

The Cost of Eating Well in Kiiwetinoong

An update on food affordability in Sioux Lookout area First Nations



Sioux Lookout
First Nations
Health Authority

September 2024

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www.slnha.com

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Contents

Report Summary	1
Background.....	3
How we Created this Report.....	5
Findings	7
Conclusions	11
Important Considerations.....	12
References	13
Appendix 1	14
Appendix 2	19
Next Steps	21

Glossary of terms

NFB	National Nutritious Food Basket survey
NNC	Nutrition North Canada
NWHU	Northwestern Health Unit
ODPH	Ontario Dietitians in Public Health
RNFB	Revised Nutritious Food Basket survey
SLFNHA	Sioux Lookout First Nations Health Authority
TBDHU	Thunder Bay District Health Unit

Report Summary

Sioux Lookout area First Nations are rich with knowledge about how to live well with foods and medicines from the land. While continuing traditional harvesting practices, communities also rely on costly foods imported by, and sold at, local stores. Communities have raised concerns about the high cost of food and its relationship to illnesses like diabetes. In response to the Sioux Lookout First Nations Health Authority (SLFNHA) Shookaawaapinewini Maawantoonikewin (Diabetes Report), Sioux Lookout area Chiefs-in-Assembly passed resolution 22-24 directing SLFNHA "...to advocate for resources and supports to address the high cost of healthy food and other inequities impacting First Nations and remote communities."

Purpose of Report

To provide updated store food cost information that will support advocacy work addressing the high cost of healthy food.

How we Gathered Information

We gathered healthy food cost information in two ways. For both, we tried to see how much it costs to feed a family of four, for a month, items from two versions of Canada's Nutritious Food Basket survey.



In August and September 2022, we received community consent to work with three stores in two Sioux Lookout area First Nations to gather food cost information using the National Nutritious Food Basket survey.



We gathered publicly available food cost information provided by 14 stores in Sioux Lookout area First Nations to Nutrition North Canada in March 2021 to understand food cost across more communities using the Revised Nutritious Food Basket item list.

What we Learned

Long-standing regional inequities in the affordability and availability of nutritious store food in Kiiwetinoong (northern region sharing geography with what is also referred to as Northwestern Ontario) remain.

In August and September 2022, the average monthly cost of a healthy diet from three stores was **\$1769.43**, even while **more than half of the Nutritious Food Basket items on the list were not available at the time of the survey**. This cost was about **37% to 69% higher** than a similar healthy diet purchased in **Northwestern Ontario towns and cities**. As of March 2021, **the average monthly cost of a healthy diet for a family of four** purchased from 14 stores in Sioux Lookout area First Nations communities was **\$1,765.12**. **Fruits, vegetables, and meat and alternatives took up over two-thirds of this cost.**

For a family participating in the Ontario Works financial assistance program, the cost of food would take up **more than half of their monthly income (62%)**.

Important details missed by our report include the types of foods that community members eat, where most of the food is purchased, the family and kinship structures that would influence how much food is purchased per household, and how income is distributed.

This report provides an update on food cost and availability in Kiiwetinoong First Nations communities. **More and new action is needed to support First Nations food sovereignty while improving store food affordability and quality.**



As of March 2021, the average monthly cost of a healthy diet purchased from stores in Sioux Lookout area First Nations communities was \$1,765.12, which is roughly 86% higher than a similar healthy diet purchased in the district of Thunder Bay.

Background



Kiiwetinoong is rich with knowledge and long-practiced approaches to sustainably harvesting foods and medicines from the land and water. For many First Nations communities, traditional knowledge and approaches to accessing food is disrupted by colonization and racist and colonial policies that forcibly shift traditional foodways towards “market foods” or foods imported into communities by retailers.

