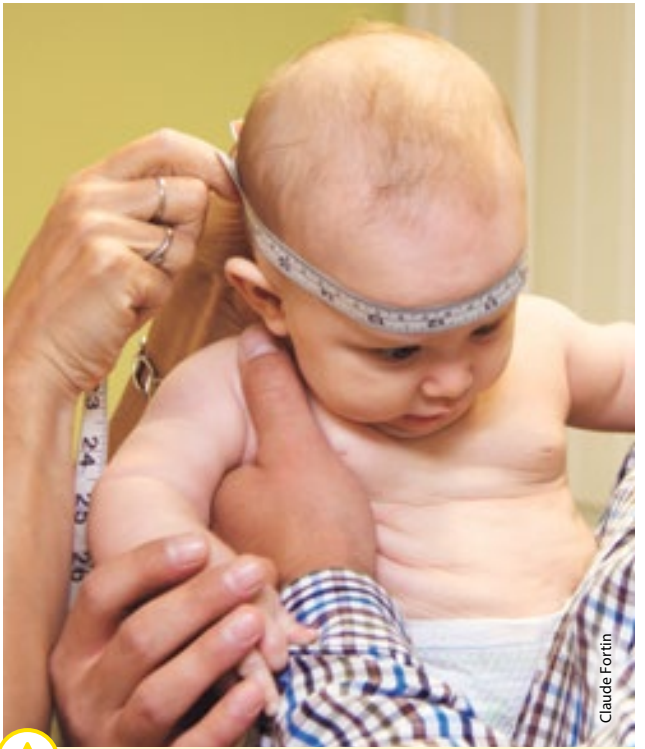
Growth spurts

During your baby's first months, he will experience periods of rapid growth called "growth spurts."

Growth spurts occur most frequently around:

- 7 to 10 days
- 3 to 6 weeks
- 3 to 4 months

Children of the same age don't necessarily have their growth spurts at the same time.



Your child is unique, he will grow at his own pace.

Tracking baby's growth

To track a baby's growth, a health professional will weigh him and measure his height and head circumference from time to time. The health professional will record the results on a growth chart. There's no need to measure or weigh your child at home unless a health professional recommends it.

If you have questions about your child's growth, don't hesitate to talk to a health professional.

Vaccination

When a person gets sick from a germ, their body reacts by naturally producing **antibodies** to get rid of the germ. It is the **immune system**. It fights against the thousands of germs present on objects and in food, water, and air.

Vaccines stimulate the immune system. They help your child make his own antibodies against certain diseases without catching the disease himself.

Vaccination is one of the most effective ways of protecting your children's health. It prevents a number of serious illnesses.

All children should receive the recommended vaccines, even healthy children with a good diet. Even though breastfeeding helps defend against infections in general, breastfed children also need to be vaccinated to be protected from the diseases targeted by vaccination.

By having your child vaccinated, you are providing him with the best possible protection against a number of serious diseases.

Vaccines are not only effective, they are very safe. If you have any questions about vaccination, feel free to talk to a health professional or visit the following website: Quebec.ca/vaccination.

Where and when should you get your child vaccinated?

You can get your child vaccinated for free. Depending on your region, you can make an appointment on Clic Santé or book one through your CLSC.

By having your child vaccinated at the recommended age in the vaccination schedule, you are providing him with the best possible protection. The vaccination schedule also applies to premature babies.

Recommended vaccination schedule

The chart on the next page shows the recommended vaccination schedule for children up to two years of age. For more information, visit the "Recommended immunization schedule" section of the following website: Quebec.ca/vaccination.

For some tips and tricks, consult the "Reducing the Pain and Anxiety of Vaccination in Children" page of the following website: Quebec.ca/vaccination.

Recommended vaccination schedule up to age 2

Child's age	Vaccines or preventive treatments
Birth (in fall and winter)	• Respiratory syncytial virus
2 months	• Diphtheria-pertussis-tetanus-hepatitis B- poliomyelitis-Hib infections [DTaP-HB-IPV-Hib] • Pneumococcus • Rotavirus (oral)
4 months*	• Diphtheria-pertussis-tetanus-hepatitis B-poliomyelitis-Hib infections [DTaP-HB-IPV-Hib] • Pneumococcus • Rotavirus (oral)
12 months**	• Diphtheria-pertussis-tetanus-poliomyelitis-Hib infections [DTaP-IPV-Hib] • Pneumococcus • Measles-mumps-rubella-chickenpox [MMR-Var]
18 months	• Measles-mumps-rubella-chickenpox [MMR-Var] • Hepatitis A–Hepatitis B [HAHB] • Meningococcal C

* It may be recommended for some children to receive additional doses of vaccine at 6 months of age.
** It is recommended that your child receive these three vaccines on his first birthday or as soon as possible after this day.

Your child may be given several vaccines for different diseases during the same visit. Administering multiple vaccines in a single visit is recommended because it will protect your child more quickly against infections. This method will not increase the frequency or severity of undesirable side effects to vaccines. It will also reduce the number of vaccination appointments.

Your child will require several doses of certain vaccines in order to produce enough **antibodies** to fight the disease.

Following the recommended vaccination schedule ensures the best protection when the child needs it most.

Possible reactions to vaccines

Serious allergic reactions to vaccines are very rare. If such a reaction occurs, it will start within minutes after the vaccination. That's why you are advised to stay at the vaccination clinic for at least 15 minutes after your child has received the vaccine. If there's a reaction, the health professional who vaccinates him will be able to treat it immediately.

Vaccines are very safe. Most of the time they cause no undesirable reactions. Sometimes they can cause short-lived reactions that are not serious, such as a mild fever, redness, or discomfort at the site of the injection.

To reduce redness and discomfort, apply a cold water compress. A small bump may appear, but it's not dangerous and will disappear within a few weeks.

If your child seems to feel unwell or has a fever after receiving a vaccine, follow the advice you were given at the time of vaccination. In the case of the vaccine against measles, mumps, rubella, and chickenpox [MMR-Var], children can come down with a fever 5 to 12 days after the vaccination.

If your child cries abnormally or if you're worried about him, talk to a health professional or call Info-Santé (8-1-1).

Today's vaccines are very well tolerated. It is not suggested that the child be given acetaminophen or ibuprofen before the injection.

Contraindications

There are few cases in which a child cannot be vaccinated. A cold, an ear infection, a runny nose, or the fact that he's taking antibiotics are not reasons to put off a vaccination.

If your child is ill to the point of being feverish or irritable or crying abnormally, discuss the situation with the health professional.

Vaccination record

This important document is a record of your child's vaccinations. You must bring it with you to the vaccination appointment. The health professional who vaccinates him will record the dose and date in it.

It's also worth bringing it along to your child's medical checkups. It may be used to record the child's growth (weight and height), as well as other information related to vaccination and your child's health.

Keep it safe, because it will be useful to your child all his life.

Bring the vaccination record to each checkup, whether it's for a vaccination or not. Some parents like to always keep it handy—in the diaper bag, for example.

Common health problems

The large majority of children go through infancy in good health.

However despite all your care, your child will sometimes become ill. You will probably want to find a way to make her feel better.

This chapter discusses common health problems among children age 2 years and under. It is not intended to provide information on rarer illnesses or those that affect only a handful of babies.

It gives you:

- Tips on preventing some common health problems
- Assistance recognizing signs that help you decide if and when to call a health professional
- Advice on how to care for your baby

In some situations, you'll need a health professional's help to identify your child's problem. Don't hesitate to consult one (see Consulting health professionals, page 614).

A well-stocked medicine cabinet

There are a few items that can be handy when it comes to caring for your child. Consider stocking your medicine cabinet with the following:

- Digital thermometer
- Acetaminophen (e.g., Tempra®, Tylenol®, or any generic brand for pediatric use)
- Oral rehydration solution (ORS)
- Zinc oxide ointment
- Over-the-counter antibiotic ointment
- Vaseline
- A sweet oil (e.g., olive oil)
- Saline solution for the nose
- Adhesive bandages and dressing
- Unscented moisturizing cream

Before adding an item to your medicine cabinet, such as an over-the-counter medication (available without a medical prescription) or a natural health product, ask your pharmacist if the product is safe for your baby.

Never give your child medication prescribed for someone else.

Keep medications and natural health products in their containers with a child-proof lid. Store them in a cabinet with a lock or safety catch or in a place children cannot get into.

Newborn jaundice

Jaundice, also known as icterus, is common in newborns. It causes the whites of the eyes and the skin to turn yellow. This colouration is due to the accumulation of an orange pigment called bilirubin in the blood.

In full-term babies, jaundice generally starts 2 to 3 days after birth and is gone by the end of the first week. In premature babies, it can last a few weeks.

Bilirubin is partially eliminated in the baby's stools. This means jaundice is worse in babies who don't drink enough and whose intestines are not very active.

It is possible for a breastfed baby to develop a type of jaundice that lasts up to 2 months. If your baby is growing well, gaining weight, and pees and poops normally (see Stools, page 279), this form of jaundice is not serious and requires no treatment. Breastfeeding can continue normally.

The best way to prevent jaundice is to make sure your newborn drinks enough milk (see Is your baby drinking enough milk?, page 370).

What to do?

It isn't easy to tell how yellow a newborn is. Check her skin and the whites of her eyes.

Make sure she drinks enough.

If you're worried about the colour of your baby, or if she is drowsy, irritable, or isn't feeding well, consult a doctor, a CLSC nurse, or the hospital or birthing centre where you gave birth.

In most cases, no treatment is necessary for jaundice.

Thrush in the mouth

Thrush is an oral yeast infection caused by the fungus *Candida albicans*. It is usually not painful and often disappears by itself. White patches appear in your baby's mouth, especially inside the lips and cheeks. These patches do not disappear when rubbed.

In the past, gentian violet was recommended as a treatment for thrush. However, it is now known that exposure to this product may increase the risk of cancer, and its use is no longer recommended. If you have any concerns about this issue, talk to a health professional.

What to do?

See a health professional.

The fungus that causes thrush can remain on objects. Sterilize objects that come into contact with your baby's mouth (bottle nipples, pacifiers, rattles) in boiling water (see Cleaning bottles, nipples and breast pumps, page 507) and replace them regularly.

Pimples, redness, and other skin problems

Small pimples, redness, and other types of skin rashes are common in babies. They are seldom serious and usually disappear on their own.

However, some skin problems can be a sign of more serious problems, in which case you should see a health professional.

Contact Info-Santé (8-1-1) or your doctor if:

- Red, raised, very itchy patches appear suddenly on your baby's body.
- The rash bleeds or seems infected. It becomes very red, cracks, runs or becomes covered with a thin, yellowish crust.
- The rash doesn't disappear after a few days and your baby seems unwell and has a fever (see Fever and skin rashes, page 652).
- You have any other concerns.

Common skin problems in newborns

Pimples and spots often appear in the first days of life. In most cases these problems are not serious and disappear within a few weeks without treatment.

Dry skin

Your baby's skin is very fragile and sensitive. It can become very dry. Newborns' skin can peel and crack around the joints. This problem usually goes away within a few weeks.

What to do?

- Bathe your baby less often.
- Use only a small amount of mild, unscented soap. Soap and hot water tend to dry the skin.
- If you wish, moisturize the dry areas with an unscented lotion or cream.

If your baby has a rash or redness as well as dry skin, he could have eczema. Talk about it with a health professional.

Heat rash (prickly heat)

Heat rash is characterized by small, round, sometimes raised red spots on the forehead, around the neck, and in the folds of the skin. This is a normal reaction when it's hot out or when your baby has a fever.

What to do?

If it's hot out, don't overdress your baby. The heat rash will disappear once your baby is in a cooler environment.

Crusty patches on the scalp (cradle cap, seborrhea)

Many babies have yellowish or greyish crusty patches on the scalp. They can be in the form of scales or small patches that peel and can sometimes cause itchiness. These crusty patches occur when a surplus of oily secretions (seborrhea) is produced or the baby's hair is frequently washed without being rinsed properly. This is a very common problem and is not a sign of infection, allergy, or lack of hygiene.

What to do?

A simple hair wash can get rid of the crusty patches. Apply the shampoo, massage it in, and leave it for 10 to 15 minutes to soften the crust. Rinse well with warm water.

If crusty patches remain, apply a vegetable oil (e.g., olive oil) or mineral oil to your baby's scalp. After a few hours, gently peel off the crusts with a soft brush or fine comb. Then wash again with warm water, rinse, and dry. If necessary, repeat the treatment once a day for a few days.

If this treatment doesn't work or if the crusty patches spread, you can use a medicated shampoo sold in drugstores. Talk to a pharmacist or another health professional.

Redness in the folds of the skin (intertrigo)

The skin becomes irritated when two skin surfaces rub against each other. This can occur under the chin, on the neck, under the arms, on the thighs, under the scrotum, or behind the ears. Redness appears in areas that are damp from perspiration, stool, or milk, which encourages germs to develop.

What to do?

Clean the affected areas with a mild and unscented soap and dry them well by gently patting the skin with a towel. If the redness persists, see a health professional.

Redness on the bottom (diaper rash)

Your baby's bottom can become red. The redness can spread to the thighs, vulva, or scrotum. Your baby may be more irritable, especially when he or she pees.

These symptoms of **diaper rash** are very common. They are mainly caused by the skin coming in contact with urine or stools. Irritation can therefore occur when diapers are not changed often enough.

What to do?

Leave your baby with a bare bottom as much as possible. Your baby will feel better and the diaper rash will heal faster.

Change your baby's diaper as soon as it's wet or soiled. Make sure the diaper is not too tight.

If you use cloth diapers, make sure to follow the manufacturer's instructions when you wash them.

Some disposable diapers can be irritating for the skin. If necessary, you can choose unscented diapers or change brands.

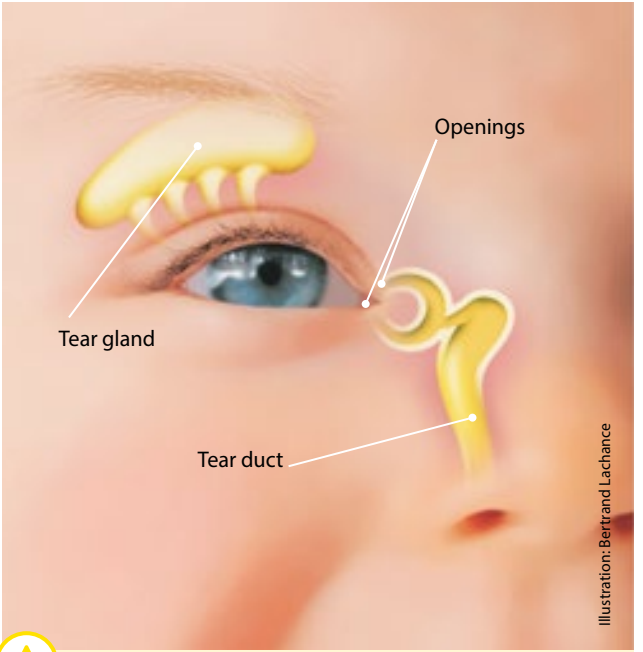
Wash your baby's bottom gently with water or a mixture of water and unscented oil, then pat dry with a towel, without rubbing.

Avoid using baby wipes because they can also irritate your baby's skin. They should be used only occasionally and should not contain alcohol or perfume.

If redness is minimal and not widespread, apply a generous layer of a protective ointment containing 10% to 20% zinc oxide. The ointment protects the skin and doesn't have to be wiped off completely at each diaper change.

If redness is more severe and widespread, use a protective ointment containing 20% to 40% zinc oxide. It's best to avoid ointments that contain allergenic ingredients like lanolin or irritating ingredients such as fragrance. Ask your pharmacist which product may be best for your baby.

If the redness persists for a few days and your baby seems unwell, see a health professional.



Tears are secreted by the tear gland. They spread across the surface of the eye, then flow through small openings from the eye to the nasal cavity via the tear duct.

Eye problems

Children under two can sometimes have eye problems. Most commonly, their eyes can be red, sticky, or watery, or they can be cross eyed.

Red, sticky, or watery eyes

A red, sticky, or watery eye can have a variety of causes:

Blocked tear duct – Normally, tears flow from the eye to the nose via the tear duct. If the duct is blocked or not fully open, tears build up, causing the eye to water.

Your baby may wake up with a crusty eye, but with no pain, redness, or swelling of the eyelid. You can gently wash the eye with a clean washcloth soaked in warm water.

If the tear duct is not already open at birth, it usually opens by itself during the first year of life. Massaging can help the tear duct open more quickly. To learn how to perform this massage or if the problem persists after one year of age, talk to the nurse or doctor at your next visit.

Foreign object in the eye – If one of your baby's eyes becomes red all of a sudden, tears up a lot, or if your baby refuses to open his eye or is uncomfortable, he may have a foreign object in his eye. To find out what to do, read the section on Foreign object or chemical product in an eye, page 718.

Allergies – If your baby's eyes are itchy, irritated, or watery, and the redness is mild to moderate, an allergy may be the cause (see Allergies, page 635).

Infection – These are the signs of an eye infection:

- Red eye
- Swollen, sticky eyelids
- Yellowish secretion (pus)
- Trouble opening the eyes and looking at a light

Eye infections can be caused by a bacteria or a virus. They can sometimes occur after a cold, flu, or sore throat caused by a virus.

What to do?

