

# 58% OF HOUSEHOLDS WITH CHILDREN EXPERIENCED FOOD INSECURITY IN NORTHERN MANITOBA IN 2008-09

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## BACKGROUND

Families in northern Manitoba lack access to affordable nutritious foods, particularly perishables such as fruits and vegetables, due to limited food selections, high food prices, and poor quality of fresh produce. Expensive transport costs and difficult logistics (e.g. air freight charges, and uncertainty of travel on winter roads), high poverty rates, and a continuing decline in the use of country foods (Northern Food Prices Steering Committee, 2003) result in few healthy food choices. This household food security survey provides the first quantified data on the food security status in northern Manitoba in First Nation communities. Food security takes into perspective food availability, quality, quantity and ethically acceptable food consumed by children under 18 years and other family members (FAO, 2005; World Bank, 1996).

The traditional Aboriginal diet, combined with the active lifestyle needed to hunt and forage, is protective for chronic disease (Dannan, Erde and Kuhnlein, 2008). Wild food also alleviates hunger providing high quality local fish, wild meat and plants. However, public health restrictions currently do not allow wild fish or meat to be sold in local restaurants or stores or even provided free to public facilities (hospital, health centre, schools) for institutional use. These public health restrictions are partially because of health concerns. Wild game associated use for traditional food has the potential to spread diseases from the animal to humans through the consumption of animal meat.

## OBJECTIVE

To determine the children's food security rates in households in Northern Manitoba communities.

## METHODS

To measure the food security status of households in communities, a simple and scientifically grounded measurement tool was applied using the version that was adapted for Canada (Health Canada, 2007, pp. 45-49) from the US Food Security Survey Module. Bickel, Nord, Price et al. (2000). The 18 validated questions about food security as experienced and reported by household members has eight questions that consider children's food security and ten questions that measure adult food security. Also questions about traditional food use were asked.

A survey of 534 households, of which 463 had children, in northern Manitoba was undertaken in the summer of 2009 in 14 communities. In most of these 14 communities we surveyed 50 homes. Many communities had small sample sizes because the population was limited, which resulted in the entire population being sampled in Granville Lake, Ilford, Thicket Portage and War Lake. However, for Messagarak the sample is small and unrelated to the population size and caution should be taken in interpreting the results for this community.

## FINDINGS

Almost two-thirds of children at 58% +/- 2% in northern Manitoba households were food insecure (n=463, 34% moderately and 24% severely) equates 58% total with 2% confidence intervals) (Figure 1). Across communities the total rate of food insecurity of household children ranged from 10% in Ilford to 88% in Granville Lake (Figure 2). Households with severely food insecure rates for children were lowest, at zero, in Ilford and Thicket Portage and highest in South Indian Lake (63%). Greater than 40% of households with children were severely food insecure in four communities, of which three are fly-in: Brodbelt/Barrens Land First Nation, Garden Hill First Nation, Red Sucker Lake First Nation and South Indian Lake First Nation. Lack of road access seems to elevate the rate of overall food insecurity by 20% in households with children (Figure 3).

The responses in 14 communities are summarized in Figures 4 and 5. The findings are:

- Households relied on only a few kinds of low-cost food to feed the children because they were running out of money to buy food 62% of the time (21% of the households were often and 41% sometimes).
- Six out of ten households meals did not always contain all of the food groups (often 19% and sometimes 44% = 63%) (Figure 4).
- Six out of ten children were not able to eat enough because households couldn't afford to buy enough food (17% often and 44% sometimes = 61%) (Figure 5).
- Lack of food, and a lack of money to buy more food, caused approximately one third of households to cut the size of children's meals (36%).
- One third of children skipped meals (34%) because there wasn't enough money for food, with 11% often skipping meals and another 11% some but not every month, and 33% skipped meals only one or two months in the last 12 months.
- One in five households contained children who had not eaten for a whole day (19%) because there wasn't enough money for food, and
- One in four households had children who going hungry (28%) because the household couldn't afford more food.

