

## Iron Deficiency and Anemia among Women in Nunavik

Anemia is often due to iron deficiency which is caused by insufficient dietary intake or poor absorption of iron to replace losses. Iron deficiency anemia has a negative impact on physical work capacity, cognitive performance and resistance to infection. The World Health Organization recognizes anemia as a widespread public health problem having major consequences on health as well as on social and economical development. The prevalence of anemia in Aboriginal children in Canada is eight times higher than among similar non-aboriginal populations in Canada and is especially high among Inuit children. Until now, the prevalence of anemia in Nunavik women was unknown, however it was suspected that similar results existed. In recent decades, important changes in lifestyle habits and dietary patterns occurred among the population of Nunavik, contributing to decreased consumption of traditional foods which are a good source of iron. This summary presents the prevalence of iron deficiency, anemia and their associated risk factors among Nunavik women.

Anemia and iron deficiency each affect a third of non-pregnant women in Nunavik. Prevalence of anemia and iron deficiency differs according to age, socio-economical status, lifestyle habits and food intake. Iron deficiency is present in 40% of women of childbearing age (18 to 49 years) and about two thirds of anemias are due to iron deficiency. Higher prevalence of inadequate iron intake the day prior to the interview was observed among women having depleted iron stores. In women aged 50 and over, iron deficiency is present in 1 out of 10, but more than half are affected by anemia. Thus, iron deficiency anemia is less prevalent in these women and the high prevalence of anemia is probably mainly due to impairment of iron metabolism caused by chronic diseases.

In pregnant women, iron deficiency and iron deficiency anemia affect respectively two thirds and one third of expectant mothers respectively, which are higher than rates observed in non-pregnant women. Besides, nearly half of the women who had a recent pregnancy (< 5 years ago) were iron deficient compared to a quarter among the other non-pregnant women. Thus, iron status is poorer in pregnant women and new mothers. Moreover, only 47% of women with a recent pregnancy declared that they took iron pills during pregnancy, while it is prescribed to 85% of pregnant women in Nunavik. Compliance to iron pills is a concern in pregnant women since untreated iron deficiency anemia may have consequences on pregnancy outcomes.

The results of the clinical session indicate that iron deficiency anemia is widespread in Nunavik, especially in women of childbearing age with rates about 5 times higher compared with iron deficiency anemia prevalence occurring in Canada and United States. The survey allowed us to identify characteristics of women suffering from iron deficiency anemia such as pregnant women and women with recent pregnancies. Pregnant teenagers and women with multiple pregnancies should also receive special attention since they are known to be at higher risk.

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### STATISTICAL ANALYSES

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