The rising cost of food and its affordability is a long-standing concern globally. Canada’s Food Price Report expected an increase of 3% to 5% in 2021 overall food costs, with the largest increases in prices in meat and vegetables (Charlebois et al., 2020). Many incomes remain fixed putting enormous strain on individuals and families and causing an increased risk for food insecurity (Tarasuk, Li & Fafard St-Germain, 2022; Men et al., 2021). People experiencing food insecurity are at a higher risk for acute and chronic medical conditions, and considerably higher risk for mental health disorders (Men et al., 2020). Food insecurity is disproportionately experienced among Indigenous households – with 28% experiencing food insecurity compared to 11% in non-Indigenous families in Thunder Bay, Ontario (Tarasuk et al., 2019). This rate is much higher (>50%) in northern remote First Nations (Batal et al., 2021; Tarasuk et al., 2019). Several factors have intensified food insecurity during the COVID-19 pandemic, including the disruption of the already precarious food supply chain, reduced or limited travel in and out of communities, and protection measures such as self-isolation limiting staffing at stores, community food distribution points, and ability to harvest and store wild foods. In this report, we are presenting a preliminary (and crude) estimate of the cost of purchasing market-based foods in

First Nations communities in Kiiwetinoong, relative to the median fixed income of a family of four. Food affordability is only one aspect of food insecurity and so this report does not give the full picture of food insecurity in the North. We suggest that food insecurity is rooted in income injustice and the affordability (high cost) of foods.

National Nutritious Food Basket (NFB) Survey

The National Nutritious Food Basket survey (NFB) is a tool used by Ontario Public Health Units (and organizations across Canada) to monitor food affordability. Since the 1990s, Ontario Public Health Units have monitored food costs and affordability annually. NFB follows the dietary patterns collected as part of the 2015 Canadian Community Health Survey and general patterns suggested by the revised Canada's Food Guide. It reflects the cost per week needed to purchase enough food to meet the needs (calculated in grams per each food) for a hypothetical family of four, including a 31-50 year old woman, a 31-50 year old man, an 8 year old girl, and a 14 year old boy.

Most recently, the Northwestern (NWHU), Thunder Bay District Health Units (TBDHU), Timiskaming Health Unit, and Ottawa Public Health carried out their NFB surveys between May and June 2022. The survey coverage of the four health units does not include any Northern Stores, band-run stores, or community cooperative stores in First Nation communities. The reason for the Sioux Lookout First Nations Health Authority to carry out a similar

costing analysis was to provide a closer picture of the costs of market-based foods available to community members on reserve.

Revised Nutritious Food Basket (RNFB) Survey

The Revised Nutritious Food Basket (RNFB) is a similar and separate food affordability tool that was developed by Crown Indigenous Relations and Northern Affairs Canada in consultation with Health Canada to address concerns about the accuracy and use of the NFB in First Nations and Inuit communities. It is used monthly by retailers in 122 remote First Nations and Inuit communities across Canada that receive the Nutrition North Canada (NNC) subsidy. The costing also reflects the weekly food cost per family of four members of the same structure as the NFB. The NNC is a national program that provides subsidies to registered retailers for eligible foods and household necessities (like diapers, personal hygiene products, and hand sanitizers) to improve access and affordability to healthy foods for people living in northern rural and remote communities. Retailers in 21 Sioux Lookout area First Nations currently receive the NNC subsidy (Figure 1).

Purpose of Report



Assess food cost in Northern Stores and a community store in Sioux Lookout area First Nations.



Assess the utility of the NFB and RNFB tools for evaluating food cost in the region and to propose next steps for a more specific assessment.

How we Created this Report

Collecting Food Cost Data

To provide an updated but preliminary look at food affordability within Sioux Lookout area First Nations, we gathered food cost data from two sources. Chiefs granted us permission to complete the NFB surveys with three stores in two communities between August and September 2022. The NFB costing tool uses a narrow description and package or unit size for each food item. When foods in the store matched this description, they were considered “preferred,” when there was a difference such as package size or flavored nuts instead of plain nuts, these foods were considered “alternative,” and when the food in any format or flavour was not available for purchase in the store it was labelled as “missing.”

Next, we used publicly available data from NNC on the cost per week of the RNFB in as many of the eligible communities as possible with retailers that received NNC subsidies in March 2021. This reporting month was the most recent with the greatest number of eligible retailers that submitted food cost data to NNC. Data were available for 14 of 21 communities with The North West Company Northern Stores eligible for the NNC subsidy. Statistics Canada and Crown Indigenous Relations and Northern Affairs Canada also provided us with expanded data that showed the cost per week per community of the RNFB.