If your baby has one or more of the signs of eye infection just mentioned:

- Wash your hands often to avoid spreading the germs.
- Gently wash the eye with a clean washcloth soaked in warm water.
- See a doctor or optometrist, if necessary.

Vision problems and crossed eyes (strabismus)

Very few young children complain of vision problems because they tend to think their vision is normal. To prevent vision problems from becoming permanent and having long-term consequences, they should be corrected as soon as possible.

Your newborn's eyes may occasionally be crossed. Don't worry, this happens to many babies. This phenomenon, called strabismus, often disappears by the time the baby is 2 or 3 months old when he develops the ability to focus and move both eyes in the same direction.

You can be attentive to early signs that may indicate that your baby has a vision problem. See a doctor or optometrist if your baby:

- Is constantly cross eyed from birth.
- Appears to be cross eyed after the age of 3 months.
- Has a white reflection (not red) in the **pupil**.
- Doesn't follow moving objects with his eyes.
- Blinks frequently.
- Is very sensitive to light and has very watery eyes.
- Cries when one of his eyes is covered.
- Knocks into things and has trouble orienting himself.

Allergies

An allergy is an excessive sensitivity to normally harmless substances. These substances are called "allergens." Allergens can come from a number of sources:

- Food (see Food allergies, page 571)
- Tree and grass pollen
- Animal fur and secretions
- Dust
- Molds and dust mites
- Insect stings (e.g., wasps or bees)
- Medications (e.g., penicillin)

Any number of the following signs in your child can indicate an allergy, depending on the area affected:

- Skin: redness, swelling, itchiness
- Respiratory system: sneezing, runny nose, cough, shortness of breath
- Digestive system: vomiting, diarrhea, mucus or blood in the stool, stomach pain
- Eyes: redness, itching, watering

What to do?

Allergies are not common in young children so they are hard to diagnose. If you suspect that your child has an allergy, you can consult your doctor.

Sudden and severe reactions can occur after your child eats food, takes medication, or is stung by an insect. See the red box for the most common symptoms.

Call 9-1-1 if your child develops

- Red patches on the skin

AND one or more of the following:

- Sudden and severe change in her general condition (e.g., irritability, drowsiness, loss of consciousness)
- Swollen lips or tongue
- Difficulty breathing
- Sudden vomiting

She could be having a severe allergic reaction.

Common childhood infections

Many parents have the impression that their youngster is always sick. Young children are very vulnerable to germs (viruses, bacteria, and parasites) that cause infections like the common cold and gastroenteritis (stomach flu). Why? Because their **immune system**, which protects them against germs, is not developed enough yet—and because they touch everything and put their hands in their mouth!

Most infections in young children are not serious, don't last long, and go away by themselves. Theses infections often occur more frequently in the first year of day care. They gradually diminish as children get older and their immune systems develop.

Transmission of infections

Infection-causing germs are everywhere (e.g., on toys, floors, door handles, and more). They are found in the nose, mouth, and stools, as well as on the skin. They can also be carried by animals.

It's impossible to completely avoid germs. In fact, some exposure to germs is essential for the proper development of the immune system. It helps your child build up a personal supply of **antibodies** for the future.

Usually, germs are spread by the hands. They can also be spread in other ways, such as through saliva and secretions (e.g., kissing or sneezing) or contact with contaminated surfaces or objects.

Preventing infections

There are several ways to reduce the transmission of infections.

Washing your hands
Usually, germs are spread by the hands. Properly washing your and your child's hands can help reduce the spread of infections (see How to do a good hand washing, page 640).

Getting vaccinated
Vaccination is one of the most effective ways to protect children against various serious diseases. It is recommended that you have your child vaccinated according to the regular schedule (see Vaccination, page 617).

Adults are also encouraged to get vaccinated. Make sure your vaccinations are up to date. Parents of babies under 6 months should get the flu vaccine.

Sneezing into your elbow or a tissue
Whenever possible, cough or sneeze into a tissue or your elbow, not into your hands. Teach your child to do the same. Throw out paper tissues right after using them and wash your and your child's hands.

Washing objects and surfaces
Thoroughly wash toys and other objects (e.g., cups, utensils) that you use regularly, especially anything your child puts in her mouth.

Avoiding contact with saliva
Don't share toothbrushes or utensils with other people, even with your child. Don't clean your baby's pacifier by putting it in your mouth. Also, avoid kissing your child on the mouth.

Avoiding contact with sick people
As much as possible, prevent children, especially babies under 3 months old, from coming into direct, prolonged contact with people who have symptoms of **contagious diseases** (e.g., fever, cough, nasal congestion, sore throat, skin rashes).

If your child has a contagious disease, fever, cold, or diarrhea, or if she is coughing a lot, it's preferable that she stays home. If you have to go out or have visitors, it's also a good idea to notify them or people you are intending to visit that your child is sick.

If you are pregnant, see Contact with people with a contagious disease, page 133.

Wear a mask (face covering)
To reduce the transmission of infections, you can wear a mask when you have symptoms of contagious diseases (e.g., fever, cough, sore throat, runny nose), especially when you need to be in contact with vulnerable people.

Masks (face coverings) are not recommended for children under 2.

Aerating your home
Regularly opening windows and doors allows air to circulate. This helps reduce the number of microbes in your home. If you have a ventilation system (e.g., air exchanger), keep it turned on and make sure the filters are well maintained.

Childcare services
Childcare services usually have clear policies about keeping sick kids at home. Reading and understanding these rules is important to help keep everyone healthy (other children, the staff, and other parents).

If your child is sick, tell your childcare provider about your child's symptoms and ask if she can attend that day.

Your sick child may not have the energy to engage in her usual activities. If necessary, keep her at home.

How to do a good hand washing

The best way to reduce the spread of infections is to wash your hands with soap and water often throughout the day, especially when you are sick.

When should you wash your hands?

- **Before** preparing meals, eating, breastfeeding, and feeding or giving medication to your child.
- **After** using or accompanying a child to the toilet, changing a diaper, caring for someone who is ill, cleaning up vomit or diarrhea, coughing or sneezing into your hands, wiping a nose, throwing out a soiled tissue, touching or playing with a pet, handle animal feed, or cleaning an animal cage or litter box or visiting a public place.

Wash your children's hands as often as necessary, especially:

- **Before** meals and snacks.
- **After** they use the potty or toilet and after they play outdoors, in the sandbox, or with pets, and after they visit a public place.

How should you wash your hands?

- Wet your hands in warm running water. Water that is too hot dries out the skin and is no more effective.
- Rub your hands together with mild soap (bar or liquid) for 20 seconds, including your fingernails and thumb, and the area between your fingers.
- Rinse your hands well in warm running water.
- Dry hands thoroughly with a clean towel.

If necessary you can use a moisturizing lotion or cream to prevent chapping.

If your child is too small to reach the sink
The previous method is the most effective but is not always easy with small children. In that case

- First wash your child's hands for 20 seconds with a paper towel or clean washcloth soaked in warm water and soap.
- Then rinse her hands with a paper towel or washcloth soaked in warm water.
- Dry her hands well.

The best way to prevent infections is to wash your hands often throughout the day.

Waterless hand sanitizer

Washing thoroughly with soap and water remains the best option. If water is not available, you can use a towelette or alcohol-based waterless hand sanitizer. These products should only be used when no alternative is available and are not recommended for children under 2 years of age.

If you use a hand sanitizer, choose one that contains alcohol. Place a small amount in the palm of your hand and dip your nails in the product. Rub your hands together, including the nails, thumbs, and area between your fingers, until the product completely evaporates.

Since the hand sanitizer contains alcohol, make sure to keep it out of the reach of children.

Fever

Fever is an increase in body temperature above normal levels. It's the body's way of defending itself against infection.

Fever is very common in young children.

The child has a fever if his rectal temperature (in the rectum) is 38.0°C (100.4°F) or higher.

Rectal temperature is the only reliable measurement for children age 2 and under (see How to take the temperature, page 644).

When to take your child's temperature

You don't have to check the temperature of a child who is in good health.

If your child looks ill, is hot, red, irritable or whiny, take his temperature. Record the temperature and the time you took it, so you can tell Info-Santé (8-1-1) or your doctor, if need be.

What thermometer to use

The best choice is an unbreakable plastic digital thermometer without glass or mercury. Digital thermometers can be used to take temperature using the rectal (in the rectum), armpit (under the arm), and oral (in the mouth) method.

Mercury thermometers are not recommended because if they break the mercury can poison both you and the environment.

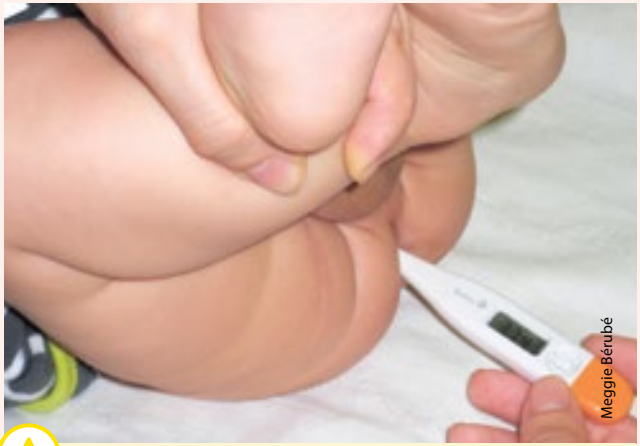
How to take the temperature

In the rectum

Rectal temperature is the only reliable measurement for children age 2 and under. Here's how to take it:

- Wash your hands.
- Clean the thermometer in cool, soapy water, then rinse.
- Cover the end of the thermometer in petroleum jelly (e.g., Vaseline).
- Place your baby on his back, with his knees bent.
- Gently insert the thermometer about 2 cm (¾ in.) into the rectum.
- Keep the digital thermometer in place until it beeps.
- Take it out and read the temperature.
- Clean the thermometer and wash your hands.

You can also cover the thermometer with a disposable plastic tip (probe cover) sold in drugstores. Follow the manufacturer's directions for using and lubricating it.



Rectal temperature is the only reliable measurement for children age 2 years and under.

Under the arm

Taking a child's temperature using the armpit method is not as accurate as with the rectal method. The armpit method is convenient for checking if your baby has a fever. However, your child's temperature must be confirmed using the rectal method if

- It is above 37.5°C (99.5°F)
- It is equal to or less than 37.5°C (99.5°F), but your child is hot to the touch and seems sick

Here's how to take it:

- Wash your hands.
- Clean the thermometer in cool, soapy water and rinse.
- Place the tip of the thermometer in the centre of the armpit against the skin.
- Make sure that the child's arm is held snugly against his body.
- Keep the thermometer in place until it beeps.
- Remove it and read the temperature.
- Clean the thermometer.

In the ear

Taking a child's temperature in the ear is very quick but is not recommended because it's less accurate.

In the mouth

Taking a child's temperature in the mouth is not recommended for children under five.

What to do if your child has a fever

Baby under 3 months old – See a doctor promptly or take your child to the emergency room.

Baby 3 to 5 months old – Consult Info-Santé (8-1-1) or a doctor. They will advise you.

Baby 6 months of age or older – Observe your baby: if she is feeding well and seems healthy to you, you can treat her at home.

If the fever lasts more than 72 hours (3 days), your baby should be examined by a doctor.

If you think he might have COVID-19, and you have questions, contact Info-Santé (8-1-1).

In some cases, you should promptly see a doctor or go to the emergency room if your child is feverish. See the red box on page 647.

Make sure your child is dressed comfortably and is neither too cold nor too hot. Don't undress him completely because he may get cold. To prevent him from becoming dehydrated, have him drink often.

Cool or lukewarm baths and alcohol rubs are not recommended. They are stressful for a feverish child and their effect doesn't last.

If your child is unwell or irritable, medication may help (see Fever medication, page 649).

Has your child recently been vaccinated?

Your child may be feverish after being vaccinated. In this case, the fever does not necessarily mean he has an infection. It's better to assess his general condition. Review the advice you were given when he was vaccinated. If necessary, consult a health professional or Info-Santé (8-1-1).

When to consult a health professional

High fever does not always mean a serious illness. Keep a close eye on your child's general condition, behavior, and other symptoms. It's normal for a feverish child to need more cuddling and be less hungry than usual.

Contact Info-Santé (8-1-1) or a doctor in any of the following cases:

- You're worried about your child's condition.
- He has a fever and is less than 6 months old.
- He's had a fever for more than 72 hours, regardless of his age.

See a doctor right away or take your child to emergency if he has a fever and has one of the following characteristics:

- Is less than 3 months old
- Has had a seizure (see page 648)
- Is vomiting a lot
- Cries constantly and won't calm down
- Is hard to wake or much sleepier than usual
- Is pale or has abnormal color
- Responds very little to others
- Has difficulty breathing or is breathing rapidly
- Has other symptoms that are worrying you

An Info-Santé nurse is always on hand to advise you on what to do: just dial 8-1-1.

Call 9-1-1 if the situation seems serious and urgent enough that you need an ambulance.

Febrile seizures (convulsions caused by fever)

From 2 to 5% of children age 6 months to 5 years are affected by febrile seizures, which are convulsions caused by fever. During a fever, their arms and legs twitch and jerk and they may faint.

Febrile seizures can be terrifying for parents, but they generally have no lasting effect on the child. Most of the time they last for a few seconds to a few minutes and stop by themselves. Afterwards, the child may appear to be asleep for a short period before recovering and returning to how she was before the seizure.

What to do?

During the seizure, lay your child on her side, on a flat surface in a safe spot. Do not try to stop her movements. Do not put anything in her mouth.

Call 9-1-1 in one of the following situations:

- Your child is under 6 months old.
- The seizure lasts more than 3 minutes.
- Your child's condition worsens (e.g., trouble breathing, bluish skin).
- Your child does not fully recover within a short period of time.

After the seizure: In all cases, see a doctor quickly (within a few hours) or go to the emergency room. The doctor will check that your child is alright and does not have any other problems.

An Info-Santé nurse is always on hand to advise you on what to do: just dial 8-1-1.

Fever medication

Medication is more useful for easing discomfort than for bringing down the fever. A feverish child who doesn't look ill doesn't necessarily need medication.

You can give him either acetaminophen or ibuprofen (see First choice: acetaminophen and Second choice: ibuprofen, page 650), unless a doctor, nurse or pharmacist makes a specific recommendation for your child. Don't give both types of medication at the same time, unless your health professional advises it.

Never give aspirin to your child.

It's a good idea to record the type of medication, the dose you give, and at what time.

You need to know your child's weight in kilograms in order to give the right dose. If you don't know his exact weight, use the last weight recorded on his vaccination record or check the age indicated on the medication packaging. Be sure to follow the manufacturer's recommendations on the packaging.

Measure the dose with the tool provided with the medication (dropper or syringe). You can also ask your pharmacist for a graduated syringe. Kitchen teaspoons and tablespoons and dosage cups are not accurate enough.

Keep medications and natural health products in their containers with a child-proof lid. Store them in a cabinet with a lock or safety catch or in a place children cannot get into.

First choice: acetaminophen

Acetaminophen (e.g., Tempra®, Tylenol®, or any generic brand for pediatric use) has been used for a long time and should be your first choice. Calculate 15 mg per kilogram. You can give one dose every 4 to 6 hours, but not more than five in any 24 hour period. Your pharmacist or Info-Santé (8-1-1) can help you calculate the right dose.

Don't give acetaminophen to a baby under 3 months old. Talk to your doctor first.

Second choice: ibuprofen

Ibuprofen (e.g., Advil®, Motrin®, or any generic brand for pediatric use) can also be used provided certain conditions are met. Calculate 10 mg per kilogram. As its effect lasts longer than that of acetaminophen, you can give it every 6 to 8 hours, but no more than 4 doses per 24 hours. Your pharmacist or Info-Santé (8-1-1) can help you calculate the right dose.

Do not give ibuprofen in the following situations:

- Your child is under 6 months old.
- Your child is dehydrated due to severe gastroenteritis (stomach flu) or is not drinking.
- Your child has chickenpox.
- Immediately before or after an operation (unless a doctor recommends it).

Good to know...

Both acetaminophen and ibuprofen will usually make your child more comfortable and will bring down the fever within 30 to 60 minutes. After a few hours, the temperature may go up again and your child may once again seem unwell. You may have to give him another dose. But it's important to avoid exceeding the recommended dose and frequency.

What to do if your child spits out or throws up the medication

If your child **immediately** spits out the medication, you can give him another dose.

If he vomits heavily **less than 15 minutes** after taking the medication, wait an hour, and then take his temperature again. If he's not feeling well and still has a fever, give him the same dose. If he throws up the medication again, do not repeat the dose and consult a health professional.

If your child vomits **more than 15 minutes** after taking the medication, don't give him another dose. He has probably already absorbed the medication.

When in doubt, consult a health professional.

Fever and skin rashes

Many children develop fever and a rash (pimples or red patches, or both) at the same time. This could be a sign of a **contagious disease**. Most of these infections are caused by viruses and last a few days. They go away by themselves and have no long-term effects.

The most common infections are roseola and hand-foot-and-mouth disease. They generally don't require treatment.

There's also fifth disease and scarlet fever, but they rarely occur in children under two.

Thanks to vaccination programs, rubella, chickenpox, and certain forms of meningitis are now very rare.

A child with fever and a rash may be contagious. For information on how to prevent the transmission of infections to others, see Preventing infections on page 638.

