First Nations Food, Nutrition and Environment Study (FNFNES)



University of Ottawa Université de Montréal Assembly of First Nations

Summary of Results: Ontario

What was the study about?

A study was conducted in **18 First Nations communities** in Ontario during the fall of 2011 and 2012 to answer these questions:

- What kinds of traditional and store bought foods are people eating?
- How well are people eating?
- Is the water safe to drink?
- Are the levels of pharmaceuticals in the water safe?
- · Are people being exposed to harmful levels of mercury?
- Is traditional food safe to eat?

Which communities participated?

Aamjiwnaang First Nation Akwesasne Asubpeeschoseewagong Netum Anishinabek Atikameksheng Anishnawbek Attawapiskat First Nation Batchewana First Nation of Ojibways Fort Albany First Nation Fort William First Nation Garden River First Nation

Kingfisher Lake First Nation Kitchenuhmaykoosib Inninuwug First Nation Marten Falls First Nation Moose Cree First Nation Munsee-Delaware Nation Sagamok Anishnawbek First Nation Six Nations of the Grand River Wauzhushk Onigum Nation Webeguie First Nation

What were the findings on health?



53% of women and 43% of men are obese



30% of adults reported having diabetes



49% of adults smoke

1429 adults from Ontario

Who participated?

- 896 women and 533 men
- Average age:
 38 years old (women)
 38 years old (men)

Thank you to everyone who participated!

Are households financially able to access sufficient, safe and nutritious food?

29% of First Nations households in Ontario experience food insecurity

•30% worried that their food would run out before they could buy more.•28% said that they could not afford to eat balanced meals.



Average weekly cost of groceries to feed healthy meals to a family of four*:



First Nations Communities Range: \$161-\$411



Ottawa

*Based on a list of 67 food items that require preparation. The cost of pre-packaged foods or items like spices and condiments

What kinds of traditional and store-bought foods are people eating?

Top traditional foods eaten:

- 1. Walleye/Pickerel
- 2. Moose
- 3. Whitefish
- 4. Canada goose
- 5. Blueberries

Top store-bought foods eaten:

- 1. Soup
- 2. Pasta
- 3. Vegetables
- 4. Cereal
- 5. Chicken

How well are First Nations in Ontario eating ?

First Nations adults in Ontario are not meeting the recommendations for healthy eating in *Eating Well with Canada's Food Guide - First Nations, Inuit and Métis.* Adults do not meet the minimum number of recommended servings in the following food groups: Vegetables and Fruit, Grain Products and Milk and Alternatives. The high intake of meat might contribute to a higher fat intake.

Recommendations:

- Eat more vegetables and fruit, including wild plants and berries.
- Choose whole wheat grains more often. Make baked bannock with whole wheat flour.
- Choose milk and milk products (such as cheese or yogurt) or beverages fortified with calcium and vitamin D (such as soy beverages) more often.
- Choose leaner meats, plus game and fish.*

* For fish consumption guidelines, contact the Sport Fish Contaminant Monitoring Program (1-800-820-2716) or find up-to-date information online at www.ontario.ca/fishguide.





Is the water safe to drink?

The results from the 741 tap water samples collected from First Nations in Ontario showed that the water is generally safe to drink. In one community, increased sampling frequency was recommended due to seasonal fluctuations in uranium levels from the community well.



Are the levels of pharmaceuticals in the water safe?

The levels of pharmaceuticals found in the water sources near the communities are not harmful to human health. However, the health effects of the mixture of multiple pharmaceuticals found in some communities are unknown at this time.



Are people being exposed to harmful levels of mercury?

A total of 744 hair samples were collected from participants from First Nations in Ontario. All participants had levels of mercury that were within Health Canada's guideline normal acceptable range, with the exception of 16 individuals. Letters were sent to these individuals with suggestions on how to reduce their exposure to mercury.



Is traditional food safe to eat?

Traditional food is safe to eat and healthy for you.

- A total of 1241 food samples representing 115 different types of traditional food were collected for contaminant analyses.
- Levels of contaminants in traditional food are within levels that are typically found in this region.
- Elevated lead concentrations were found in some game meat. This was likely caused by contamination from lead shot.
- High concentrations of cadmium were found in moose liver and kidney samples.
- Intake of contaminants from traditional food was below guideline levels and is not a concern. The only exception is mercury intake from fish for some women of child bearing age.

Recommendations:

- Use steel instead of lead shot. Eating wild game contaminated by lead shot can be harmful to the brain, especially in children.
- Limit consumption of moose liver and kidney to avoid exposure to cadmium. Smokers should be especially careful since they are already exposed to high amounts of cadmium from cigarettes.
- Women of child bearing age (as well as teenagers and children) should choose smaller size walleye, pike, and lake trout.

Key Results For All Participating First Nations in Ontario:

- 1. The diet of First Nations adults in Ontario does not meet nutrition needs, but the diet is healthier when traditional foods are eaten.
- 2. Overweight/obesity, smoking, and diabetes are major issues.
- 3. Household food insecurity is a major issue.
- 4. Water quality, as indicated by the trace metals and pharmaceutical levels, is overall satisfactory, but close monitoring is warranted as water sources and water treatment vary greatly.
- 5. Mercury exposure, as measured in hair samples and calculated through dietary estimates, is not a serious health concern.
- Chemical contamination of traditional food is not worrisome, but it is important to have the data from this study for future monitoring of trends and changes.



More information can be found on the FNFNES website: www.fnfnes.ca

If you have any questions about these results or the project itself, please contact: Judy Mitchell, FNFNES National Coordinator Phone: (613) 562-5800 ext 7214

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