Approach to Data Analysis

Using the data collected from three stores in Sioux Lookout area First Nations communities, we calculated the average cost per month (overall) using a NFB master spreadsheet provided by TBDHU. Since cost was only assessed at one point in time, we did not calculate average costs for individual stores to avoid making unfair comparisons between stores. We then compared our results with results from NWHU, TBDHU, Timiskaming Health Unit, and Ottawa Public Health NFB surveys completed between May and June 2022 with:

- Eleven stores in Kenora, Dryden, Sioux Lookout, and Red Lake (NWHU, 2022)
- Four stores in the City of Thunder Bay, and two in the wider Thunder Bay district (TBDHU, 2023)
- Ten stores (including 6 in-store data collection and four online) in Timiskaming’s northern, middle, and southern parts (Timiskaming Health Unit, 2022)
- Fourteen stores (12 urban and two rural) in the City of Ottawa (Ottawa Public Health, 2022).



Figure 1. Sioux Lookout area First Nations with retailers (e.g., The North West Company Northern Stores) eligible to receive Nutrition North Canada subsidy.

We also calculated the average percentage of items found and labelled preferred, alternative, or missing.

Using NNC data from March 2021, we calculated the average cost per month of the RNFB (overall and by food grouping) for a wider range of Sioux Lookout area First Nations retailers. Finally, we looked at how much of a family's monthly income may go toward food costs. We used the income scenarios worksheet developed by the Ontario Dietitians in Public Health (ODPH, 2019) to calculate three hypothetical monthly income scenarios (after tax): a family of four with a median Ontario income; a family of four with a single earner receiving minimum wage; and a family of four on Ontario Works.

A detailed summary of our approaches to data collection and analysis is presented in Appendix 2.



Findings

Across three stores surveyed in two Sioux Lookout area First Nations, the average monthly NFB cost for a family of four was \$1769.43 (Figure 2). The 2022 average monthly NFB cost in NWHU municipalities was \$1295.18, while in the City of Thunder Bay and district it was \$1045.88 (NWHU, 2022; TBDHU, 2023). For municipalities within Timiskaming Health Unit, the 2022 average monthly NFB cost was \$1,152.00, while in the City of Ottawa and district, it was \$1,088.00 (Timiskaming Health Unit, 2022; Ottawa Public Health, 2022). The monthly average cost of healthy foods we observed in two Sioux Lookout area First Nations was between 37% and 69% higher than the monthly average for municipalities within NWHU, Timiskaming Health Unit, Ottawa Public Health, and TBDHU regions, respectively.

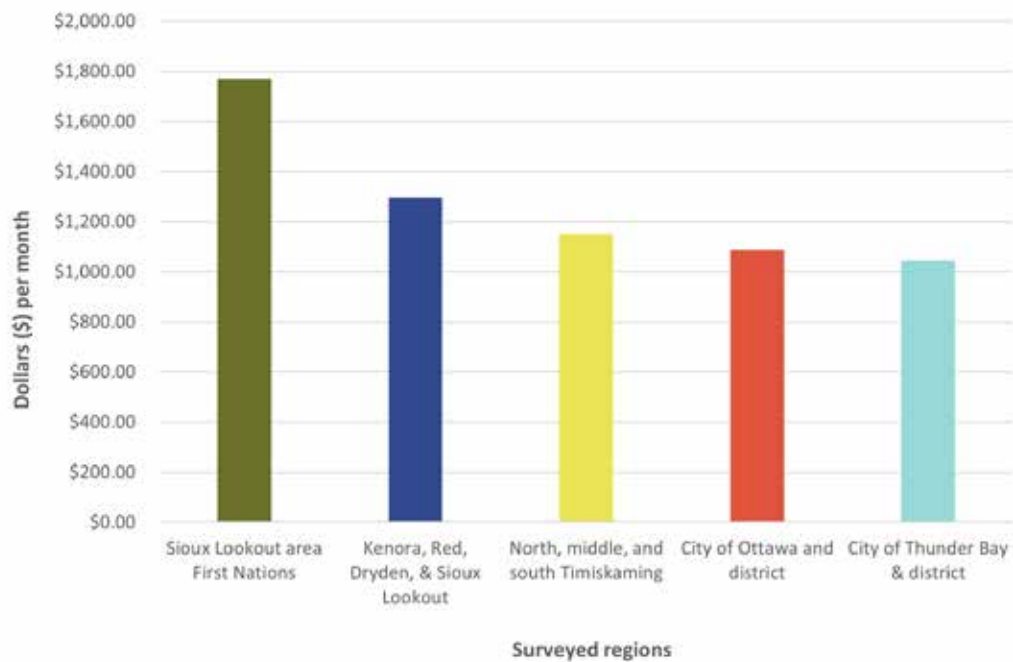


Figure 2. Average healthy food cost per month (Nutritious Food Basket, 2022) for a family of four in three stores in two Sioux Lookout area First Nations compared to grocery stores in Northern and Eastern Ontario municipalities.