Childcare services usually have clear policies about keeping kids at home in the event of illness. Read these rules or ask the childcare provider if your child can attend daycare.

What to do?

The presence of a rash (i.e., pimples or red patches on the skin) with fever does not necessarily indicate a serious illness.

It's usually better to consider the child's general condition rather than the presence of a rash or how high the fever is. Keep a close eye on your child's behavior and any other symptoms.

See a doctor right away or take your child to the emergency room if:

- your child's general condition deteriorates rapidly, or
- he has one or more of the characteristics listed in the red box on page 647.

In other cases, follow the recommendations in the What to do if your child has a fever section on page 646.

You can contact Info-Santé (8-1-1) at any time for advice from a nurse.

You can let your child continue his normal activities and playing if he feels well enough.

Colds and flu

Colds and flu are caused by viruses.

Children under 2 can catch up to 10 or so colds per year. If they do catch the flu, it generally will be only once a year.

A child's cold symptoms include a stuffy or runny nose, sneezing, coughing, mild sore throat, loss of appetite, and mild fever. Usually these symptoms will last one to two weeks.

Cold and flu symptoms can be similar, but flu is a much more serious illness. There is a flu vaccine available that your child can be given.

What to do?

There is no cure for the common cold or the flu. They will go away by themselves.

You can let your child continue his normal activities and playing if he feels well enough. Make sure he drinks enough.

If necessary, gently clean out his stuffed-up or runny nose (see Stuffed-up or runny nose, page 656).

If your child has a fever, see What to do if your child has a fever, page 646.

If you think he might have COVID-19, and you have questions, contact Info-Santé (8-1-1).

There are many over-the-counter cough and cold medications on the market. These medications should not be given to children under 6. They are not effective and can be dangerous for them.

Using a humidifier is no longer recommended. If the humidity is too high or the humidifier poorly maintained, harmful molds can develop.

Health Canada advises against giving cough and cold medications (syrups, suppositories, etc.) to children under the age of 6. They are not effective and can be dangerous for young children.

Stuffed-up or runny nose

There are various reasons why a child may have a stuffed-up or runny nose: crying, environmental factors (e.g., heat, humidity, dust, animal hair, tobacco smoke), or colds or other infections.

What to do?

In order to clear your child's nose, it is sometimes useful to thin out the secretions.

Here are two methods:

- Take a long shower or bath with your child or let him play in the bath. The water can help thin out the secretions.
- Use saline solution (salt water) with a dropper or nasal spray bottle that is suitable for your child's age. Use them according to the manufacturer's instructions.

Always use saline solution (salt water) and avoid medicated nasal drops and sprays (such as decongestants) (see Saline solution (salt water) recipe to treat stuffy noses, page 603). Ask your pharmacist for advice.

If necessary, you can also use a nasal suction device. Follow the manufacturer's instructions. Bulb syringes are less effective and may injure your child's nose.

If the skin on your child's nose is irritated, you can apply Vaseline or unscented moisturizing cream.

You can ask your healthcare provider if there are other methods of clearing the nose that may suit your child (see Nasal irrigation, page 603).

It's best to use a different dropper or spray bottle for each child.

When to see a doctor
Call your doctor if your child has a runny nose for more than 10 days and his secretions are yellow or green or you are concerned about his health.

If you think he might have COVID-19, and you have questions, contact Info-Santé (8-1-1).

Cough

Coughing is a defence mechanism. It's the body's way of getting rid of mucus. For example, children may cough when they have a respiratory infection such as a cold or flu (see Colds and flu, page 654).

Coughing is also a way to dislodge a foreign body (small object or other). Foreign bodies can cause a cough immediately after being drawn into the **airway**, or several days later.

What to do?

If your child seems to have a lot of mucus, you can clean out her nose (see Stuffed-up or runny nose, page 656).

If she has a fever, see What to do if your child has a fever, page 646.

Make sure she drinks enough fluids. Some children prefer warm drinks when they are sick.

If your child has a hoarse voice or barking cough that sounds like a barking dog, this usually indicates laryngitis (also known as "false croup"). To relieve your child's cough, have him breathe cold air for a few minutes: bundle him up warmly and take him outdoors, or open a window or the freezer door. Cold air will calm the inflammation in the throat (larynx).

Health Canada advises against giving cough and cold medications (syrups, suppositories, etc.) to children under the age of 6. They are not effective and can be dangerous for young children.

When to consult a health professional
See a doctor if your child:

- Coughs a lot and is less than 3 months old.
- Is coughing to the point of choking or vomiting.
- Has had a cough for more than 10 days.

See a doctor right away if your child is coughing and also shows any of the following signs:

- He has trouble breathing or his breathing is laboured.
- He has chest retractions (the skin pulls in between his ribs or beneath his rib cage).
- He is wheezing or breathing noisily and rapidly.
- You think his cough might be caused by a foreign body in his **airway**.
- You are concerned about his overall health.

Call 9-1-1 if the situation seems serious and urgent enough that you need an ambulance.

An Info-Santé nurse (8-1-1) can advise you at any time.

If you think he might have COVID-19, and you have questions, contact Info-Santé (8-1-1).

Sore throat

If your child has a sore throat, she may eat and drink less. She may drool more or have a hoarse voice. So long as she is able to breathe easily, it's not serious.

In children 2 years and under, sore throat is usually caused by viruses (cold and flu viruses, for example). In this case, antibiotics are not effective, but there are several things you can do to make your child more comfortable.

Good to know...

Don't give lozenges to children age 4 and under because they could choke.

Don't give honey to children under 1 year. They can catch a very serious infection called botulism (see Honey—never for babies under age 1, page 531).

What to do?

Make sure she drinks plenty of liquids. It may be easier for her to drink with a straw or sippy cup when she has a sore throat. She may also prefer to eat cold foods.

Acetaminophen may provide her some relief. Ibuprofen may be given if she's over 6 months. (See Fever medication, page 649).

Consult your doctor if she has trouble breathing or swallowing. If your child has a fever, see What to do if your child has a fever, page 646.

If you think your child might have COVID-19, and you have questions, contact Info-Santé (8-1-1).

Ear infection

Otitis media is an ear infection of the inner ear. It is not visible from the outside. Most ear infections develop following a cold.

Children with an ear infection may have a fever. They may sometimes cry, roll their head on the bed, or touch their ears. They may seem to have less appetite. They may also vomit or have diarrhea. In some cases fluid can run out of the ear.

What to do?

Ear infections do not always require medical treatment. However, if your child is unwell or irritable, there are medications that may help (see Fever medication, page 649).

If your child has a fever, see What to do if your child has a fever, page 646.

If your child is crying a lot, has a discharge from the ear, or seems to be in pain, see a doctor.

An ear infection can temporarily affect your child's hearing. If you think your child is not hearing as well as normal a few weeks after the ear infection, see a doctor.

François Gervais

Diarrhea

The frequency, quantity, consistency and colour of stools vary from child to child. Stools also change as children grow older and depending on what they eat (see Stools, page 279). You will learn to recognize what is normal for your child.

When children have diarrhea, their stools change from what is normal for them. Bowel movements are more frequent and more liquid than usual. Most diarrhea is caused by germs, like viruses.

What to do?

The germs that cause diarrhea can be contagious. For information on how to prevent the transmission of these germs to others, see Preventing infections, page 638.

If your child's stools suddenly become more liquid, it may be a sign of a transient trouble. If your child is healthy, continue to feed him normally.

If your child seems to be behaving unusually, eating or drinking less than normal, or seems ill, keep an eye on him to see if the situation improves. If your child has a fever, see What to do if your child has a fever, page 646.

A child with diarrhea can become dehydrated. Take steps to prevent dehydration (see Preventing dehydration, page 667) and watch for the signs of dehydration described on page 668.

If your child's bottom becomes red or irritated, see Redness on the bottom (diaper rash), page 630.

When to consult a health professional
Call Info-Santé (8-1-1) or a doctor if the situation worsens or persists, or you have concerns about your child's condition.

If you think he might have COVID-19, and you have questions, contact Info-Santé (8-1-1).

If your child loses weight or the diarrhea continues for more than 1 or 2 weeks, consult a doctor.

See a doctor right away if your child has diarrhea and is showing any of the following signs:

- There is blood in her stools (red or black stools).
- She seems to be in pain (e.g., she is very irritable, constantly cries, or curls her legs up against her belly).
- She exhibits unusual behaviour (e.g., is difficult to wake, sleepier than usual, or responds very little to others).
- She vomits often for a period of more than 4 to 6 hours.
- She shows signs of moderate to severe dehydration (see Dehydrated baby, page 668).

Gastroenteritis (stomach flu or "gastro")

A child with diarrhea often has gastroenteritis. Gastroenteritis spreads easily from person to person, especially among children.

It is a very common childhood infection. Almost all children come down with it at least once in their first year.

A child with gastroenteritis is visibly ill: she has diarrhea and she might vomit and have fever. You can refer to the recommendations in the sections on Diarrhea, page 662, Vomiting, page 665 and Fever, page 643.

Most gastroenteritis cases clear up on their own within a few hours or days.

> **!** Don't give your child anti-nausea or anti-diarrhea medication if you have not been advised by a doctor. This type of medication can have serious side effects and is rarely recommended for young children.

Vomiting

It can be hard to tell the difference between vomiting and regurgitation (spitting up), especially in babies (see Regurgitation, page 374). A baby who vomits will appear to be making an effort. The quantity of vomit produced also tends to be larger than regurgitation. The child may also appear to have a stomach ache.

What to do?

Vomiting can be a sign of infection. For information on how to prevent the transmission of infections to others, see Preventing infections, page 638.

Most vomiting does not require any special action.

But a child who vomits repeatedly can become dehydrated. Take steps to prevent dehydration (see Preventing dehydration, page 667) and watch for the signs of dehydration described on page 668.

If you suspect a food allergy, see Food allergies, page 571.

If your child also has a fever, see What to do if your child has a fever, page 646.

When to consult a health professional
Most vomiting does not require medical treatment. Contact Info-Santé (8-1-1) or your doctor if vomiting persists for more than:

- 12 hours, for a child under 3 months old
- 24 hours, for a child between 3 months and 2 years old

See a doctor right away if your child vomits and shows any of the following signs:

- She appears to be in pain (e.g., she is very irritable, constantly cries, or curls her legs up against her belly).
- She exhibits unusual behaviour (e.g., is difficult to wake, sleepier than usual, or responds little to others).
- She shows signs of moderate to severe dehydration (see Dehydrated baby, page 668).
- She has green or blood-tinged vomiting (red or brown).
- There is blood in her stools (red or black stools).
- She projectile vomits several times a day.
- She vomits more than once following a blow to the head.

Call 9-1-1 if your child develops red patches accompanied by sudden vomiting: this may be a severe allergic reaction.

An Info-Santé nurse (8-1-1) can advise you at any time.

Dehydration

When a child vomits or has diarrhea, she may become dehydrated. Dehydration occurs when your child doesn't get enough water and minerals from what she eats and drinks to replace those lost due to diarrhea and vomiting.

If your child vomits or has diarrhea but does not show any of the symptoms described in the chart on page 668, be sure to take steps to prevent dehydration.

Preventing dehydration

What to do?

To prevent dehydration in your child, have her drink more often than usual.

If your child hasn't started eating solid food, keep giving her the usual amount of milk, and offer to feed her more often than usual. If she has difficulty nursing or isn't taking her bottle well, use a sippy cup, spoon, dropper, or straw.

If she has started eating solid food, offer her food that she particularly likes and is able to keep down. Also have her drink more often than usual.

If your child has heavy diarrhea or vomiting and refuses to drink or eat, you can give her small amounts of oral rehydration solution. For example, you can give her 5 to 15 ml (1 tsp to 1 tablespoon) of oral rehydration solution every 5 to 15 minutes (see Oral rehydration solutions (ORS), page 670).

Watch for the signs of dehydration described on page 668. An Info-Santé nurse (8-1-1) can advise you at any time.

Dehydrated baby

Certain signs indicate if your child is dehydrated. The following table lists the signs of mild and moderate to severe dehydration, and what to do if your child is dehydrated.

Signs of dehydration	What to do?
Mild dehydration	
• Mouth and tongue slightly drier than usual • Increased thirst • Fewer wet diapers than usual	First, call Info Santé (8-1-1) or a doctor to assess the situation. You can start dehydration treatment at home (see Treatment of mild dehydration, page 669).
Moderate to severe dehydration	
• Lack of tears when child cries • Drowsiness or irritability • Sunken eyes • Less than 4 diapers wet in 24 hours	See a doctor or take your child to the emergency room right away.

Treatment of mild dehydration

To treat mild dehydration, you should give your child small quantities of liquid very often. Breast milk or oral rehydration solutions (ORS) are the best choices (see Oral rehydration solutions (ORS), page 670).

Babies who have not started eating solid food	
Breastfed baby	**Baby fed commercial infant formula**
Breastfeed more often, for shorter periods at a time. If your baby has difficulty nursing, give her small quantities of expressed breast milk using a sippy cup, spoon, dropper, or straw. Between feedings, give her small quantities of oral rehydration solution (ORS). Continue breastfeeding and giving your child ORS, even if she throws up her milk. You can increase the quantity of ORS if it is well tolerated. If vomiting persists, see Vomiting, page 665.	Stop giving her commercial infant formula for around 4 hours. Give her small quantities of oral rehydration solution (ORS) in a bottle, sippy cup, spoon, dropper, or straw. Return to her usual preparation after 3 to 4 hours.
Babies who eat solid food	
If your child vomits, stop feeding for about 4 hours. Give her small amounts of oral rehydration solution (ORS) regularly, using a spoon. Gradually start reintroducing her usual food when the vomiting becomes less frequent. After 24 to 48 hours (1 to 2 days), most children are able to return to their normal diet.	

For example, you can offer 5 to 15 ml (1 teaspoon to 1 tablespoon) of breast milk or oral rehydration solution every 5 to 15 minutes. Once your baby is feeling a little better, gradually increase the quantities, according to her tolerance.

Avoid giving her juice, soft drinks (even flat), sports drinks, or rice water. If your baby has diarrhea or severe vomiting, avoid giving her only water as well. None of these drinks contain the right quantities of sugar and salt your child needs to rehydrate.

Oral rehydration solutions (ORS)

Oral rehydration solutions (ORS) contain precise ratios of water, salt, and sugar to replace what has been lost through diarrhea and vomiting.

You can find ORS in various flavours and forms at the drug store:

- Ready-to-serve
- Packets of powder
- Ice pops

Your pharmacist can help you choose the right product and use it as directed. The Canadian Paediatric Society suggests that parents always keep ORS on hand.

Keeping baby safe

Roseline Olivier-Pilon

There are many laws, codes, and regulations designed to protect children's health and safety. These include the Québec Highway Safety Code and Canada's *Cribs, Cradles and Bassinets Regulations*. Organizations such as the Canadian Paediatric Society and the Québec Lifesaving Society also make recommendations.

Injuries are a leading cause of doctor's visits and death among children. It is essential to be vigilant and never underestimate the natural curiosity that constantly drives children to explore their environment. You can reduce the risk of injury by following basic safety principles and taking a few precautions.

This chapter includes:

- Babyproofing tips.
- Advice on preventing accidents and using your safety reflexes.
- Information about protecting your child from natural elements like the sun and insect bites.

Travelling safely

In the car: Car seat

In Québec, it's mandatory to use a car seat for all car travel with your child.

An appropriate car seat, when used properly, can reduce the risk of death and injury by 70% in the event of a collision.

Car seat use is divided into three consecutive phases, starting from the birth of your child and changing with weight and age. The phases are presented on pages 676 to 679.

Types of car seats

The type of car seat you should use depends on your child's weight and height. There are four types of children's car seats:

- Infant car seats used from birth until around 10 kg (22 lb.).
- Child seats for children who weigh around 10 kg (22 lb.). Most child seats go up to 29.5 kg (65 lb.).
- Booster seats for children who weigh at least 18 kg (40 lb.). Booster seats are mandatory for children up to 145 cm in height or 9 years of age.
- Convertible seats, which can be used from birth and during the three phases described on pages 676 to 679.

Where to install a car seat in a vehicle

For your child's safety, his car seat must always be installed on the back seat of the vehicle.

Your child should always sit in the back seat until age 13.

Good to know...

If you need to sit your child in the front seat due to exceptional circumstances (e.g., the vehicle has no back seat or your child has a health issue that requires close supervision), you must first submit an airbag deactivation application to the Société de l'assurance automobile du Québec (SAAQ).

For more information, go to saaq.gouv.qc.ca/en/road-safety/modes-transportation/automobile/safety-devices/airbags/deactivation.

Car seat direction

Rear-facing car seats: as long as possible

For safety reasons, Transport Canada recommends children stay rear facing for as long as possible. This position provides better protection for their spinal column and brain in the event of a collision.

In Québec, use of a rear-facing seat is recommended until your child is at least two years of age.

Your child should stay rear facing until he reaches the car seat manufacturer's recommended weight and height limits, even if his legs are bent. There must be a space of at least 2.5 cm between the top of the child's head and the top of the seat.

Good to know

Convertible seats can generally be used in the rear-facing position longer than regular child car seats (up to age 4, on average).

