



University of Ottawa
 Université de Montréal
 Assembly of First Nations

Summary of Results: Quebec-Labrador

Who participated?

420



Ave. age: 41



573

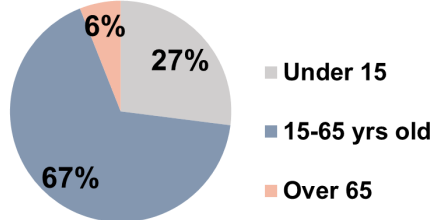
4 is the median # of people living in each home
 69% of households had at least 1 adult working full-time

153



Ave. age: 44

Age distribution of households



What is the FNFNES about?

FNFNES took place in **10 First Nations** communities in Quebec/Labrador in 2016 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?

Naskapi Nation of Kawawachikamach
 Whapmagoostui First Nation
 The Crees of Waskaganish First Nation
 Montagnais de Unamen Shipu
 La Nation Anishnabe du Lac Simon

Cree Nation of Mistissini
 Mohawks of Kahnawá:ke
 Odanak First Nation
 Micmacs of Gesgapegiag
 Listuguj Mi'gmaq First Nation

What were the findings on health?

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



30% of adults are **physically active**



9% of adults are at a **healthy weight**



25% of adults have **diabetes**
 Type 2 diabetes is more common



46% of adults **smoke**

Thank you to everyone who participated!

How many households are harvesting traditional food?

78% of households harvested traditional food

59% hunted

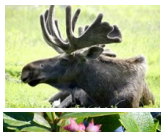
60% fished

50% harvested wild plants

84% want more traditional food.

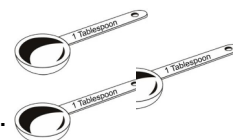
Top barriers to greater use are lack of: time, a hunter in the household, equipment/transportation, money to purchase traditional food and availability.

What and how much traditional food are people eating?



95% of adults reported eating traditional food. **Moose, Labrador tea** and **blueberry** are the **3 foods** most commonly eaten.

37 grams of traditional food or **2.5 tablespoons** are eaten daily.



How well are First Nations adults in Quebec-Labrador eating?

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



Grain Products



Vegetables and Fruit



Milk and Alternatives

Adults **eat more** than 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.”

36% of households are **food insecure**

28% are **moderately** food insecure: families relied on lower quality/priced foods

8% 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 **\$179** to **\$336**.

Costs were calculated using the National Nutritious Food Basket, which is a **list of 67** basic food items. Foods that require **little or no** 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 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.

Is the water safe to drink?



Only **52%** of participants said they usually **drink** the tap water (**19%** sometimes do) while **96% cook** with it. Reasons for avoidance included: **preference for other beverages**, **unpleasant taste** and **distrust of the quality/safety**.

Testing of tap water was undertaken in **156** homes for metals that can affect **health** or 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** (2 homes), **iron** (3 homes), **manganese** (3 homes) and **sodium** (9 homes).

Are the levels of pharmaceuticals in the water safe?



Low levels were found in surface water samples in **9** communities. These levels should not be harmful to human health.

25 pharmaceuticals were found including: **caffeine** (pain med./beverages), **metformin** (diabetes med.), **sulfamethoxazole** (antibiotic), **carbamazepine** (mood/anti-convulsant), **cotinine** (nicotine metabolite), **atenolol** (heart med.), **naproxen** (inflammation/pain med.), **clarithromycin** (antibiotic), **acetaminophen** (pain med.), **metoprolol** (blood pressure med.), **gemfibrozil** (lipid med.), **bezafibrate** (lipid med.), **cimetidine** (ulcer med.), **ketoprofen** (arthritis/pain med.), **hydrochlorothiazide** (hypertension med.), **codeine** (pain med.), **diclofenac** (arthritis/pain), **ibuprofen** (pain/fever med.), **ranitidine** (ulcer med.), **ciprofloxacin** (antibiotic), **sulfamethazine** (antibiotic), **pentoxifylline** (diabetes med.), **diphenhydramine** (antihistamine), **furosemide** (diuretic), and **atorvastatin** (cholesterol med.)

Are people being exposed to harmful levels of mercury?



Hair samples were collected from **381** adults. **Mercury** levels were **within** Health Canada's guideline normal acceptable range **except** for **23** participants (**6%**). There was a greater percentage of **exceedances** among participants in the **northern regions**. Letters were sent to these individuals with suggestions on how to reduce their exposure to mercury.

Is traditional food safe to eat?



682 food samples from **80** species were collected.

Fish: salmon, sturgeon, bass, trout, catfish, cisco, cod, eel, whitefish, lobster, mackerel, pike, scallop, sea snail, shrimp, smelt, crab, clam, sucker, walleye

Land mammals: bear, beaver, caribou, deer, hare/rabbit, moose, muskrat, porcupine,

Birds: arctic tern, black guillemot, Canada goose, eider, golden eye, grouse, mallard,

ptarmigan, scoter, snow goose, wood duck **Plants:** wild apple, bear root tea, blackberry, blueberry, butternut squash, yew, cedar tea, chaga tea, chanterelle mushroom, chokecherry, cloudberry, clover tea, crab apple, cranberry, dandelion, fiddlehead, honey, Jerusalem artichoke, Labrador tea, maple syrup, muskrat root tea, pine tea, raspberry, raspberry leaf tea, stinging nettle, strawberry, sweetgrass tea, tamarack tea, teaberry **Cultivated foods:** chicken eggs, pole beans, potatoes, white corn flour, white washed corn

Traditional food is safe and healthy to eat.

Recommendations

- To help protect the environment, **return unused medications to a pharmacy** for proper disposal.
- **Use non lead ammunition.** Ammunition can shatter and fragments can be **too small to detect** by sight or feel. Eating meat contaminated by lead shot can be harmful to health, especially to a child's brain development.
- Some lakes have fish advisories. Information can be found online at the Ministry of Environment's website and the Government of Canada's Dept. of Environment and Climate Change webpage, *Fish Consumption Advisories*

Key Results For All Participating First Nations in Quebec-Labrador

1. The diet of First Nations adults in Quebec-Labrador does not meet nutrition 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. Levels of chemical contamination of traditional food are generally low. At the current rate of consumption, the total dietary contaminant exposure from traditional food is generally low and is not a health concern.
6. Mercury exposure, as measured in hair samples suggests some concern and a strong south-north gradient of increasing exposures. There appears to be a greater frequency of exceedances among women of childbearing age and adults age 71+. Of the 381 adults in the Quebec region who provided hair samples, 23 (6%) had a mercury level above Health Canada's guideline.
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.fnfnnes.ca

If you have any questions about these results or the project itself, please contact:

Lynn Barwin, FNFNES National Coordinator

Phone: (613) 562-5800 ext 7214

Email: fnfnnes@uottawa.ca