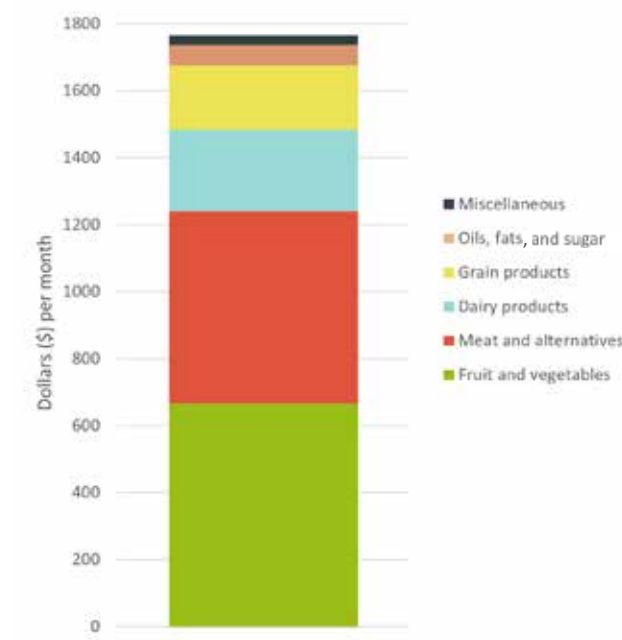


However, more than half of the food items on the NFB list were not available in-store at the time of survey in the three stores we surveyed. Information on the availability of listed foods was not available from NNC to compare with the percentage of missing items identified by the RNFB survey.

Figure 3. Percentage of items on the Nutritious Food Basket item list available in three Sioux Lookout area First Nations stores when surveyed (August/September 2022).

As of March 2021, the average monthly RNFB cost for 14 Sioux Lookout area First Nations communities was \$1,765.12. Fruit and vegetables were the largest contributor to the RNFB cost (38% of the monthly cost) followed by meat and alternatives (33%), together making up more than two-thirds of the monthly cost of food.

Figure 4. Average monthly healthy food cost (Revised Nutritious Food Basket March 2021) for family of four in Sioux Lookout area First Nations by food group category.



As of March 2021, the average monthly RNFB cost for 14 Sioux Lookout area First Nations communities was \$1,765.12.



As of March 2021, the RNFB costs for a hypothetical family of four in Sioux Lookout area First Nations was between 22% and 62% of their total income (Figure 5). Even in a scenario where two adults are earning a median income, nearly a quarter of the monthly income is spent on the basic foods required to maintain a healthy diet.

The cost of a healthy diet in Sioux Lookout area First Nations uses between 22% and 62% of the total income of a hypothetical family of four.