Front-facing car seats

If your child becomes too tall or heavy for his rear-facing seat (see owner's manual for height and weight limits), he can switch to a forward-facing seat. Depending on his weight and height, your child may use a child car seat, a convertible seat in child car seat mode, or a booster seat.

Booster seats and convertible seats used as booster seats must always face forward.

How to install a car seat and secure your child

To properly secure your child in his seat, you'll need to consider the type of seat and the direction it faces (front or rear). Car seat use is divided into three consecutive phases, starting with the birth of the child.

Read the manufacturer's instructions very carefully before putting your child in a car seat.

Phase 1

Types of seats: Infant seat, child seat or convertible seat (see Types of car seats, page 674)

Direction: Facing the rear of the vehicle

Installation:

- The harness straps must go through the slots in the back of the seat **at the height of your child's shoulders or a little lower.**
- The chest clip connecting the two harness straps must be placed at armpit level (middle of your child's chest).
- The harness straps must be tightened as close as possible to your child's body. Don't leave more than a finger's width between your child's body and the harness.

Good to know...

During baby's first month of life, try to avoid taking him on trips of more than one hour at a time. If you must take your newborn on a long trip, it is a good idea to take frequent breaks. Newborn babies have very little muscle tone and they tend to slide down in their seats, which can constrict their breathing. Stop every now and then to take your baby out of his seat and move him around.

In Quebec, use of a rear-facing seat is suggested until your child is at least two years of age.

Phase 2

Types of seats: Child seat or convertible seat (see Types of car seats, page 674)

Direction: Facing the front of the vehicle

Installation:

- Attach the tether strap located at the top of the car seat back to the anchor bolt in the vehicle. The anchor bolt is usually located behind the rear seats.
- The harness straps must go through the slots in the back of the seat **at the height of your child's shoulders or a little higher.**
- The chest clip connecting the two harness straps must be placed at armpit level (middle of your child's chest).
- The harness straps must be tightened as close as possible to your child's body. Don't leave more than a finger's width between your child's body and the harness.

Phase 3

Types of seats: Booster seat or convertible seat used as a booster seat (see Types of car seats, page 674)

Booster seats raise your child so that the seatbelt is properly aligned to protect him in case of accident.

Direction: Facing the front of the vehicle

It's the law.

In a moving vehicle, your child must be secured in a car seat that is appropriate for his height and weight until he is 145 cm or 9 years old.

For more information

- Read the section on "Car seats" in the vehicle manual. It contains useful information.
- Consult the *Secure Them for Life* brochure: saaq.gouv.qc.ca/fileadmin/documents/publications/secure-them-life.pdf.
- Watch the video clips on the SAAQ website explaining in detail how to use the appropriate car seat for each of the three phases at saaq.gouv.qc.ca/en/road-safety/behaviours/child-safety-seats/. Click on the "Choosing the right seat at the right time" tab, and select the type of seat (e.g. rear-facing seat, forward-facing seat or booster seat) to view the video.
- Visit the Transport Canada website: tc.gc.ca/en/services/road/child-car-seat-safety/installing-child-car-seat-booster-seat/stage-1-rear-facing-car-seats.html.

Car seat safety

All car seats sold in Canada meet Transport Canada standards. Make sure the car seat bears a compliance label before you use it. It is illegal to use car seats purchased in other countries because safety standards may vary from one country to another.

Expiry date

An expiry date is usually engraved on the plastic part of car seats sold in Canada. If you can't find the expiry date, see the seat's user manual or contact the seat manufacturer. Be sure to have the following information on hand: serial number, date of manufacture, and date of purchase of the seat.

Accidents

Your child's car seat may be damaged if a car accident occurs, whether your child was in the car seat at the time of the accident or not. Check the seat owner's manual to determine if the collision was serious enough to require seat replacement. If in doubt, it is recommended that you replace the car seat that was involved in an accident, even if it does not look damaged. Replacement of a car seat involved in an accident is often covered by automobile insurance companies.

Manufacturer recalls

Every year, car seat manufacturers issue a number of recalls. That's why it's a good idea to register your car seat. You can register your seat on the manufacturer's website or fill out the product registration card that came in the original box and return it to the manufacturer by mail. Once your car seat is registered, you'll be able to receive recall notices from the manufacturer.

To find out if a car seat has been recalled, visit the Transport Canada website at tc.gc.ca, click on "Child car seat safety," and go to the section "Safety alerts and notices for child car seats".

Used car seats

Parents are strongly advised not to get a used car seat because you need to know the full history of seat your child will use.

If you do decide to get a used car seat, make sure it meets the following criteria:

- It is in good condition and has all its parts.
- It has the Transport Canada compliance label (the one with the maple leaf).
- It has not been in an accident.
- It is not past its expiry date.
- It has not been recalled by the manufacturer.

Taxis and rideshare services

For safety reasons, taking a taxi or rideshare service with your child is not recommended unless you can put him in a car seat suitable for his weight and height.

If you must take a taxi with your child and don't have a car seat, the *Highway Safety Code* requires him to wear a seat belt, unless he is unable to sit up on his own. If your child can't sit up on his own, it is recommended that you put your own seatbelt on first, then hold the child in your lap.

Some types of transit even have reserved spaces for strollers.

On public transit

Whether by bus, train, or metro, you can take public transit with a baby or young child. Some types of transit even have reserved spaces for strollers.

Public transit is also an environmentally friendly and economical choice. In most municipalities, children ride free with an accompanying adult.

Check with the transit company or your municipality for more information.

Consult Taking baby for a walk, page 762, to learn more about active transport such as cycling, or walking with a baby carrier or stroller.

Babyproofing

Your babyproofing checklist will change as your child grows and develops. Take electrical outlets, for example. Though they are not dangerous for newborns, babies who are crawling could suffer electrical burns if they touch them. So from time to time you need to reassess the dangers that may be present in your child's surroundings.

Is your baby growing, becoming more mobile, and exploring everything by touch? Reassess the home environment regularly, to make sure it is still safe.

As soon as your baby can turn over, pick up objects, and move about, you need to pay special attention to his surroundings.

Get in the habit of looking around your home from your child's vantage point. See what could be done to reduce the risk of accidents. A good tip for inside the home is to physically get down to your child's level and examine every room from his perspective. Are there any toxic products within reach? Store them in a secure location your child can't get to. Don't forget the outside of your home, either. For example, swimming pools must be kept safely secured.

The nursery

Your baby's room must have a window and be well ventilated. If the temperature in the room is suitable for you, it's suitable for your baby, too. A temperature between 20°C and 22°C (68°F and 72°F) is appropriate. When it's cold out, humidity should ideally be kept between 30% and 45%.

Wood and vinyl floors are best because they are easier to keep clean than carpeting, which absorbs moisture from the air and traps dirt. If you have carpets, vacuum regularly to eliminate dirt and dust mites.

During the first six months of life, the safest place for a newborn to sleep is in her parents' room in her own crib.

Crib, cradle, and bassinet

The safest place for a baby to sleep is in a crib that meets Canadian safety standards (see Sleeping safely, page 295). This type of bed can be used until your child is 90 cm (35 in.) tall or is able to climb out of the crib, whichever happens first.

Once your baby is able to sit up or crouch on his hands and knees, place the mattress in the lowest possible position and remove all mobiles and toys suspended over the crib.

Cribs made before September 1986 do not comply with *Canada's Cribs, Cradles and Bassinets Regulations*. They can no longer be sold, and should not be used. Since December 2016, this regulation has also prohibited the sale, import, and manufacturing of drop-side cribs. Neither new nor secondhand drop-side cribs should be used.

You should regularly check the crib to make sure it is in good condition. Make sure all the parts are secured and undamaged. The mattress must be firm and fit the crib. There should be no more than 3 cm (1 3⁄16 in.) between the mattress and the sides of the crib. The side slats should not be more than 6 cm (2 3⁄8 in.) apart.

If you are thinking of using a bassinet or cradle instead of a crib during your baby's first months, make sure the products you choose meet Canadian regulations. Carefully read the manufacturer's instructions before use, and follow all directions.

Bunk beds are dangerous because children can fall out of them. Children under the age of 6 should not use them.

If you use a hand-me-down crib, cradle, or bassinet, make sure it is in good condition and meets current safety standards. Health Canada recommends using cribs that are not more than 10 years old.

For more information, consult the pamphlet *Is Your Child Safe? Sleep Time*: canada.ca/content/dam/hc-sc/migration/hc-sc/cps-spc/alt_formats/pdf/pubs/cons/child-enfant/sleep-coucher-eng.pdf.

You can also contact Health Canada toll-free at 1-866-225-0709 or by email at hcinfo.infosc@canada.ca.

Bedding

The only bedding your baby needs is a fitted sheet for the mattress. If necessary, use a light blanket or sleep sack. If you use a sleep sack, make sure it is the right size for your baby. It is recommended to thoroughly wash and rinse blankets and sleep sacks before use.

Do not place cushions or crib skirts around the bed, or put pillows, positioners, or stuffed toys in the bed, as they present a choking hazard. These items could also cover your baby's head. When he gets older, he could use them to climb out of bed and could hurt himself if he falls.

Wash bedding regularly with hot water to kill dust mites, which feed on dead skin and live in warm, moist beds.

The kitchen

When your baby starts to crawl, you must be even more vigilant in the kitchen. It's best not to use a tablecloth because your baby could pull on it, bringing everything crashing down on herself. Pot and cup handles should be turned toward the centre of the table, buffet, or counter.

Don't leave utensils lying about, and always keep knives and other sharp objects out of the reach of children.

The risk of getting burned is also highest in the kitchen. When cooking, turn pot and pan handles inward on the stove, and use the back burners whenever possible. Also, keep your child away from the hot oven: they could place their hands on it.

If you are frying food, keep your child away so she doesn't get splattered with grease or oil. See Preventing burns, page 699, for additional safety tips.

High chair

The high chair should be kept away from counters and tables because your child could push off with her feet and tip over. Belt your child into the high chair so she cannot slide out or climb over the backrest or the tray.

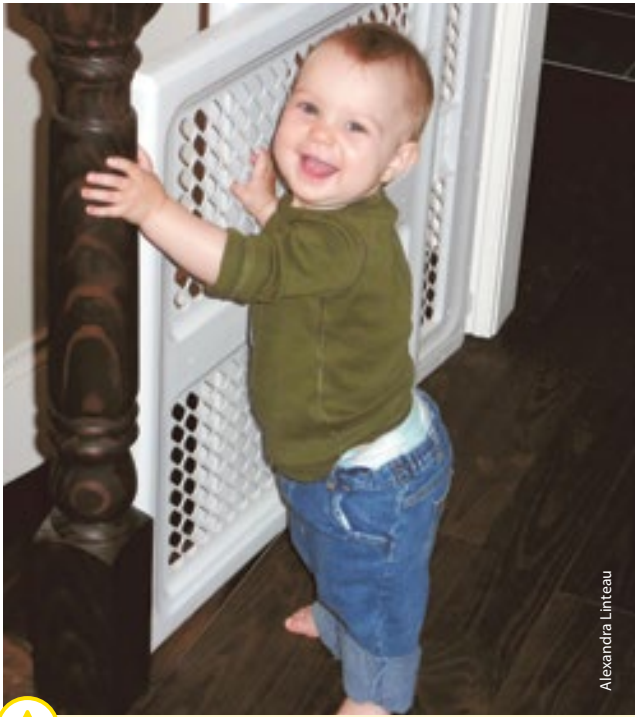
Keep an eye on your child at all times. Some babies manage to get out of their high chair even if they are belted in.

When you use a portable booster chair, your child must be belted in at all times. Even if she is belted in securely, avoid putting the chair on a table or counter. This will help reduce the risk of falls.

Stairs

A gate must be installed at the top of every set of stairs. It's also preferable to install one at the bottom of the stairs. Gates must be securely attached to the doorframe or hallway walls.

If the gate is second-hand, make sure it meets current safety standards by checking the Health Canada website: canada.ca/en/health-canada/services/consumer-product-safety/reports-publications/consumer-education/your-child-safe/is-your-child-safe.html.



A gate must be installed at the top of every set of stairs.

Blinds and window coverings

Since May 1, 2022, the sale of blinds and window coverings with reachable long cords (over 22 cm) has been prohibited in Canada. It is recommended to replace all such window coverings.

Cords used to operate blinds or window coverings are dangerous for children: playing with them is a strangulation hazard.

Since May 1, 2022, the sale of blinds and window coverings with long accessible cords (over 22 cm) has been prohibited. It is recommended that such blinds and window coverings be replaced, especially in children's bedrooms and any rooms where they play.

If you cannot immediately replace blinds or window coverings with long accessible cords, take measures to reduce the strangulation hazard until you can.

- Install your baby's crib away from the window.
- Secure blind and curtain cords very high up, out of your child's reach.
- Make sure your child cannot reach the blinds by climbing on furniture or anything else near the window.
- Follow the manufacturer's instructions and read all warnings.

Health Canada recommends against using low-cost PVC mini-blinds from China, Taiwan, Indonesia, Hong Kong, and Mexico manufactured before 2009 because they may contain lead.

Furniture, appliances, and televisions

Children sometimes climb or grab onto furniture and appliances. They can then fall or be crushed under the weight of the furniture. Dressers, bookcases, cabinets, and other furniture should always be secured to the wall. The same holds for appliances and televisions.

Always read assembly instructions, and ensure furniture is correctly assembled. Furniture with a wide and sturdy base is less hazardous than furniture on legs or wheels.

Secure furniture to the wall using the anchors provided at the time of purchase, and always follow manufacturer's instructions when installing anchors. If you do not have an anchor, obtain straps or anchors to secure furniture to the wall.

Electrical cords and outlets

Appliance and extension cords can be dangerous if they are left within reach. They can cause electrical burns if children put them in their mouth. Your child could also pull on a cord, causing an appliance to fall on him. Some appliances, such as irons or kettles, can also cause burns.

To keep your baby from getting an electrical shock (e.g., by inserting something in an electrical outlet), ensure all outlets are secured with a snug-fitting outlet cover.

Toxic products

Keep toxic products (e.g., cleaning products, certain plants, personal care products), prescription drugs, and natural health products out of children's reach. Store them in cabinets or drawers with safety latches or in places children cannot get into.

Objects dangerous to children

Many objects can be dangerous for babies and young children.

Kitchen knives and other sharp objects must be kept out of children's reach. For example, make sure that tacks, nails, or screws are inaccessible.

Small items that could be swallowed or cause choking should also be stored out of children's reach. Once your baby begins to move around, make sure to never leave small objects on the floor (see Preventing suffocation and choking, page 697).

Living in a smoke-free environment

Babies and children are more sensitive to tobacco smoke and aerosols (airborne substances) because their organs are still developing.

Asthma, otitis, bronchitis and pneumonia are more common in children exposed to tobacco smoke. Exposure to tobacco smoke also increases the risk of **sudden infant death syndrome** (SIDS) (see Sudden infant death syndrome (SIDS), page 298).

Tobacco, vaping, and cannabis products give off smoke or other substances that are dangerous, especially for babies and young children.

Smoking outdoors

Smoking in the home poses a threat to the health of everyone who lives there. The dangerous products in smoke spread throughout the air, settle on the ground and on objects, and stay there for months. Opening the windows, turning on the range hood, or smoking in a designated room are not effective solutions. Even a high power ventilation system like the ones you sometimes see in public places cannot eliminate all cigarette smoke.

That is why you should not smoke in the home, even when your children are not there. For your child's health, do not smoke in your home or car.

Choosing toys

Safe toys are:

- Washable
- Non-toxic (check the label)
- Unbreakable
- Non-flammable (flame-resistant)
- Big enough so children cannot swallow them
- Compliant with Canadian government safety standards (check on the website: canada.ca/en/health-canada/services/consumer-product-safety/reports-publications/consumer-education/your-child-safe/play-time.html)

It's best to avoid soft vinyl (PVC) toys and rattles because some substances used to make them more flexible are toxic. Children can absorb these substances by chewing on them. In the bath and wading pool, avoid rubber toys that retain water because they can breed germs.

Before you buy a toy

- Read the label to find out the recommended age.
- Examine the toy to see if it is easy to handle.
- Check that there are no sharp edges or pointed tips.
- Make sure it doesn't have any small parts that can break loose or come unstitched. Parts on large toys should not come off easily.
- Avoid toys with cords, especially elastic cords that could get wrapped around the child's neck.
- Be careful with small items, small parts, and button cell batteries (the kind used in watches), as the child could put them in his nose or mouth and swallow or choke on them.
- Make sure baby toys like rattles and teething rings are large enough so they cannot get caught in your baby's throat and choke him.

- Musical toys are great because they stimulate baby's sense of hearing and sight, but check the gears and make sure small parts do not come apart.
- Be careful however with toys that are too noisy as they can damage children's hearing and irritate parents. Try them out before you buy them.

If you acquire used toys or other items, make sure they are in good condition and meet current safety standards.

For more information, read the brochure *Is Your Child Safe? Play Time*: canada.ca/en/health-canada/services/consumer-product-safety/publications/consumer-education/your-child-safe/play-time.html.

You can also contact Health Canada toll-free at 1-866-225-0709 or by email at hcinfo.infosc@canada.ca.

Packaging, batteries, and magnets

- Throw away all plastic, cellophane, and polystyrene (Styrofoam) packaging.
- Properly install the right type of batteries in toys to prevent leaks. Battery fluid is corrosive and should not come into contact with your child's skin, let alone his mouth, nose, or eyes.
- If your baby's toys have batteries, they should be difficult to access (e.g., in a screwed compartment).
- Don't let your child play with small magnets. He could put them in his nose or in his mouth and swallow or choke on them.

