

# First Nations Food, Nutrition and Environment Study (FNFNES)



University of Northern British Columbia  
 Université de Montréal  
 Assembly of First Nations

## Summary of Results: Manitoba

### What was the study about?

- A study was conducted in **9 Manitoba First Nations** communities during the fall of 2010 to find out:
- What kinds of traditional and market 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?

### Who participated?

- 706 adults from Manitoba
- 477 women and 229 men
- average age:  
42 years old (women)  
41 years old (men)

### Which communities participated?

- Swan Lake First Nation
- Chemawawin Cree Nation
- Cross Lake Band of Indians
- Sandy Bay Ojibway First Nation
- Sagkeeng First Nation
- Sayisi Dene First Nation
- Pine Creek First Nation
- Hollow Water First Nation
- Northlands Denesuline First Nation

### What kinds of traditional and market foods are people eating?

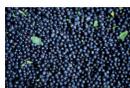
| Top 5* traditional foods eaten in Manitoba:                   | Top 5* market foods eaten in Manitoba:                           |
|---|--|
| 1. Moose<br>2. Wild rice<br>3. Walleye<br>4. Ducks<br>5. Deer | 1. Soups<br>2. Pasta<br>3. Eggs<br>4. Potatoes<br>5. White bread |

\*based on grams per person per day



Thank you to everyone who participated!

# How well are Manitoba First Nations eating compared to the recommendations?



| Food Group  | Gender | Manitoba First Nations Current Diet | Canada's Food Guide Recommendations |
|---|--------|-------------------------------------|-------------------------------------|
|   |        | Servings/day                        |                                     |
| Vegetables and Fruit  | men:   | 5                                   | 7-10                                |
|   | women: | 4                                   | 7-8                                 |
| Suggestion for change: Eat more vegetables and fruits. 1 serving= 1/2 cup of dark green or orange vegetables, or 1/2 cup of wild plants, or 1/2 cup of berries or fruits  |        |                                     |                                     |
| Grain Products  | men:   | 6                                   | 7-8                                 |
|   | women: | 5                                   | 6-7                                 |
| Suggestion for change: Eat more whole grains. 1 serving= 1 slice of whole wheat bread or bannock, or 1/2 cup of whole wheat pasta, or 1/2 cup of wild or brown rice   |        |                                     |                                     |
| Milk and Alternatives*  | men:   | 1                                   | 2-3                                 |
|   | women: | 1                                   | 2-3                                 |
| Suggestion for change: Eat more milk products. 1 serving= 1 cup of milk or fortified soy milk, or 3/4 cup of yogurt, or 50 grams (1 1/2 oz) of cheese<br>*Individuals who do not eat or drink milk products should seek advice from a health care provider. |        |                                     |                                     |
| Meat and Alternatives   | men:   | 4                                   | 3                                   |
|   | women: | 3                                   | 2                                   |
| Suggestion for change: Choose non-processed, leaner meats and fish. 1 serving =1/2 cup of meat, wild game, fish or shellfish, or 2 eggs, or 3/4 cup of beans  |        |                                     |                                     |

Intake of foods high in salt and fat is excessive.



Depending on age, 64-91% of Manitoba First Nations women and 79-89% of Manitoba First Nations men are overweight or obese.

23% of MB First Nations adults have diabetes



Food insecurity is a serious problem in Manitoba First Nations communities.

- 38% of Manitoba First Nations households experience food insecurity.
- 35% worried that their food would run out before they could buy more.
- 32% said that food they bought didn't last and there wasn't any money to buy more.

Average weekly cost of groceries to feed a family of four:



MB First Nation community



Winnipeg

## Is the water safe to drink?



The results from the 311 water samples collected from Manitoba (including re-testing of 1 household) showed that the water is safe to drink.

## 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.

## Are people being exposed to harmful levels of mercury?



Only 8 out of the 236 hair samples had levels of mercury that were above Health Canada's guideline normal acceptable range. Letters were sent to these 8 participants 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 651 food samples representing 83 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.
- Intake of contaminants (except lead) from traditional food is below the guideline levels and is not a cause for concern.

**Recommendation:** Use steel shot instead of lead shot. Eating wild game contaminated by lead shot can be harmful to the brain, especially in children.

## Key Results For All Manitoba First Nations Communities:

1. Overall, the nutritional quality of food intake is below what is required for optimal health but it is improved when traditional food is eaten.
2. Overweight/obesity, smoking and diabetes are major health issues.
3. Food insecurity is a serious problem.
4. Water quality is overall satisfactory but close monitoring is recommended.
5. Mercury exposure, as measured by mercury levels in hair and food intake, is not a health concern.
6. Chemical contamination of traditional food does not warrant any health concern, but it is important to have the information that was collected in this study to monitor any future changes.



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**More information can be found on the FNFNES website: [www.fnfnesc.ca](http://www.fnfnesc.ca)**

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

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