First Nations Food, Nutrition and Environment Study (FNFNES)

Atlantic 2014

University of Ottawa
Université de Montréal
Assembly of First Nations

Summary of Results:
Atlantic Region

Who participated?

670

Ave. age: 42

1025

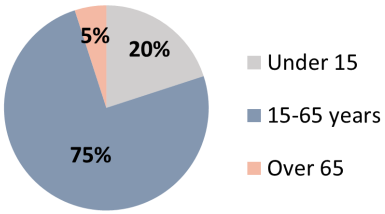
3 is the median # of people living in each home

54% of households had at least **1** adult working full-time

355

Ave. age: 40

Age distribution of households



What is the FNFNES about?

The FNFNES took place in **11** First Nations communities in the Atlantic region in 2014 to answer these questions:

- What kinds of traditional and store bought foods are people eating?
- What is the diet like?
- 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?

Woodstock First Nation
Saint Mary's First Nation
Eel Ground First Nation
Esgenoopetitj First Nation
Elsipogtog First Nation
Pictou Landing First Nation
Waycobah First Nation
Potlotek First Nation
Eskasoni First Nation
Membertou First Nation
Miawpukek First Nation

What were the findings on health?

30% of adults said their health was **very good** or **excellent**

40% of adults are **physically active**

21% of adults are at a **healthy weight**

20% of adults have **diabetes**

52% of adults are **smokers**

Thank you to everyone who participated!

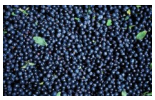
How many households are harvesting traditional food?

62% of households harvested
- **49%** fished
- **34%** hunted
- **26%** harvested wild plants
- **21%** harvested seafood

3 out of 5 want more traditional food.

Top barriers to greater use are lack of: time, a hunter, knowledge, equipment or transportation, and availability

What and how much traditional food are people eating?


83% of adults reported eating traditional food.

Moose, blueberry, and **lobster** are the **3 foods** most commonly eaten.

21 grams of **traditional food** or **1.5 tablespoons** are eaten daily

How well are First Nations adults in the Atlantic eating?

Adults **eat fewer than** the recommended servings of:

Grain Products

Vegetables and Fruit

Milk and Alternatives

Adults **eat** the recommended servings of:

Meat and Alternatives

Inadequate amounts can lead to **nutrient deficiencies** and **poor health**.

Can households afford sufficient, safe and nutritious food?

Household food security is defined as "when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life."

31% of households are **food insecure**
- **22%** are **moderately** food insecure: families rely on lower quality/priced foods
- **9%** are **severely** food insecure: families regularly experience food shortages

Weekly grocery costs for a family of four

Costing was done in a grocery store near each community.

Costs ranged from **$193** to **$238**. Costs are calculated using the National Nutritious Food Basket (NNFB), which contains a list of **67** foods. Foods **requiring** preparation, spices, condiments, household supplies or personal care items are **not** included. Transportation costs are **not** included.

Recommendations:
- Talk to a local dietitian for more information on healthy eating.
- Choose more vegetables and fruit, including wild plants and berries.
- Choose whole wheat grains more often.
- Choose milk and milk products (such as cheese or yogurt) or beverages fortified with calcium and vitamin D (such as soy beverages) more often.

Is the water safe to drink?

58% of households **drink** tap water. An **unpleasant taste** and **smell** were the most common reasons given for not drinking tap water.

93% of households **cook** with tap water.

Testing of **tap water** was undertaken in **216** homes for **metals** that can affect **health** or that have an **aesthetic objective/operational guidance** value.

Metals that can affect **health** were **within guidelines**.

Metals that can affect **colour, taste,** or **smell** were **not within guidelines** for **aluminum** (42 homes), **iron** (22 homes), and **manganese** (31 homes). The elevated levels are not harmful but can cause the water to appear cloudy (aluminum), smell unpleasant (iron), or have a strong metallic taste (iron and manganese), which may discourage people from drinking it.

Are the levels of pharmaceuticals in the water safe?

Low levels were found in surface water samples in **10** communities. These levels should not be harmful to human health.

11 pharmaceuticals were found including: **caffeine** (pain med./beverages), **metformin** (diabetes med.), **atenolol** (heart med.), **carbamazepine** (mood/anti-convulsant), **acetaminophen** (pain med.), **naproxen** (inflammation/pain med.), **sulfamethoxazole** (antibiotic), **clarithromycin** (antibiotic), **cotinine** (nicotine metabolite), **ketoprofen** (arthritis/pain med.), and **bezafibrate** (lipid med.).

Are people being exposed to harmful levels of mercury?

632 hair samples were collected. **Mercury** levels were **within** Health Canada's guideline **normal acceptable range** for all participants.

Is traditional food safe to eat?

90 species of **traditional food** were collected

Seafood: Cod, eel, flounder, gaspereau, haddock, halibut, herring, mackerel, perch, salmon, smelt, sole, smallmouth bass, striped bass, tomcod, trout, sucker, clams, crabs, lobster, mussels, oysters, scallops, shrimp, squid, harp seal
Game: moose, deer, bear, beaver, muskrat, squirrel, hare
Birds: Grouse, Canada goose **Berries:** bakeapple, blueberry, chokecherry, crabapple, cranberry, currant, elderberry, raspberry, strawberry, wild apple, wild grape
Greens/roots: bergamot, burdock, dandelion, fiddleheads, goldthread root, labrador tea, mint, raspberry leaf, wintergreen, wihkes, yarrow **Tree foods:** butternut, chestnut, hazelnut, hemlock, lichen moss, maple, spruce, tamarack, cedar, pine, birch

Traditional food is safe and healthy to eat.

Recommendations

- To help protect the environment, **return all unused medications to local pharmacies** for proper disposal.
- **Use steel shot** instead of l**ead shot.** Ammunition can shatter and fragments can be **too small to detect** by sight or feel. Eating wild game contaminated by lead shot can be harmful to health, especially to a child's brain development.

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Key Results For All Participating First Nations in the Atlantic:

1. The diet of First Nations adults in the Atlantic does not meet nutrition recommendations and needs, but the diet is healthier when traditional foods are eaten.
2. Overweight/obesity, smoking and diabetes are major public health issues.
3. Household food insecurity is a major issue.
4. Water quality, as indicated by the trace metals and pharmaceutical levels, is satisfactory overall, but close monitoring is needed as water sources and water treatment vary by community.
5. The overall mercury exposure, as measured in hair samples and calculated through dietary estimates, is low and is not a health concern.
6. Levels of chemical contamination of traditional food are generally low and together with the limited consumption, the total dietary contaminant exposure from traditional food is low and is not a health concern.
7. Elevated levels of lead were found in some food items: it is important to identify the sources.
8. Future monitoring of trends and changes in the concentrations of environmental pollutants and the consumption of key traditional foods is needed.

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:
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