Preventing falls

Babies fall a lot, even when you think they are in a safe place. Supervision is needed whenever falls are likely and your baby could hurt herself. Here are some examples:

- A child is left alone in her high chair. She tips over her high chair or falls trying to get out.
- An adult is changing a baby's diaper on a changing table and steps away to get something.
- A child falls out a window that does not have a window guard preventing it from opening more than 10 cm.

Stairs

A gate must be installed at the top of every set of stairs. It's also preferable to install one at the bottom of the stairs. (see Babyproofing - Stairs, page 687).

Baby walkers

Baby walkers are prohibited in Canada because children can fall down the stairs in them, causing head and other injuries. Health Canada recommends using stationary activity centres for babies instead. They are safer than walkers because they do not have wheels.

Make sure your child uses age-appropriate play structures.

Play structures

Playground equipment and slides

Make sure your child is under adult supervision whenever she uses play structures like playground equipment and slides. Teach your child how to play safely on this kind of equipment.

Falls are the leading cause of injury on playground equipment and slides. The risk of injury is linked primarily to two factors:

- The height of the play structure (the higher it is, the more dangerous it is).
- The type of material under and around the play structure (e.g., falling on concrete is riskier than falling on sand).

Make sure your child uses age-appropriate play structures. If you install a play structure at home, follow the manufacturer's installation instructions.

Deaths are rare on playground equipment and slides. When they do happen, they usually result from a child's head, neck, or clothing (e.g., cords or scarves) getting stuck in a play structure opening. For this reason, when your child uses these play structures, make sure she is not wearing any clothing with cords, have her wear a neck warmer instead of a scarf, and remove her bike helmet, if she is wearing one.

Trampolines

Because so many trampoline injuries are reported, Health Canada recommends that children under 6 not be allowed to play on trampolines, even with supervision.

Preventing drowning

A child can drown in a matter of seconds, even in a small amount of water like in a bathtub. A drowning child doesn't necessarily make any noise.

> **!** Never leave a child in a bathtub, pool, wading pool, or natural body of water without adult supervision.

Many organizations offer first aid training, including cardiopulmonary resuscitation (CPR). It's a good idea to know CPR in case you ever need to use it. Your municipality or CLSC can tell you about the courses available in your area.

Never leave a child near a bathtub, pool, wading pool, or body of water without adult supervision.

Bathtub

Children can drown in a bathtub if they slip or lose their balance. Bath seats and infant inner tubes cannot prevent this kind of accident. They give adults a false sense of security, which can lead to drowning.

To learn more about bathing your infant and safety during bath time, see Bathing your baby on page 597.

Pools

Fatal and non-fatal swimming pool drownings occur most often when no one is actually swimming and a child accidentally falls in the water. Oftentimes this type of accident happens when a child living at the home or in the neighbourhood is able to gain access to the pool when no adults are present.

To find out how to secure all types of pools (above ground, inground, and inflatable), contact your city or town.

For more information and safety tips about backyard pools, visit quebec.ca/piscinesresidentielles (in French only).

Bodies of water

Your child must be constantly supervised around lakes, rivers, oceans, and other bodies of water. It only takes a moment for a child to slip away and risk drowning.

When you go out on the water, always wear a life jacket. Make sure children and the other people with you wear one, too. Life jackets must be appropriate for the person wearing them and for the type of activity. Fasten life jackets properly. If the boat capsizes, life jackets can save the lives of everyone onboard.

Water gardens and features

Since children can drown in even a very small amount of water, caution should also be exercised around shallow ponds, like water gardens and other landscaping water features.

Preventing suffocation and choking

Small objects

Young children tend to put everything they touch in their mouth. Small objects can be swallowed easily and cause choking. It is best to keep them out of your child's reach.

The Canadian Paediatric Society advises that if an object can fit in a toilet paper roll, it represents a choking hazard.

Some types of food can also become lodged in your child's throat or block her **airways**. Read Choking risk: Be extra careful until age 4, page 529, for more information.

When young children choke, it's usually on small everyday objects and food.

Your child can also suffocate on objects (like a plastic bag), that risk covering her mouth and nose preventing her from breathing. It is a good idea to put a knot in used plastic bags before storing them out of the reach of children or putting them in the recycling bin or the garbage.

Latex balloons are dangerous for young children because they can choke on them. Make sure balloons (both inflated and uninflated) and pieces of popped balloon are always kept out of children's reach.

Cords

Caution must also be exercised with hanging cords and toys, like mobiles. Cords on clothing, curtains, and toys should be no longer than 20 cm (around 8 in.).

Preventing burns

Electrical outlets and wires

To keep your baby from being burned or getting an electrical shock, make sure his environment is safe. Ensure all outlets are secured with a snug-fitting outlet cover, and never leave appliance or extension cords hanging (see Babyproofing - Electrical cords and outlets, page 689).

Fire

It is essential that you install a smoke detector on every floor and replace the battery periodically, for example when you change your clocks in the fall and spring.

Keep matches, lighters, and candles out of the reach of children.

Ensure all outlets are secured with a snug-fitting outlet cover. That way, your baby will be safe from electrical shock.

Hot liquids

Children have thinner skin than adults, so they can be burned more easily by a hot liquid. Some accidents can easily be avoided. For example, don't eat soup or hot beverages when you are holding your baby or leave a hot liquid unattended. Also beware of steam and hot electrical appliances.

Hot water

Québec's *Building Code* requires that home water heater thermostats be set so that the water in the tank is no cooler than 60°C (140°F). This reduces the risk of water contamination by bacteria. At that temperature, however, water can cause second- and even third-degree burns in children within a second.

Burns caused by hot tap water occur most often at bath time. To prevent the risk of burns, always check the water temperature with your elbow or wrist before putting your child in the tub. Water should be warm, i.e., body temperature.

You should ideally have a device installed on the faucet you use to bathe your child (e.g., bathtub or sink faucet) to keep the water temperature at or below 49°C (120°F). This device can be installed on the pipe or near the faucet. You can also purchase faucets with this device built in.

Some children are capable of turning on the hot water tap and burning themselves. Never leave your child in a bathtub or sink without adult supervision.

Never leave your child in a bathtub or sink without adult supervision.

Preventing dog bites

Children are unpredictable and unable to recognize the signs of aggression in an animal. For this reason, they are susceptible to dog bites, even from your own dog or the neighbour's dog.

Remember that a dog that is gentle with your child may show aggression toward other children. Take signs of aggression seriously. If the dog bares its teeth, growls, or pretends to bite, see your veterinarian or a dog trainer.

When you are at someone else's home, be especially vigilant if the household dog does not know your child.

Never leave a child alone with a dog, even if the animal knows the child and does not seem dangerous.

Preventing poisoning

Every year, thousands of children are poisoned in Québec by ingesting a toxic product, getting a toxic product in their eyes or on their skin, or inhaling toxic vapours.

These products are everywhere: in kitchen cabinets, in the bathroom, bedroom, or garage, even in your purse.

Many household products and plants can be toxic to children (e.g., vitamins, drugs, cosmetics, cleaning products, cannabis and nicotine products, fuel, plants, mushrooms, pesticides, and personal care, car care, and renovation products).

Québec Poison Control Centre has published a number of poisoning prevention pamphlets. To learn more, visit their website:

Québec Poison Control Centre
ciusss-capitalenationale.gouv.qc.ca/antipoison/
(Mostly in French)
1-800-463-5060

Medications and toxic products: tips on poison prevention

- Keep toxic products, medications, and natural health products out of children's sight and reach.
- Store these products in cabinets and drawers with safety latches or in places children cannot get into.
- Keep these products in their original containers with a childproof cap.
- Never transfer hazardous products to food containers (e.g., gasoline in a water bottle).
- Keep children away from ashtrays and glasses containing alcoholic beverages.
- Keep purses and other bags that may contain toxic products (e.g., cosmetics, drugs, hand sanitizers, nicotine products) out of reach of children.
- Carefully read the instructions before you give your child any medicine and measure out the exact dose. See your pharmacist if you need help.
- Never leave medication on the changing table or near the crib.
- Return expired medications to the pharmacy. This keeps them from accumulating at home and ensures they are not stored in unsafe locations or thrown out in the garbage.

Plants

Many indoor and outdoor plants have toxic leaves and fruits that can cause conditions such as skin irritation, swelling, trouble swallowing, dry mouth, diarrhea, vomiting, and hallucinations.

To prevent exposure to toxic plants, it's worth checking to see if your indoor and outdoor plants are toxic. As soon as your child can crawl or walk, keep these plants out of her reach.

Keep plants in their original container so you can easily identify them later. If you don't know the name of your plants, ask at a garden centre or florist. It may be useful to bring along some photos so they can help identify them.

Outdoor mushrooms

Some outdoor mushrooms can cause poisoning. This can result in serious damage to a child's liver and digestive system.

To prevent poisoning caused by outdoor mushrooms, it's a good idea to pick or destroy them before children can find them. Since they grow quickly, be vigilant and keep a watchful eye out for them.

Protecting your baby from the sun

Little ones should not be exposed to the sun without protection because their skin is very thin and burns easily. This means you'll need to protect your child from the sun's rays, which can cause sunburn, dry skin, and allergic reactions. Children with dark skin must be protected from the sun, too. It is important to keep children out of direct sunlight between 11 a.m. and 3 p.m. This is especially important around noon when the sun is most intense.

Under 6 months – It is best to keep your baby in the shade and to protect him with clothing and a hat. Skin is very delicate at this age and applying sunscreen could cause allergic reactions.

6 months and up – Whenever your baby is outdoors, dress him in a hat and clothing that covers his arms and legs. About 30 minutes before going out, apply sunscreen to exposed body parts. Reapply every two hours and after swimming.

It is always good to cover your child as much as possible (lightweight clothing and hat) and to keep him in the shade to protect him from the sun's rays.

Up to 85% of UV (ultraviolet) rays can pass through clouds, so sunscreen is a must even when it's cloudy. Choose a sunscreen with a high sun protection factor (SPF 30 or 50). Your pharmacist can help you find an appropriate one.

Eyes and the sun

The sun's UV rays are dangerous to the eyes and can be reflected by sand, water, and snow.

The best way to protect your child's eyes is to put a large brimmed hat or cap on his head.

Never seat your child in facing the sun. Shade is best.

If you decide to put sunglasses on your child, make sure they protect against UV rays before you buy them. Look for the words "100% UV protection" or "UV 400."

Protecting your baby from insect bites

To protect children under age 2 from insect bites, you can:

- Put a mosquito net over your child's stroller.
- Dress your child in light or khaki coloured lightweight clothing made of a closely knit fabric that is closed at the neck, wrists, ankles, and waist.
- Put a hat or cap on her head and cover the back of her neck if necessary.
- Keep your child indoors when mosquitoes are most active (sunrise and sunset).

Insect repellent must be used with caution and only if there is a high risk of insect bite complications. For instance, you may decide to use it if your child is allergic to bites or there is a chance she could contract a mosquito-borne disease while travelling abroad.

Under 6 months – Do not use any insect repellent.

6 months to 2 years – Do not use products containing more than 20% icaridin, 10% DEET, or 2% soybean oil. These products protect against mosquito bites. Those containing 20% icaridin also protect against tick bites.

Apply a small amount once daily to body parts exposed to the air. Do not apply to the face or hands. The product may be applied to your child's hat or cap, depending on the fabric.

When protection is no longer needed, wash all skin that was in contact with insect repellent with soap and water.

Good to know...

The duration of action (between 90 minutes and 10 hours) varies depending on the product's ingredient and concentration. Your pharmacists can advise you.

Avoid combination insect repellent/sunscreen products because sunscreen should be applied more generously and more often than insect repellent.

Start with sunscreen, wait 30 minutes to let it absorb, then apply the insect repellent to limit its absorption into your skin.

Citronella and lavender oil-based repellents as well as citronella-scented eucalyptus products are not recommended for children under 2 because they are not effective for very long.

To learn about insect bite first aid, see Insect bites, page 721.

First aid

Anne-Marie Turcotte-Tremblay

As a parent, you will at some point have to care for and provide comfort to your child when he injures himself. Here are a few first aid basics that may come in handy in case of an accident.

Keep in mind, however, that these basics cannot replace a first aid course.

Many organizations offer first aid training, including cardiopulmonary resuscitation (CPR). It's a good idea to know CPR in case you ever need to use it. Your municipality or CLSC can tell you about the courses available in your area.

You may also need the opinion or assistance of a health professional. Don't hesitate to call 9-1-1 in an emergency, or Info-Santé (8-1-1) if you need advice.

Bites

If your child has been bitten by an animal or another child, clean the wound with soap and running water for several minutes.

Contact Info-Santé (8-1-1) or a doctor in the following situations as treatment may be necessary (stitches, antibiotics, or vaccines):

- The teeth went through the skin and caused bleeding or a wound.
- Redness develops around the bite in the days that follow.
- You think your child has been in contact with a bat.
- Your child was bitten by a pet displaying unusual behaviour (e.g., aggression or fearlessness) or by a wild animal.

Once the scrape or cut has been cleaned, watch for signs of infection.

Scrapes and cuts

For a minor, superficial cut or scrape that is not bleeding profusely:

- Wash your hands with soap and water before caring for the wound.
- Clean the wound with water and mild, unscented soap.
- Rinse the wound under running water for 5 minutes and remove any foreign objects (e.g., dirt or gravel).
- Dry the affected area. You can apply an over-the-counter antibiotic ointment.
- Place an adhesive or gauze bandage over the wound, depending on how large it is.
- Watch for signs of infection around the wound (redness, pain, warmth) in the days that follow. See a doctor if you notice any signs of infection.

If your child has not been vaccinated or is not up to date on her shots, she may need a vaccine. You can check this with a health professional or Info-Santé (8-1-1).

If the cut is large or is bleeding profusely, put a bandage or clean towel over it and apply pressure to stop the bleeding. Usually, 5 to 15 minutes of pressure is enough. While doing so, call Info-Santé (8-1-1) to find out if your child needs to see a doctor to have the cut looked at or to close the wound.

Small object in the nose

Even if your child is well supervised, she can put all sorts of things in her nose like buttons, pebbles, pieces of foam, dry peas, and peanuts, for example.

If the object is sticking out of the nostril and can be easily grasped with your fingers, you can try to remove it. Otherwise don't try to remove it because you could push it in further: take your child to the doctor immediately.

If your child has a cell button battery (i.e., watch battery) in her nose, go right to the emergency room. The chemical products in the battery could leak and cause serious burns.

If your child has a nosebleed, have him sit down and lean his head forward slightly, pinch his nostrils, and maintain pressure for about 10 minutes.

Nosebleeds

Bleeding can occur when the nose is irritated after a cold or when a child has put a finger or object in a nostril. Nosebleeds are generally harmless.

If your child is bleeding from the nose, follow these steps:

- Reassure him.
- Have him sit down and lean his head forward slightly.
- Make sure he is breathing through the mouth.
- If your child is able to blow his nose (rare in children under 2), have him blow it into a tissue to clear out any blood clots.
- Pinch his nostrils, just below the bony part of his nose, between your thumb and index finger.
- Maintain constant pressure for about 10 minutes; that should stop the bleeding.
- If bleeding persists, contact Info-Santé (8-1-1) or a doctor.

Oral and dental injuries

Tongue or lip bites

Gently clean off the blood with a clean, dry cloth. To stop the bleeding, apply direct pressure to the wound. Apply a very cold wet washcloth to keep swelling down.

If the wound is still bleeding after 10 minutes, go to the emergency room.

You can call Info-Santé (8-1-1) to assess the seriousness of the wound or if you have concerns.

Knocked out baby tooth

Don't put the tooth back into the gum. Keep it so a dentist can take a look at it.

Apply light pressure to the wound with a clean cloth. See a dentist.

Broken or displaced tooth

See a dentist as soon as possible.

Blow to a tooth

After a blow or a fall, if a tooth seems to have been pushed into the gums or if the lips and gums are bleeding profusely, see a dentist or doctor as soon as possible.

The tooth can turn greyish in the months following the accident. If this happens, see a dentist.

Bumps and blows to the head

Active young children hit their heads frequently, for example when they fall down. Most of the time these bumps and blows to the head are not serious and cause no harm. However, sometimes a more severe blow can lead to complications. These complications can arise immediately, or up to 72 hours after the bump or blow to the head.

You can also call Info-Santé at any time by dialling 8-1-1 if you have any concerns.

What to do?

If any of the situations described in the red box on the next page apply to your child, see a doctor or go to the emergency room right away.

If your child is behaving normally and is not displaying any of the symptoms listed in the red box, keep a close eye on him.

In the first 6 hours after the blow to the head – If your child wants to sleep, let him. But wake him up every two to three hours to make sure he is reacting normally. If he is still reacting normally after six hours, you can let him sleep as he usually would.

In the first 72 hours after the blow to the head – If your child has any of the symptoms described in the red box, see a doctor.