Family Income Scenario

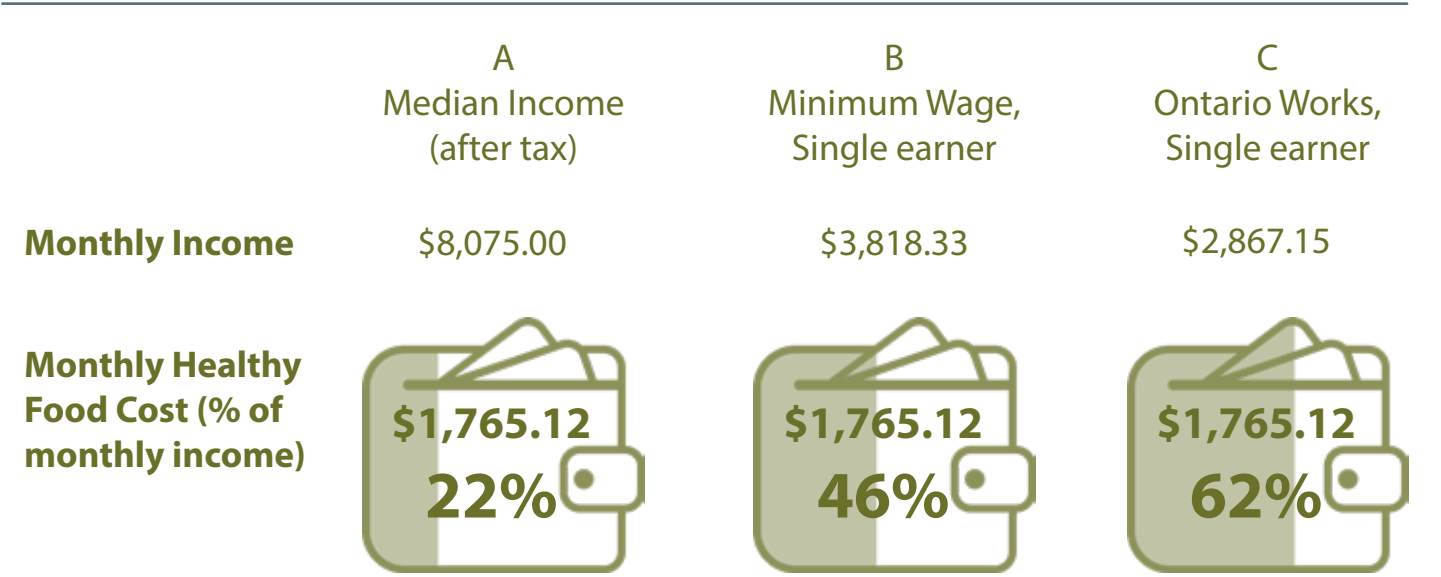


Figure 5: Average monthly healthy food cost (Revised Nutritious Food Basket, March 2021) for hypothetical Sioux Lookout area First Nations family of four by income scenario.

Median: The middle number in a group of numbers ordered from smallest to largest. Half of the numbers (e.g., dollars earned by workers) are greater than the median and half of them are less that the median. The median or “middle” income earned by workers, is more reliable than the average when there is a wide range of incomes earned.



Conclusions

In August and September 2022, the average monthly cost of the NFB was \$1769.43 in two communities. In March 2021, the average monthly cost of the RNFB was \$1765.12 across 14 Sioux Lookout area First Nations communities. Fruit, vegetables, meats, and meat alternatives made up nearly three quarters of monthly food costs. Our updated cost estimates appear considerably higher than those reported in municipalities such as the City of Thunder Bay, Kenora, Dryden, Sioux Lookout, and Red Lake, Ontario (NWHU, 2022; TBDHU, 2021; TBDHU, 2023). Our updated cost estimates also suggest Sioux Lookout area First Nations families may need to spend between 22% and 62% of their monthly income to purchase nutritious store foods alone. Note, the food cost data we collected includes the NNC subsidy, emphasizing the urgent need for new approaches to improve affordability.

The affordability and availability of nutritious store foods reflects long-standing injustice that community members living in Sioux Lookout area First Nations are forced to navigate. In 2006 and 2015, SLFNHA and Northwestern Health Unit completed food cost surveys with Sandy Lake, Wunnumin Lake, and Sachigo Lake First Nations (NWHU & SLFNHA, 2016). The survey was based on the NFB survey but also included essential items like personal hygiene products. Between 2006 and 2015, the average monthly cost of food and essential household items for a family of four in these three communities appeared to increase from \$1333.91 to \$1833.85 (approximately 73% higher than the cost in municipalities). Inflation explained about 42% of this increase (NWHU & SLFNHA, 2016). Strengthening the reliability of our findings is the consistency between the 2022 NFB and 2021 RNFB average food cost estimates. The RNFB survey tool used for this report was expected to reduce differences in costs calculated for

Sioux Lookout area First Nations stores and stores in municipalities because it contains fewer perishable items that are often more costly (Richmond et al., 2021). However, there are significant challenges with making direct comparisons of food costs over time and across regions due to differences in the surveys used for previous reports, the large proportion of NFB food items not available in Sioux Lookout area First Nations stores, the small number of stores surveyed, and the slightly different timeframe of the 2022 TBDHU, Timiskaming Health Unit, Ottawa Public Health, and NWHU surveys.

Furthermore, using both the NFB and RNFB comes with significant error, given that we are missing a vast component of people's diets that is not necessarily reflected in the dietary patterns of the 2015 Canadian Community Health Survey. Foods harvested from the land make up a large component of the diets among members of Sioux Lookout area First Nations. The costs associated with harvesters' time and supplies (e.g., fuel, ammunition, airplane, boat, and snow machine use) required to harvest food and medicines is left out of this survey and, as such, the tool mischaracterizes the diets of many of the community members. In addition, the hypothetical family structure used in the survey does not reflect the broad family and kinship structures in many First Nations communities. Sioux Lookout area First Nations community members have rich and diverse relationships with the land and how food is procured, stored, and shared within communities.