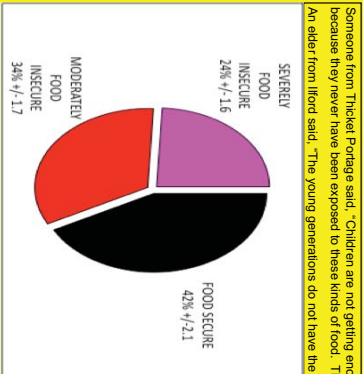


Figure 1. Percent of households with children that were food secure (black), moderately food insecure (red) and severely food insecure (purple) but 95% confidence intervals and weighted by sample size of

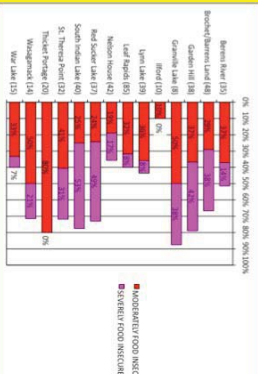


Figure 2. Percent of households with children that were moderately (red) and severely (purple) food insecure compared by communities. Numbers in bracket represent the number of households that were interviewed in each community.

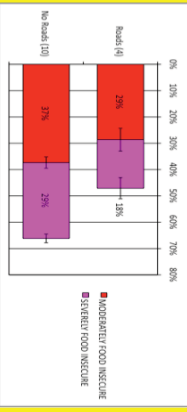


Figure 3. Percent of households (purple) food insecure with moderate (red) and severely (purple) food insecure with 95% confidence (weighted by sample size of communities with community number in brackets) compared by road access.

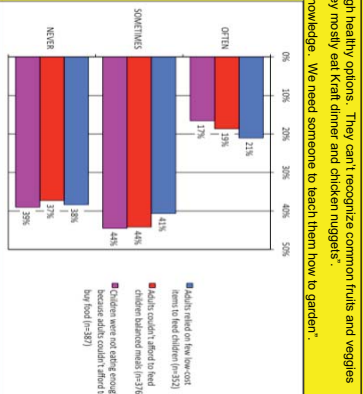


Figure 4. Percent of households where adults relied on a few kinds of low-cost food to feed children (blue), couldn't afford to feed children balanced meals (red) and children were not able to eat enough because households couldn't afford to buy enough food (purple).

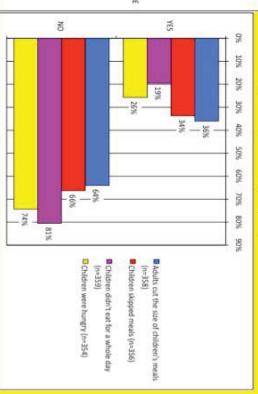


Figure 5. Percent of households where children's meals were restricted in size (blue), skipped (red), children weren't eat for a whole day (purple) and

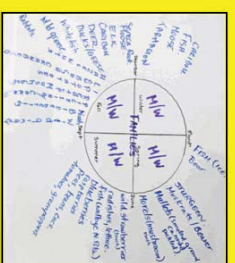


Figure 6- Seasonal Calendar of some northern Manitoba community members

The quality and quantity of healthy food is lacking in 58% +/- 2% of households with children in northern Manitoba due to high food prices of imported foods and their poor quality. More than half of households with children in northern Manitoba had either reduced food intake and disrupted food patterns or reduced quality or quantity of food. These rates show a food security crisis in Manitoba's Aboriginal communities) that needs immediate attention and dedicated resources. Long-term solutions are required and immediate action should be taken. Road access is an important factor contributing to the rates of food insecurity. Communities without road access have greater levels of food insecurity than those with road access.

## CONCLUSIONS

Increasingly, research is making the link between high food insecurity and different chronic diseases like diabetes for both adult and children (Thompson, Mallman, Gulrukh, 2009). A practical and culturally appropriate solution for the situation in Northern Manitoba communities is to further support and promote community food security through home gardens and medicinal plants. Despite the food safety risks that exist with traditional food there are clear benefits for their use that appear to outweigh the risks from prions and other factors. Traditional food practices are proven practices in contrast to public health, which is science based, to address the safety of home gardens. The idea of traditional food has been processed in an approved facility for a head start program in BC (BCFNHS Growing Together newsletter, 2003) and by Kivalliq Arctic Foods Ltd. which distributes traditional food using retail, whole sale and online stores. However, in Northern Manitoba there are no approved processing facilities for meat or fish. Nelson House country foods program, which has resulted in better food security rates.

As well, the household food survey applied should consider other aspects than money which limit access to food in communities without food stores or roads. As well, the household food survey does not consider country foods access.

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