See a doctor or go to the emergency room right away in any of the following situations:

- Your child is less than 3 months old.
- Your child has lost consciousness.
- He is semi-conscious, disoriented, or behaving strangely (e.g., he is difficult to wake, very irritable, does not make eye contact, or displays some other behaviour you find troubling).
- He is having a convulsion, is very agitated, or is shaking.
- He has trouble moving an arm or a leg, has trouble walking, or lacks coordination.
- He has a lump or deformation in the scalp area (on the top, back, or side of his head).
- He fell from a height of more than 0.9 metre (3 feet) or 5 steps.
- His head was hit very hard or hit by a fast moving object.
- He has vomited more than once.
- A bruise appears behind his ear or under his eye.
- There is a clear or reddish discharge from his ear.

Call 9-1-1 if the situation seems serious and urgent enough that you need an ambulance.

If your child's clothing is on fire, lie her down and quickly roll her entire body except her head in a blanket to extinguish the flames.

Burns

In the event of a burn caused by fire, boiling liquid, or steam, run cool water over the burn or immerse it in cool water for 10 minutes.

If you cannot put the burn under water, apply a cool, clean wet cloth to the burned area. Do not rub it. Wet the cloth again when it is no longer cool.

If the clothing your child was wearing is stuck to the skin, do not remove it. Apply a cool, clean wet cloth and go to the emergency room.

Go to the emergency room if the clothing is stuck to your child's skin, the burn is extensive, or it affects the face, neck, hands, feet, genitals, or a joint.

If the burn is small and superficial, you can apply an over-the-counter antibiotic ointment and put a bandage on it. Other substances like baby oil, vinegar, butter, and toothpaste can make the burn worse.

If there is a blister, do not pop it because doing so could cause pain and lead to infection.

If the burn does not heal or shows signs of infection (e.g., redness around the burn or drainage), see a health professional.

You can call Info-Santé (8-1-1) to determine the severity of the burn or get information if you have any concerns.

Electrical shock

If your child gets an electrical shock and is still touching the electrical source, cut the electricity before you pull your child away.

If your child is no longer touching the electrical source, you don't have to wait before touching him.

If your child is unconscious, yell for help and have someone call 9-1-1. If no one can help, call 9-1-1 yourself. See Loss of consciousness, page 726.

Electricity can cause serious problems (e.g., internal burns and heart problems). Always call Info-Santé (8-1-1) or take your child to the emergency room.

Foreign object or chemical product in an eye

To remove a foreign object (grain of sand, small insect, blade of grass, eyelash, etc.), gently rinse the eye under a slow stream of warm water at the faucet.

If you see a foreign object in the inside corner of her eye, try to remove it with the corner of a wet tissue. If you cannot remove the foreign object, the eye continues to tear, or your child's condition does not improve

- Don't insist
- Keep your child from rubbing her eye and apply a cold wet washcloth to the eye to relieve the pain
- See a doctor or optometrist right away

If your child got splashed in the eye with a product that can cause burns (household cleaning product, pool chlorine, etc.), rinse the eye immediately. Be careful not to contaminate the other eye when rinsing. Rinse for a long time, from 15 to 30 minutes. Exact rinsing time depends on the product that caused the burn.

As soon as you start rinsing, contact the Québec Poison Control Centre for further instructions at 1-800-463-5060. They will instruct you how to proceed.

If your child is too young to cooperate while you rinse her eye under the tap, place her on her back, keep her eye open, and pour water right into her eye with a cup.

Poisoning and contact with hazardous products

Poisoning is the second leading cause of hospitalization in children 4 and under. It often occurs at home. The most common source of poisoning in small children is medication (vitamins, antibiotics, cold and fever medication) and household products (cleaning products, fuel, personal hygiene products, plants, mushrooms, pesticides, etc.).

If you suspect poisoning or contact with hazardous products and your child has difficulty breathing or is unconscious, call 9-1-1. See Loss of consciousness, page 726.

Always have the product that caused the poisoning with you when you call the Québec Poison Control Centre so you can read the label to the person who assists you.

What to do?

Ingested product

- Clean out and rinse your child's mouth.
- Do not induce vomiting.
- Do not try to neutralize the product by giving him milk or anything else.
- Call the Québec Poison Control Centre at 1-800-463-5060. Do not administer treatment unless instructed to do so by a Poison Control Centre nurse or a health professional.

Product in the eyes or on the skin

- Rinse the affected area with warm water for at least 15 minutes.
- Keep your child's eye open while you rinse it (see Foreign object or chemical product in an eye, page 718).
- Call Québec Poison Control Centre at 1-800-463-5060.

Inhaled product

- Take your child out into the fresh air.
- Call Québec Poison Control Centre at 1-800-463-5060.

Good to know...

Québec Poison Control Centre is a 24-hour emergency helpline. Staff will explain what to do based on your child's condition, the product involved, and how it was ingested or what organ it came into contact with (mouth, lungs, skin, or eyes).

Québec Poison Control Centre has a number of prevention publications available on its website: ciusss-capitale nationale.gouv.qc.ca/antipoison/ (Mostly in French).

Insect bites

If you see a stinger, remove it. Then, whatever the type of insect bites it is, clean the bite with soap and water.

To help relieve itching or reduce swelling, use a cold compress, lemon juice, or a paste made of equal parts baking soda and water.

Call 9-1-1 if your child develops

- Red patches on the skin

AND one or more of the following:

- Sudden and severe change in her general condition (e.g., irritability, drowsiness, loss of consciousness)
- Swollen lips or tongue
- Difficulty breathing
- Sudden vomiting

She could be having a severe allergic reaction.


Marie-Ève Murray

Choking

The following information is not a substitute for a first aid course. Many organizations offer first aid training, including choking manœuvres. Your municipality or local CLSC can provide information on courses in your area.

Your child put a candy, nut, piece of grape, or some other small object in his mouth and it got stuck there.

Your child is breathing, coughing noisily, talking, or making sounds?

Do not intervene as long as your child is still coughing noisily. This means he is trying to dislodge the item on his own. Encourage him to cough vigorously (e.g., try coughing along with him so he'll imitate you).

Call 9-1-1 if you're worried about your child's breathing.

If your child is unable to breathe, cough, talk, or make sounds, see page 724.

Illustration: Audrey Malo

Think of the lungs as plastic bottles and whatever is blocking your child's breathing as a stopper. The manœuvres aim to pop the stopper off by pressing firmly on the bottles.

Your child is unable to breathe, cough, talk, or make sounds?

1. Do the manœuvres described below and onto the next page immediately.

2. Call for help and make sure someone calls 9-1-1.

Manœuvres

Choking manœuvres are intended to expel whatever is blocking your child's **airway**. Doing so requires you to press down firmly on the lungs.

The next page shows how to do it, depending on the age of the child.

Manœuvres

Child under age 1

1. **Give 5 firm taps between the shoulder blades** with the palm of your hand.
2. Turn your child over and **push hard 5 times** with 2 fingers in the middle of their **chest**, just below an imaginary line between the nipples.

Alternate steps 1 and 2 until your child starts breathing, coughing, or crying.

If your child loses consciousness, see Loss of consciousness, page 726.

Child age 1 or older

Perform abdominal thrusts: Place your fist on your child's stomach just above the belly button, then thrust firmly inward and upward (J-shaped movement).

Repeat the thrusts until your child starts breathing, coughing, talking, or crying.

If he loses consciousness, see Loss of consciousness, page 726.

Take your child to the emergency room after a choking episode because there could be complications.

Loss of consciousness

The following information is not a substitute for a first aid course. Many organizations offer first aid training covering the steps to take when someone is unconscious (including cardiopulmonary resuscitation (CPR) with rescue breathing). Your municipality or local CLSC can provide information on courses in your area.

A child who has lost consciousness will be immobile, limp, and unresponsive when you touch her or call her name.

Your child is breathing?

1. **She suffered a blow to the head, neck, or torso**
   – Don't move her;

   She did not suffer a blow to the head, neck, or torso
   – Turn her on her side.

2. Call 9-1-1. The operator will tell you what to do.

Your child isn't breathing

1. Call for help and make sure someone calls 9-1-1.

2. Do the manœuvres described below. The 9-1-1 operator can guide you.

Manœuvres

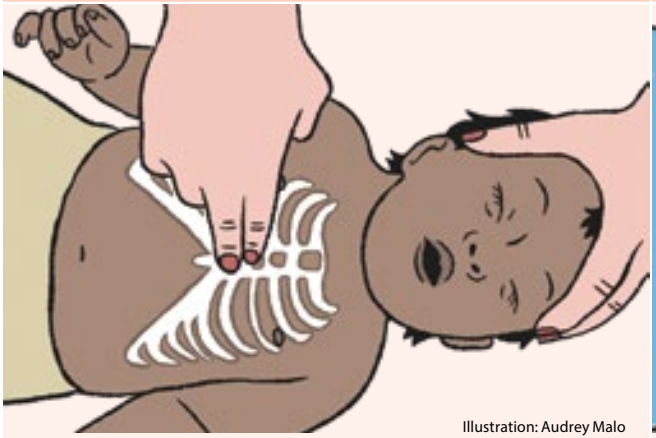
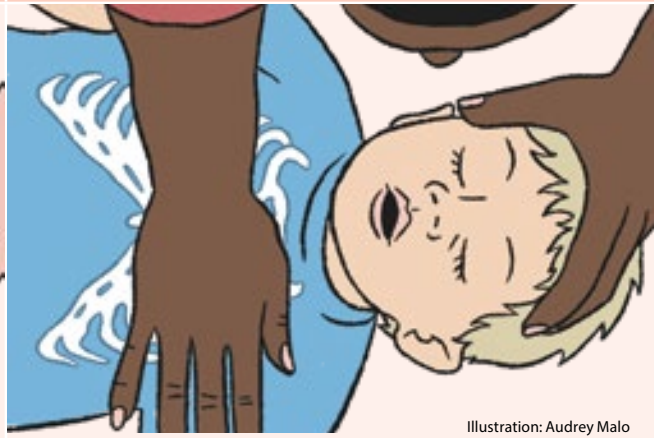
1. Place your child **on her back** on the floor.

2. **Press her chest firmly** toward the floor, **then release** to allow it to return to its normal position.

3. Repeat the compression and release in a **rapid and continuous up-and-down** motion until your child responds or breathes or until help arrives.

The next page shows how to do it, depending on the age of the child.

A person trained in first aid should favor manœuvres with ventilation.

Manœuvres	
Child under age 1	**Child age 1 or older**
 Illustration: Audrey Malo	 Illustration: Audrey Malo
Press down on **the middle of the chest** with 2 fingers, just below an imaginary line between the nipples.	Press down on **the middle of the chest** with the palm of your hand, between the nipples.

Take your child to the emergency room when they regain consciousness because there could still be complications.

Mélissa Martin

Being a father

Anne Leclerc

Fathers are more and more involved in their children's lives. They want to play a full and active role. For many, fatherhood can be a source of accomplishment and pride.

Becoming a father

Becoming a father means learning a new role, one that begins during pregnancy and lasts a lifetime. It is a major change that brings great joys—and great challenges!

Your experience of becoming a father may vary depending on your situation (see Emotional changes, page 50). Preparation for the baby's arrival can also vary from person to person, even within the couple. Talking to your partner about your respective expectations and concerns can help your couple adjust to these new realities.

After the delivery, your life as a parent truly begins. You will ease into your new role and learn to take care of your baby day by day as you spend more time with her.

At first, your daily routine may feel like it's been turned upside down. Schedules are all over the place, the house is a mess, you're trying to get your bearings as a couple, and nothing is the same as before. It's normal—most new parents go through this phase. The adjustment period may last a few months for some, or a few years for others.

Talking with other dads

If you have the chance, take time to chat with other dads. They've been there. Hearing about their experiences can do you good and help get you through the tougher moments. Talking to someone other than your partner can also help you better understand what you're going through.

Some fathers may experience a period of depression after the birth of a baby (see Depression, page 262). If this happens to you, don't hesitate to seek help right away.

Importance of the father-child relationship

Fathers sometimes underestimate their role. Loving, actively involved fathers contribute to their children's well-being and development, strengthening their self-esteem. For example, this could be done by helping them discover the world through games and books.

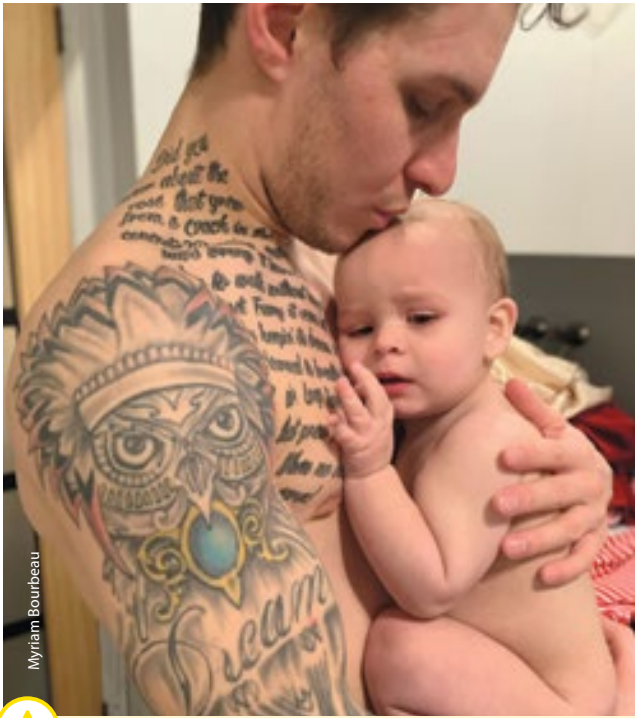
The presence of a caring father helps his child—boy or girl—to be more confident and to reach his or her full potential. By taking an active role from the moment your child is born, you help create a bond that lasts for the years to come.

Developing your relationship with your baby

Here are some things you can do to build your relationship with your baby:

- Take care for your baby, change her diapers, give her a bath, rock her, and put her to sleep
- Play and do activities with her
- Show her your affection
- Talk to other parents about your child, share baby photos with friends, and tell them how proud you are!

Playing an active role in organizing family life also strengthens your relationship with your child. You can do this by keeping track of your baby's health record, booking the babysitter, going to swimming lessons with your child, preparing meals, or contributing to the family income, for example.



Physical contact with dad is comforting and reassuring for your baby.

During the pregnancy

You can start establishing a relationship with your baby during pregnancy. To help make baby's upcoming arrival feel more real, you can

- Attend prenatal checkups and **ultrasound** appointments where you can see your baby
- Listen to your baby's heartbeat at prenatal checkups
- Touch the mother's belly to feel the baby moving
- Attend prenatal sessions, especially ones designed for dads (if available in your area)
- Work with your partner to get the baby's room ready—a good way to start visualizing daily life with your baby
- Talk with other dads about their experiences

Starting at 24 weeks, the baby can hear sounds from outside the womb, including your voice.

During delivery

Childbirth can be a rollercoaster ride of conflicting emotions for fathers—everything from stress, worry, fear, and helplessness to excitement and great joy. For many dads, the birth of a child is an unforgettable experience. Holding and talking to your baby for the first time makes fatherhood very real all of a sudden. This is also the moment when your couple becomes a family, or your family grows.

The father plays an important role during labour and delivery by accompanying and supporting his partner as she gives birth. There are different ways for him to provide support (see Having someone with you during childbirth, page 210). He can also act as the contact person, keeping family and friends informed.

The father needs to pay attention to his own needs and the emotions the birth can trigger.

After the birth

Spending time with your newborn allows you to quickly establish a relationship, one that can help you build the attachment bond that's necessary for your child's development. For this to happen, your baby needs to get to know you, and you need to get to know your baby.

Find time to be together just the two of you. You can enjoy skin-to-skin contact (see Skin-to-skin contact, page 241), take her for a walk in the baby carrier or stroller, or give her her bath, for example. Moments like these allow you to develop your own special father-child relationship and gain confidence in your abilities.

Baby becomes attached to the people who are close to her and respond to her needs.

Feeding baby together

Feeding your newborn will be one of your main activities as parents in the weeks after the birth. You can get involved by teaming up with your partner in a variety of ways.

Breastfeeding requires a lot of time and energy from the mother. It can be very rewarding, but also very demanding. If your partner is nursing, you may sometimes feel left out and not very useful. However, there are a number of ways you can help share in the responsibilities around breastfeeding, for example:

- Bring baby to mom to breastfeed
- Burp her after she has fed
- Change her diaper
- Hold her after she has fed
- Rock her to calm her or help her to sleep (see Skin-to-skin contact, page 241)

See also The role of the partner, page 180.

If your baby is bottle-fed, these are all equally useful ways of contributing to her care and feeding.

You can also get involved when it's time to introduce solid foods. Sharing in your baby's discovery of new foods can be another special moment you enjoy together.

Working as a team with your partner

One of the challenges of fatherhood is working together with another parent on a daily basis (see Being parents, page 744). Exploring this new reality together, supporting each other through the difficult moments, and sharing in the joys and sorrows that come with the birth of a child isn't always easy.

Try to be open, present, and attentive to your partner. This can help you adapt to the changes in your relationship and work through this period of transition together.

It's also important to try to find time for intimacy. This is often easier said than done in the weeks and months after the arrival of a baby. Give yourselves time and you'll find ways to adjust your private life and your sexuality to your new reality (see Sexuality after birth, page 264).

The support of family and friends can be extremely helpful while you're adapting to your new situation.

If people offer to help, accept. You can also ask them to give you a hand. If possible, delegate household chores and some of your meal preparation to family and friends.

