

CENTRE HOSPITALIER
UNIVERSITAIRE DE CLERMONT-FERRAND

1. Nutrition

Traditional foods such as game, fish, fowl and berries are healthy. They are low in fat and high in some vitamins and minerals that help protect against illness. Caribou, goose, and ptarmigan are the most common traditional foods eaten in Whapmagoostui. Over 60% of the people interviewed had eaten these foods in the last year, and this did not depend on age. Fowl and game were eaten more often than fish.

People in Whapmagoostui get enough protein and carbohydrates in their diets. However, most people tend to eat too much fat, saturated fat, and cholesterol. Most people eat enough meat to get plenty of zinc and iron. People in all age groups eat fewer fruits, vegetables, and milk products than recommended. This leads to low levels of important nutrients like calcium, magnesium and some vitamins

Children get about 13% of their daily calories from drinking pop and other sweet drinks (not including fruit juice). The extra calories and sugar contribute to being overweight and can lead to diseases like diabetes.

2. Physical Activity

In Mistissini, the study found encouraging links between physical activity (especially walking) and better weight. Other studies have established that

doing regular physical activity lowers the risk of heart disease, diabetes, and other health problems.



3. Contaminants

Contaminants are chemicals like mercury, lead and pesticides that can be harmful to our health.

Some contaminants are released into the environment by industries in the south and carried north by the wind and rain. Mercury is present naturally in the soil, but developments such as hydroelectric dams and forestry cause mercury to move from the soil into lakes and rivers, where it is absorbed by plants and tiny animals. Contaminants travel up the food chain and accumulate in the fish and animals that we eat.

Our bodies can tolerate a small amount of contaminants, but too much can affect our health. Babies, children and pregnant women are especially vulnerable. The project tested for Mercury, Lead, Cadmium, Arsenic, Selenium, PCBs and other Organic Contaminants, such as pesticides and fire retardants. Mercury levels in blood or hair are lower than they were in the 1970s, but they remain a concern. In Whapmagoostui, one individual required follow-up (but not serious) with a doctor for mercury and 18 for lead (not serious). Lead shot is likely the source of lead. Smoking is the main source of cadmium and also remains a concern (as do PCBs blood levels, which were mid-range compared to the other communities). Although body levels of arsenic were normal, levels in hair of some individuals suggested an external source.

4. Zoonoses

Zoonoses are bacteria, germs and viruses that people can catch from animals. Hunters and trappers who come into contact with wild animals may be at risk. When we come into contact with zoonoses, our bodies make antibodies to fight infection. These antibodies stay in our blood for years and can be detected with a blood test. The study found some traces of past infection by zoonoses, but nobody was currently infected. Often these infections have very few symptoms.

A local group like the CTA could tell hunters and trappers what symptoms to look out for. Health care workers should also be informed about the symptoms of these illnesses

5. General Health (adults 18 years and older)

Some health problems are linked to people’s eating habits and contaminants. These include thyroid problems, heart disease and diabetes.

RISK FACTORS FOR HEART DISEASE

Weight

- 92.1% of participants were overweight.
- 83.1% can be considered obese.
- People in Whapmagoostui are more overweight than individuals in Mistissini, Eastmain, Wemindji, Waswanipi, and Chisasibi, with Waskaganish the lowest.

Blood pressure

- 12.5% had high blood pressure.



Cholesterol and fats

- 42% of the participants had low levels of “good” (HDL) cholesterol.
- 26% had high triglycerides, another unhealthy fat.

Carotid artery thickness

- This analysis was performed using a machine that is able to capture images via sound waves. It is called ultrasound and is based on similar technology to radar.
- In general, both men and women had healthy arteries which were comparable to other aboriginal population we have studied in Canada.
- As reported in many other studies, men tended to have thicker arteries compared with women.
- Individuals who presented with signs of diabetes had unhealthy arteries. This confirms what has been reported in other health studies.

Diabetes

- One out of 4 adults in the study had diabetes diagnosed previously by a doctor. Of the others without diagnosed diabetes, 3% had blood sugar levels suggestive of diabetes (but not yet diagnosed by the clinic) and 9 % were considered to be at risk.
- To reduce chances of getting diabetes and heart disease, people need to eat less food high in saturated fats, trans fats and sugar, and to be more active.

Fragile Bones

Osteoporosis, or fragile bones, mostly affects older women. The study used ultrasound to measure the bone strength of women over the age of 35 in Whapmagoostui. Compared to women in Quebec City, women in Whapmagoostui have a low risk of breaking a bone.

Of the others without diagnosed diabetes, almost a quarter had blood sugar levels suggestive of diabetes which had not been diagnosed yet by the clinic.