However, if you feel like your space is being invaded, you can always say no to visitors to protect your privacy as a couple and family.

Being a mother

Frédérique Gros-Louis

Becoming a mother

The birth of a child is an event like no other. Holding your baby in your arms for the first time can be a deeply moving experience.

Becoming a mother can bring great joy, but also new feelings. It's an experience that comes with many questions and new responsibilities. For some, all these changes can be unsettling. Every mother experiences maternity in her own way, depending on her situation.

You will gradually learn to be a mother as you gain experience with your baby. You too will grow and change as a parent. For some people, this process may reveal new facets of themselves. You will discover your strengths and find your own way of doing things.

With a baby, your days are very busy, and often tiring. Many new mothers are surprised by how much there is to do. Time seems to fly by for some, and go very slowly for others.

The cuddles, smiles, and special moments you share with your baby can help you through the tired times and tough days.

Some mothers may feel depressed for a while after their baby is born (see Baby blues, page 260, and Depression, page 262). It can happen to any mother and is not a reflection of your parenting skills. If this happens to you, don't hesitate to seek help right away.

Taking care of yourself

Meeting your baby's needs during the first months and years of his life is very demanding. But don't neglect your own needs: it's important to eat well, get enough rest, and have fun. You'll find it easier to care for your baby if your own needs are met.

New mothers sometimes feel overwhelmed. If that's the case for you, postpone tasks that can wait and don't be afraid to ask for help. Clearly state your needs and expectations to your loved ones.

It can take a few years to reconcile your new role as a mother with other areas of your life like work, friends, and personal pursuits.

For most mothers, it takes about two years to strike a balance. Give yourself time to grow into your new role.

If you are solo parenting, it's also very important to take care of yourself. Don't hesitate to ask your family and friends for help.

Trusting yourself

Many new mothers have doubts about their ability to care for their new baby. Are you afraid of being clumsy when giving baby his bath, or not understanding why he cries, or panicking when he comes down with his first fever? Don't worry. Most parents go through the same thing.

Don't set the bar too high and ask for advice if you need it.

Your confidence will grow with each passing week as it gets easier for you to understand your child's needs. It will also get easier to plan your baby's routine and organize your time.

As is the case during pregnancy and childbirth, you may need support. If you feel overwhelmed or unable to manage your everyday activities, ask for help from family and friends or a professional. You can also contact your local CLSC or perinatal resource centre.

Despite your doubts, you'll get to know your child better with each passing day. You'll also discover your own strengths and develop your own way of caring for your baby.

Maxim Rousseau

Being parents

Cynthia Ladouceur

Co-parenting

The birth of a child can bring new meaning to a couple's life. In addition to your relationship as partners, you now have a new relationship as parents: this is what's known as co-parenting.

As parents, you share the responsibility for caring for your child and guiding her through the different stages of her growth and development. Together, you will also decide how you go about providing your child with a safe and caring environment.

Parents have complementary strengths and preferences. That's why it's good to work as a team!

Co-parenting isn't just about sharing the duties and chores. It's about recognizing your respective strengths and the contributions you each make to your child's life. Each of you can meet your child's needs and be involved in your own way. And each of you can provide the same care to your baby, but not necessarily in the same way.

As parents, each of you needs to step into your role and feel respected and valued in the way you care for and educate your child. This helps strengthen your commitment to your child and to your role as a parent.

Talk to your partner about the values and attitudes you consider important in your children's education. Look for common ground when you disagree. Listening to and respecting each other's opinions can help strengthen your relationship as parents, but also as a couple.

Children feel safe and secure when parents apply consistent rules.

Taking care of yourself and your relationship is also beneficial for your child.

Children need love and support, but they also need rules and boundaries. As parents, you provide love and affection, but you also act as educators who set rules. Together, you will learn how to balance these different roles.

Caring for your relationship

The arrival of a new baby, with all the attention a newborn needs, means there is less room for your activities as a couple. At times, you may feel like your childcare responsibilities leave no time or space for the two of you.

Don't hesitate to go out together or spend a day just the two of you from time to time. Keep on sharing activities and making plans. Have fun together!

Try to make room for couple time and intimacy, even if it's not always easy in the months after your baby arrives.

Communicating to understand each other better

Communication is a good way to take care of your relationship. Pregnancy and the period that follows bring major changes in a couple's life, and both parents need to adapt. It's important to talk about your emotions, concerns, and joys during this period in order to maintain a close bond with your partner.

If you face an obstacle or conflict, don't wait to talk about it. Take time to explain your different perspectives and find solutions together. Good communication habits can help you develop a new approach, one where both parents feel valued and respected.

You don't need to be perfect!

Your role as parents will change over the course of the passing days and the different stages of your child's life. Being a parent is all about learning, making mistakes, and trying again. Don't get discouraged. It's normal to have doubts and to feel awkward and insecure at times. What's more, being a good model for your child also means acknowledging your missteps and mistakes.

"Am I too strict?" "Am I stimulating my child enough?" Parents are always asking themselves questions like these, but there's no "right" answer that fits every situation and every child.

Many parents feel pressure from family and friends, or the things they see in the media. Even total strangers will sometimes offer parenting advice.

Talking with other parents

If you have the opportunity, take time to chat with other parents about their experiences. Hearing their stories can do you good and help get you through those tougher moments.

Sharing your experiences with someone—without comparing yourself to them—can also help you deal with built-up stress and better understand what you're going through. Most parents like talking about their kids. Feel free to do the same!

Every parent, like every child, is different. There's no magic recipe for raising a child. Trust yourself!

Benoît Dupras

Growing as a family

Maxim Rousseau

In Canada, families with children, whether biological and adopted, come in many shapes and forms, including families with heterosexual, gay, transgender, or non-binary parents, single-parent families, and blended families. And there are many others! There are as many family models as there are families.

The same family can also change over time, depending on events. The arrival of a child is one such life-changing event. Change requires adaptation.

If you need support, contact your CLSC or community resources in your area.

There are as many family models as there are families. Every family is unique.

Make sure that friends and relatives show as much interest in the older child as the new baby. A little special attention will make her feel better.

Reaction of older children

A child of any age can be worried about and jealous of the arrival of a new baby in the family. This is a normal reaction. You can help older children get ready for their new role and reassure them that they'll always have a big place in your heart.

You can talk to them about the baby several months in advance. Reading them stories on the subject or looking at photos of them when they were born are good ways to familiarize them with the new family reality.

You can also explain that little babies sleep a lot and cry from time to time, and that they won't be able to play with the baby right away. Also, let them know you'll be away during the birth, and who will be looking after them during that time.

Even so, your child may behave differently around the time of the baby's arrival. They may fall back into phases of behaviour they had previously grown out of (e.g., bedwetting, thumb-sucking, asking to be breastfed). These are normal reactions. Don't scold them, and continue to show your affection.

Your child may need time to bond with the baby. It's important not to rush them, and to listen to their feelings. If they want, you can give them little chores that make them feel good about helping you. You can tell them that what you're doing for the baby is the same as what you did for them when they were little. If they want, sing to them and rock them. Tell them you love them as much as ever.

Grandparents

Becoming a grandparent is a unique new opportunity to relive a child's first moments. It's also an occasion to witness firsthand the birth of a family. The role played by Grandma and Grandpa in this new family will depend on a host of factors: distance, work, the relationship with the new parents, and the grandparents' desire to be involved.

Pregnancy is a good time to talk about the grandparents' new role. Do you want them to be present during the baby's first days? How will they be involved in his education? How can they best help the new parents?

Grandparents may do things differently, and practices have changed a lot since their day. This guidebook *From Tiny Tot to Toddler* can be a very handy tool for sharing the latest recommendations with your child's grandparents.

The first few weeks will be easier for the new parents if someone else is helping them look after household chores. Home-cooked meals, for example, are a wonderful, heartfelt gift new parents are sure to appreciate.

It takes time to build a relationship with a grandchild. Your close and loving attachment, sense of pride, and protective instinct are the foundation for a lifelong bond.

Twins

If you give birth to twins, your life during the first few months will revolve around feedings, diapers, baths, and naps. You'll have the same routine as all new parents—times two! You'll also be doubly amazed at how your babies develop from day to day.

Even identical twins will probably have different schedules. To make things easier, keep a notebook of each baby's schedule. This will also be helpful to those who come to give you a hand.

If friends are looking for gift ideas, why not ask for diapers, home-cooked meals… or a few hours off!

You'll very likely need a hand looking after the babies and doing household chores. Seek help from your family, friends, or CLSC.

Sophie Cliche

Your twins may look alike, but they are two very distinct people. As parents you can encourage each child's own unique character. With time, you'll discover what sets them apart.

Marilou Richard

Even if you're the very busy parents of twins or triplets, make sure to set aside time for yourself and your significant other. Remember, you're more than just parents! If the weather is good, get out of the house with your babies. This will break the routine and give you the chance to chat with other people. Plus, people are sure to express their admiration at the sight of your twins, making you feel proud and rewarded.

To find out more, you can consult resources for future and new parents of twins and triplets, such as Mamans pieuvres.

Mamans pieuvres
mamanspieuvres.com (in French only)

Being a parent of a baby who is different

Some parents learn during pregnancy that they will have a baby who is different, while others only find out at birth or in the hours, days, weeks, or months that follow. In some situations, it's the parents who notice their baby is different.

Regardless of when you learn of a chronic illness, disability, or other persistent problem in your child's life, it can be deeply upsetting. After all, don't all parents-to-be wish first and foremost for a healthy baby?

The need to know

Sometimes it's hard to make a definite diagnosis. It can feel like these difficult times of worrying and waiting will never end. Receiving a diagnosis often makes it easier to know the best way to act, but this is not always the case. Your intuition and knowledge of your baby are valuable assets.

There are also many advantages to developing a good relationship with all the health professionals dedicated to your baby's well-being.

Medicine has come a long way in recent years. It is now sometimes possible to identify the cause of a baby's health problem or deformity. It may be a genetic or metabolic illness, a **birth defect**, a neurological disorder, or a syndrome. Regardless of whether medicine can help identify the cause of your child's health problem, avoid falling into the trap of needing to blame someone or something.

Karen Baldwin

Available help

A baby with health or developmental problems often requires more care and has greater needs. It will take courage and a lot of love on your part. But don't forget that parents also have needs as they learn to adapt.

There are support groups to help you come to grips with the situation and your baby's health. Some services may also help you care for your baby. Remember that you just gave birth and still need to rest, despite the emotional strain, errands, appointments, medical investigation, and hospitalizations.

Obtaining a clear diagnosis for your baby is an important step. As soon as you receive a diagnosis, you can put your child on the waiting lists at rehabilitation centres that can help her. Unfortunately, these waiting lists are sometimes long. Various associations provide information and, in some cases, support for families faced with specific health problems. Don't hesitate to ask questions to the health professionals and parents you meet.

Services differ from one region to the next. You'll find the resources that suit you best by exploring what's available. The website laccompagnateur.org (in French only) provides a wealth of practical information that can guide you in your search for information about your "different" child.

Financial support is available. For information on the *Child disability benefit*, visit canada.ca/en/revenue-agency/services/child-family-benefits/child-disability-benefit.html.

Free time with your child

When you bring a "different," ill, or disabled child into the world, life becomes very action-oriented. You need to take care of him, stimulate him, give him medication, feed him, and so on.

All these tasks mean you lack the time and energy to simply be with your baby. "Being" with your baby who is different can simply mean spending time massaging him, stroking him, watching him sleep, just looking at him without worrying about his physical care or medication, sharing your sorrow with him, and expressing your love.

Forming a bond with your baby is as important for you as parents as it is for him. This contact without any obligation to "perform an action" will help you come to grips with and adapt to the situation.

Taking baby for a walk

Babies need fresh air and light. Going for a walk outdoors is also stimulating and fun for your child. A healthy baby can go outside every day in any season, as long as the temperature isn't too hot or cold.

Babies poorly tolerate hot summer weather and must be kept out of the sun (see Protecting your baby from the sun, page 705). If it's very hot (above 25 °C), short, light clothing and a diaper are sufficient.

When it is very cold, don't stay outside too long as your baby runs the risk of frostbite, especially if she isn't moving around. It's hard for a baby to tell you she's cold. That's why it's important to dress your baby warmly and ensure her head, hands, and feet are well covered. Wind can also make your baby uncomfortable, so make sure she's protected (e.g., by raising the stroller hood).

Your baby's first outing should be short—about 20 to 30 minutes. Then you can start going out for longer periods, provided you and your baby are comfortable.

Baby carriers

Babies like to be snuggled up next to their mother or father when taking a walk or at home. Baby carriers are convenient for doing everyday tasks and taking your baby on outings. The body heat and movement often put babies right to sleep.

Certain precautions must be taken to carry your baby safely. Get a baby carrier that fits you and is appropriate for your baby's age and weight, according to the manufacturer's instructions. Make sure it's in good condition and meets current safety standards.

Baby carriers are fun for children and practical for parents.

Always make sure that your child is properly positioned in the baby carrier, according to the manufacturer's instructions. In order for your baby to breathe properly, her face shouldn't be squished against you, your clothes, or the baby carrier itself. Also make sure her chin is not resting against her chest. You should be able to see her face at all times.

When you have your baby in a carrier:

- Hold your baby when you bend over.
- Take extra care going up and down stairs.
- Make sure your baby's clothing is not so tight it cuts off blood circulation.
- Don't fasten your coat around the baby.
- Don't lie down or nap while your baby is in the carrier.

Baby carriers shouldn't be used during activities where there's an increased risk of falls (e.g., biking or walking on icy sidewalks). Avoid using them while cooking due to the risk of burns.

For more information, consult:

Institut national du portage des enfants (INPE)
inpe.ca/en/index/

On your bicycle

Your baby is ready to ride in a bike seat or trailer once she is

- At least one year old
- Able to sit up on her own while wearing a bike helmet

By this age her neck muscles are strong enough to support her head and the bike helmet in the event of an accident, and her head is big enough so that the helmet will fit her properly.

Make sure your child is seated properly in the bike seat or trailer with the straps adjusted correctly. She should be sitting upright, with her shoulders and head well supported. The bike seat should be equipped with a headrest and leg protectors for maximum safety.

Your child should always wear a helmet, whether she is riding in a bike seat or a trailer.

Check the seat's maximum weight capacity and make sure it is compatible with your bike. If you use a bike trailer, install the safety flag on the back to make it more visible. Be sure to read the recommended safety precautions in the user guide that comes with the bike seat or trailer.

Never leave your child in the seat when you're not on the bicycle as it could tip over and injure her.

With the extra weight behind you, it takes longer for the bike to stop when you brake, so take it easy the first few times out until you get used to the feeling.

In the stroller or carriage

There are many styles of strollers and baby carriages to choose from. Models that convert from carriage to bed to stroller are practical year-round. Those with reclinable seats are an excellent way to get around. Umbrella strollers are handy but light, and can tip over.

Always buckle up the safety harness and keep a close eye on your baby. While it's convenient to hang a few shopping bags from the stroller or carriage handles, be careful not to overload it, which can cause it to tip over.

Strollers and carriages retain the heat. When it's very hot, make sure your child stays comfortable. You can install a stroller umbrella or a small fan.

When it's very hot, do not put a blanket over the stroller even if it's to shield your baby from the sun. The temperature inside the stroller increases rapidly.

Family activities

Your energy will return once you've adapted to life with your new baby. Many parents then get the urge to get out and do things as a family. This is a good idea! Depending on your energy level, there's no reason you can't continue your usual family activities with the baby. Even very brief outings are beneficial for the whole family. They are a good way to break the sense of isolation you may feel. Try a few short outings as soon as you feel up to it.

Most children love being outdoors. Take your child outside in a baby carrier or in a stroller in summer or a sled in winter. In summertime, picnics in the park can be a lot of fun. If the weather's bad, seek out indoor activities where you can meet other people.

Municipalities often offer enjoyable free or low cost activities, such as family swim time at the pool, storytelling at the library, children's shows... Contact your municipal recreation department to find out what's available in your area.

Ask your friends who have young children about their favourite family activities. Get out and have fun!

Childcare and babysitting

Finding childcare is a key concern for parents wishing to return to work after taking parental leave. See the "Pregnancy and Parenthood" section at quebec.ca/parent for more information on childcare.

If you want to go out alone with your partner, you'll need to entrust your baby to someone else. Choose someone you know or who has been recommended by other parents.

If you opt for a teenager, pick one who has experience and has taken a babysitting course. Have the babysitter come for a visit before you leave him or her alone with your child.

Watch how your baby reacts to the sitter. Before going out, make sure you leave a phone number where you can be reached and the approximate time you'll be home.

Information to give the babysitter:

- Baby's name and age
- Bedtime and feeding schedule
- Phone number where you can be reached and emergency phone numbers

Rosalie Naud

Budgeting for baby

With the arrival of your baby, new expenses combined with a drop in income can be an added source of stress, so try to keep life simple. There are different types of financial aid that may be available to you (see Government programs and services, page 781).

Take advantage of your pregnancy to make your needs known to people around you. You can also explore the treasures to be found in thrift shops, garage sales, second-hand clothing stores, used furniture stores, and bazaars held by church and community groups.

If your family is having trouble adjusting financially to your baby's arrival (debt, difficulty paying regular bills, etc.), there are about 30 consumer associations in Québec that offer free budget consultation services.

For the name of the association nearest you, contact Union des consommateurs du Québec at 514-521-6820 or 1-888-521-6820 (in French only), or Coalition des associations de consommateurs du Québec at 514-362-8623 or 1-877-962-2227 (in French only). You can also visit defensedesconsommateurs.org (in French only), which provides a list of these associations.

Being environmentally aware

Having a child and making green choices can seem complicated. Yet, through small, everyday actions, parents can help protect the environment.

If the environment is important to you, parenthood can be a time to reaffirm your values. However, you don't have to put pressure on yourself. Do what you can and what's important to you.

Through small, everyday actions, parents can help protect the environment.

Active and public transport

If possible, you can get around using active transport like walking or cycling (see Taking baby for a walk, page 762). In addition to being environmentally friendly, this type of transportation can increase your physical and mental well-being.

You can also use public transport (e.g., bus, train, subway) or carpool. For more information, see Travelling safely on page 673.

Nutrition

At the table, you can focus on seasonal and local foods as well as plant-based proteins such as legumes and tofu (see Protein foods, page 85 and Legumes and tofu, page 552). These choices help limit pollutants related to producing and transporting meat.

The overpackaging of individual portions can also be avoided by buying regular sizes. The contents can then be put in reusable pouches or small containers (e.g., yogurt, purée).

Baby products

It's possible to get a variety of items while being environmentally aware.

Buy truly useful items – While there are an impressive number of baby products on the market, very few are truly essential.

Opt for used items – Because babies grow rapidly, most of the items intended for them will only be suitable for a short period of time.

You can use second-hand baby items (e.g., stroller, crib, high chair). However, it's important to make sure that they're in good condition and meet current safety standards (see Babyproofing, page 683). If you're thinking about buying a used car seat, see Used car seats, page 681.

Also, when you no longer need your baby items, you can give them to other parents or to organizations, if the items are in good condition.

Borrow toys and books and use them in rotation – Instead of always buying new toys or books, you can go to a toy or book library if there's one nearby. You can also exchange books and toys with other families.

Give your child just a few toys and books at a time, and put the others away. That way, they'll seem new to him when you pull them out of their hiding place!

Choose items that will grow with your child – Some children's items can be adaptable, meeting your child's needs as he grows. That's the case for some car seats, high chairs, and clothing, for example. Sometimes those items are a bit more expensive, but because they don't need to be replaced often, they end up being more cost-effective and environmentally friendly.

Prioritize washable and reusable items – You can also opt for washable and reusable items (e.g., nursing pads, diapers, washcloths) rather than single-use items that must be thrown out. Several municipalities offer subsidies for purchasing washable items.

It is possible to borrow games and toys in most libraries.

Choosing clothes

As diapers will be part of your baby's wardrobe for about two and a half years, you'll find more about them in the section Choosing diapers, page 610. When it comes to clothing, there's no need to buy lots of clothes of the same size because your baby will grow quickly. The size indicated on the tag can be deceiving: even if your baby is only 1 month old, a size 3-month garment may already be too tight.

The choice of clothing is often based on the weather. In summer, a diaper and a light garment or undershirt are fine. Dress your baby more warmly if you have air conditioning. In winter, your baby will be very comfortable in pyjamas with feet. Your baby's toes shouldn't be curled up in pyjamas that are too short. Check whether your baby is too hot by touching the back of his neck: it shouldn't be damp.

Preparing for the arrival of your baby requires a few necessities. But there's no need to spend a fortune!

Caring for clothes

If your baby has sensitive skin, wash her clothing separately with mild, unscented soap. Rinse the clothes twice to get rid of any trace of soap. Poorly rinsed clothes are often the cause of skin irritations.

It's best to wash new clothes before your baby wears them. Watch out for fabric softeners: they can irritate the skin of some newborns.

First shoes

Babies normally have flat feet until the age of about three. The arch takes shape as the muscles develop. Letting your baby go barefoot in the house and outside in the summer about half the time is excellent for his feet. There's no need for shoes before your baby takes his first steps.

It's best to take your baby to the store with you when buying him shoes. The shoes should fit properly at the heel and be about 1.25 cm (½ inch) longer than your baby's feet. Have your baby stand up so that you can measure the space between his longest toe and the tip of the shoe. You can also measure the inside of the shoe with a measuring tape and compare this measurement with the length of your baby's foot when he's standing.

Your baby's first shoes should have a semi-rigid sole. You should be able to bend the front of the sole with slight pressure. Shoes protect the feet and keep them warm. Ankle-high boots offer unnecessary support and are harder to take off. Socks should not squish the toes together.

When your child is between the ages of 12 and 36 months, check his shoes regularly to make sure they still fit properly.

Asking for help

In your neighbourhood, there are many community organizations, volunteer groups, and social economy enterprises providing services for families and support for parents in their new role. Are you familiar with them?

At every stage of life, getting involved in community life can be enriching for you and for other parents. In your community, you'll find information, help, respite, solutions, friends, a babysitter… or maybe even the desire to become a volunteer!

Find out about the organizations in your neighbourhood by contacting your CLSC. You'll also find contact information for a number of associations, agencies, and support groups on page 784.

Guide Info-Famille

If you're looking for written material, try the *Guide Info-Famille*, published by Éditions du CHU Sainte-Justine (in French only) or visit editions-chu-sainte-justine.org. The guide and website provide a list of books, associations, and websites that can answer parents' specific questions.

Adaptation problems

Does your child have sleep or behavioural problems? Does she seem overly nervous or sad? Talk to a doctor or a trusted health professional. Don't feel guilty—you wouldn't hesitate to consult a health professional for an earache, and you shouldn't for other health problems either.

You can also get help by contacting your CLSC or Info-Social (dial 8-1-1 and choose option 2). They can provide you with psychosocial services or refer you to other resources in your region that can assist you.

Ordre des psychologues du Québec can also refer you to psychologists in your region who work with children. If you are on a tight budget, some insurance policies and most employee assistance programs will reimburse part of these expenses.


Geneviève Gagné

Programs and services

Government programs and services

Pregnancy and Parenthood

The Government of Québec has a number of programs and services as well as useful information for future parents and new parents.

See the Pregnancy and Parenthood section at quebec.ca/en/family-and-support-for-individuals/pregnancy-parenthood for more information on topics such as the following:

- Adoption
- Financial support
- Parental leave and preventive withdrawal
- Parent's rights and obligations
- Childcare centres

Services Québec provides information on government programs and services.

By telephone
Québec area: 418-644-4545
Montréal area: 514-644-4545
Elsewhere in Québec: 1-877-644-4545

By teletypewriter (TTY)
1-800-361-9596

In person
To find an office near you, use the Locator—Services Québec offices at localisateur.servicesquebec.gouv.qc.ca/en.

Resources for parents

Solange Lambert

Telephone help line resources

211 : Ressources sociales et communautaires
2-1-1
211qc.ca/en/
Multilingual information and referral service for social and community resources throughout Québec.

Québec Poison Control Centre
1-800-463-5060
ciusss-capitalenationale.gouv.qc.ca/antipoison/
Information on what to do in the event of poisoning, downloadable brochures (website in French only).

Info-Santé / Info-Social
Available throughout Québec, except in certain remote regions.
8-1-1
sante.gouv.qc.ca/en/systeme-sante-en-bref/info-sante-8-1-1
A health professional provides health and psychosocial advice 24 hours a day, seven days a week.

Première ressource, aide aux parents
514-525-2573 / 1-866-329-4223
premiereressource.com
Parents can consult professionals through this bilingual telephone service, available September to June.

S.O.S Grossesse
418-682-6222 / 1-877-662-9666
sosgrossesse.ca
Telephone help line, referral and information for any questions about pregnancy, contraception and sexuality (in French only).

SOS Violence conjugale
1-800-363-9010 / 438-601-1211 (text)
sosviolenceconjugale.ca/en
Bilingual telephone service accessible 24 hours a day, seven days a week.

Associations, agencies and support groups

Allergies Québec
514-990-2575 / 1-800-990-2575
allergies-alimentaires.org/en/
Information, support, education and training on food allergies. Website section dedicated to newborns.

Association de parents pour l'adoption québécoise
514-990-9144
parentsadoptants.org
Promotes the adoption of children born in Québec. Support, seminars and family activities (website in French only).

Association québécoise des consultants en lactation certifiées from the IBLCE
514-990-0262
ibclc.qc.ca/en
To obtain the list of breastfeeding consultants, visit the website.

Banques alimentaires du Québec
banquesalimentaires.org/en/
Directory of food banks across Québec.

Best Start
resources.beststart.org/for-parents/
Maternal, newborn and early child development resource centre.

CAA Québec – Child car seats
caaquebec.com/en/road-safety/child-car-seat
Advice on the safe installation of child car seats.

Canadian Child Care Federation
613-729-5289 / 1-800-858-1412
cccf-fcsge.ca
Ideas on a broad range of topics of interest to families, including outings, activities, care, and tips.

Canadian Paediatric Society – Caring for kids
613-526-9397
caringforkids.cps.ca
Information on children's health.

Canadian Red Cross
1-800-363-7305
redcross.ca
Information on Red Cross prevention and first aid courses for the parents of young children and on the course for babysitters.

Centre de soutien au deuil périnatal du Center for studies and research on Family Intervention (CERIF-Death)
1-800-567-1283 ext. 2257
cerif.uqo.ca/en/death
Support offered to parents and workers affected by perinatal loss.

Children now
514-593-4303 / 1-800-361-8453
avanttoutlesenfants.ca/home
Organization offering a wide range of services including a telephone help line, professional legal advice, a database of more than 2000 community resources and information sessions.

Clinique Parents Plus du Centre de réadaptation Lucie-Bruneau
514-527-4527
luciebruneau.qc.ca
A specialized public clinic for parents with physical disabilities. Assessments and adapted equipment to help them care independently for their baby (website in French only).

Canadian CMV Foundation
cmvcanada.com
National charity committed to preventing congenital Cytomegalovirus (CMV) infections.

Coalition des associations de consommateurs du Québec
defensedesconsommateurs.org/
Portal featuring a wide variety of personal finance information and tools (in French only).

CRP Les Relevailles de Montréal
514-640-6741
relevailles.com
Telephone support, courses, meetings, assistance at home, videotape lending and referrals (in French only).

Diabetes Québec
514-259-3422 / 1-800-361-3504
diabete.qc.ca/en
Provincial organization that answers questions about diabetes.

Drogue : aide et référence
514-527-2626 / 1-800-265-2626
aidedrogue.ca/en/
Support, information, and referrals for persons coping with addiction throughout Québec.

Éditions du CHU Sainte-Justine
editions-chu-sainte-justine.org/catalogue/english-titles.html
The hospital's publications dealing with childhood and families listed on this site can be ordered online.

FASD - Alcohol-free pregnancy
fasd-alcoholfreepregnancy.ca/
Information and resources on fetal alcohol spectrum disorder.

Family Service Canada
familyservicecanada.org
Organization that supports a network of organizations offering services to families.

Fédération des associations de familles monoparentales et recomposées du Québec
514-729-6666
fafmrq.org
The federation defends the rights and interests of single-parent and blended families in Québec. Bilingual service is available in Montréal and some regions of Québec (website in French only).

Fédération du Québec pour le planning des naissances
514-866-3721
fqpn.qc.ca
This bilingual service provides information on contraception and women's sexual health (website in French only).

Fédération québécoise des organismes communautaires Famille
450-466-2538 / 1-866-982-9990
fqocf.org
Gathers together and supports family-oriented community organizations and helps ensure that the family has a place in Québec society (in French only).

Fondation du Dr Julien
514-527-3777
fondationdrjulien.org/en
Community-based social paediatric centres that provide comprehensive support and a full range of medical care and services to children and families at risk or in vulnerable situations.

Fondation Olo
fondationolo.ca/en/
Food assistance for pregnant women with low income.

Fondation Portraits d'Étincelles
1-877-346-9940
portraitsdetincelles.com
Free photo and photo touch-up service for babies who died prior to or at birth (in French only).

Food Allergy Canada
416-785-5666 / 1-866-785-5660
foodallergycanada.ca
Support and information for families living with allergies.

Immunize Canada
613-725-3769 ext. 122
immunize.ca
Information on vaccines and the vaccination schedule, answers common questions and lists resources.

Institut National du Portage des Enfants
inpe.ca/en/index
Non-profit organization promoting skin-to-skin practices and babywearing.

iQuitnow
1-866-527-7383
tobaccofreequebec.ca/iquitnow
Information and support to individuals who wish to stop smoking (bilingual service).

L'accompagnateur
laccompagnateur.org
Site developed by parents of children with disabilities to help other parents in the same situation (in French only).

La Leche League
613-238-5919
lllc.ca
Telephone support by recognized leaders. Books and breastfeeding accessories for sale.

LGBT+ Family Coalition
famillesLGBT.org
The organization advocates for the legal and social recognition of LGBT families. A group of lesbian, gay, bisexual and transgender parents exchanging information, sharing resources and having fun together with their children.

Lifesaving Society
514-252-3100 / 1-800-265-3093
sauvetage.qc.ca
The Lifesaving Society (Société de sauvetage) is a provincial association dedicated to preventing drowning and water-related injuries. The Society offers a complete range of first-aid, lifesaving, resuscitation, and pleasure-craft courses.

Mamans pieuvres
mamanspieuvres.com
Resources for future and new parents of twins and triplets (in French only).

Mouvement allaitement du Québec
mouvementallaitement.org
Breastfeeding Friendly Ressource (in French only).

Naître et grandir
naitreetgrandir.com/en/
Website on children's development and health.

Nourri-Source
514-948-9877 / 1-866-948-5160
nourri-source.org/en/
Telephone support, breastfeeding support meetings, prenatal information sessions, training and information, rental and sale of breastfeeding accessories.

Ordre des orthophonistes et audiologistes du Québec
514-282-9123 / 1-888-232-9123
ooaq.qc.ca
Directory of Québec speech-language pathologists and audiologists (in French only).

Parachute
1-888-537-7777
parachute.ca/en
Parachute wants to help Canadians reduce their risks of injury and enjoy long lives lived to the fullest.

Parents Orphelins, The Quebec Association for parents grieving from pregnancy and infant loss
514-686-4880
parentsorphelins.org/en
Gathering and complimentary services for parents who have lost a baby during pregnancy. Coffee Chats, Helpline, recurring activities, Annual Candlelight Walk and external resources.

Préma-Québec
450-651-4909 / 1-888-651-4909
premaquebec.com/
Québec association for premature children.

Regroupement des cuisines collectives du Québec
1-866-529-3448
rccq.org/en/
To find the nearest collective kitchen.

Relevailles Québec
418-688-3301
relevaillesquebec.com
Assistance at home, support group for post partum depression, meetings, baby massage, support (website in French only).

RePère
514-381-3511
repere.org
Assistance and support program for fathers (in French only).

Réseau des Centres de ressources périnatales
418-336-3316
rcrpq.com/english-version/
*Gather the CRPs of Quebec that offer services such as: prenatal classes, postnatal care (*Relevailles*), postpartum and perinatal bereavement support groups, breastfeeding support, and various workshops.*

Réseau québécois d'accompagnantes à la naissance
naissance.ca
Information and referral centre to inform the public of services offered by members (in French only).

Serena
1-888-373-7362 / 1-866-273-7362
serena.ca
Promotes natural family planning methods. Service in French and English.

SexandU
sexandu.ca
Questions and issues around sex and sexuality that matter most to Canadians.

Sexplique
418-624-6808
sexplique.org
Information on family planning methods and sexuality (in French only).

St. John Ambulance
1-800-706-6660
sja.ca/English/Pages/default.aspx
First aid training organization that offers training in early childhood first aid.

The Health of Canada's Children and Youth
cichprofile.ca
Devoted to child and family health and offers parents numerous publications and resources.

Today's Parent
todaysparent.com
Parenting magazine website.

Union des consommateurs du Québec
514-521-6820 / 1-888-521-6820
uniondesconsommateurs.ca
Québec consumer associations providing free budget consultation services (website in French only).

The authors have chosen the organizations and references mentioned in this section because of their relevance to the users of this guide. However, the list is by no means exhaustive and neither the authors of the Institut national de santé publique du Québec are in any way responsible for the contents of the references indicated.

Amélie Gauthier-Duchesne

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Conversion table

WEIGHT

1 oz	28 g
1 lb	450 g / 0.45 kg
2.2 lb	1,000 g / 1 kg

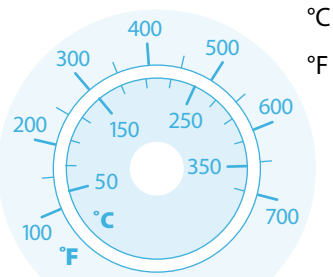
LENGTH

0.4 in	1 cm
1 in	2.5 cm

LIQUIDS

1 tsp	5 ml
1 tbsp	15 ml
1 oz	30 ml
½ cup	125 ml
⅔ cup / 5 oz	150 ml
1 cup	250 ml
4 cups	1,000 ml / 1 L

TEMPERATURE



°C = (°F − 32) ÷ 1.8

°F = °C × 1.8 + 32

From Tiny Tot to Toddler

From Tiny Tot to Toddler supports parents by providing information about pregnancy, delivery and the first two years of a baby's life.

Institut national de santé publique Québec

ISBN 978-2-550-98928-8

9 782550 989288

Imprimé au Québec, Canada