Important Considerations

There are considerations specific to this region that influence the interpretation of the findings as well as planning for future food affordability assessments. Some considerations include the following:

- A standard tool such as the NFB does not seem to measure a healthy diet that is available or consumed in the region. As such, we recommend that approaches to measuring food affordability and availability in the Sioux Lookout area First Nations should be developed using a community-based participatory approach.
- Food purchasing in Sioux Lookout area First Nation communities is different than in urban settings. For example, certain store foods might be purchased in community, but many other sources of foods like wild meats and fish or bulk foods purchased from larger municipalities are not considered as part of the NFB.
- When considering income scenarios relative to food costs, the diverse family and kinship structures and how income sharing takes place should also be considered. Family, kinship, and household structures, and the number of dependents relying on income varies greatly in the First Nations communities and the hypothetical family situation may not be even an appropriate “average” interpretation. For example, a single income may be used to purchase food for many more than two to three dependents and as such the food budget would need to be greater to feed a larger number of people.
- The steps required to access federal and provincial financial assistance programs and benefits requires

steps that are made challenging for many Sioux Lookout area First Nations community members. For example, registering for a child’s birth certificate requires a credit card. To apply for other forms of identification requires travel to larger municipalities for processing which is prohibitively expensive for many community members. These barriers represent structural issues that are often rooted in racist and colonial policies.



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Appendix 1. Nutritious Food Basket Food List Information and Supplementary Results

Table i. Food List from Revised Nutritious Food Basket

Food Item	Food Group	Qty	Unit
2% Milk, fresh or in TetraPak	Dairy products	4.76	L
Mozzarella cheese	Dairy products	0.485	kg
Processed cheese slices	Dairy products	0.385	kg
Yogurt	Dairy products	1.67	kg
Evaporated milk, 2%	Dairy products	1.58	L
Skim milk powder	Dairy products	0.09	kg
Large eggs (8 eggs)	Meat and alternatives	0.456	kg
Chicken drumsticks	Meat and alternatives	2.68	kg
Pork chops, loin	Meat and alternatives	1.21	kg
Ground beef, lean	Meat and alternatives	1.34	kg
T-bone steak	Meat and alternatives	0.47	kg
Sliced ham	Meat and alternatives	0.135	kg
Frozen fish sticks	Meat and alternatives	0.135	kg
Canned pink salmon	Meat and alternatives	0.27	kg
Sardines in soya oil	Meat and alternatives	0.27	kg
Canned ham	Meat and alternatives	0.2	kg
Bologna	Meat and alternatives	0.06	kg
Wieners	Meat and alternatives	0.1	kg
Peanut butter	Meat and alternatives	0.09	kg
Canned pork-based luncheon meat	Meat and alternatives	0.05	kg
Canned corned beef	Meat and alternatives	0.04	kg
Canned beans with pork	Meat and alternatives	0.29	L
Canned beef stew	Meat and alternatives	0.18	kg
Canned spaghetti sauce with meat	Meat and alternatives	0.155	L
Bread, enriched white	Grain products	0.66	kg
Bread, 100% whole wheat	Grain products	0.66	kg
Flour, all purpose	Grain products	1.92	kg
Pilot biscuits	Grain products	0.275	kg
Macaroni or spaghetti	Grain products	0.385	kg
Rice, long-grain parboiled white	Grain products	0.33	kg
Rolled oats	Grain products	0.275	kg
Corn flakes	Grain products	0.44	kg
Macaroni and cheese dinner	Grain products	0.55	kg
Oranges	Fruit and vegetables	1.23	kg
Apple juice, frozen	Fruit and vegetables	0.033	L
Orange juice, frozen	Fruit and vegetables	0.282	L
Apples juice, TetraPak	Fruit and vegetables	0.88	L

Orange juice, TetraPak	Fruit and vegetables	0.375	L
Canned whole tomatoes	Fruit and vegetables	0.215	L
Canned tomato sauce	Fruit and vegetables	0.3	L
Apples	Fruit and vegetables	4.38	kg
Bananas	Fruit and vegetables	3.58	kg
Grapes	Fruit and vegetables	0.5	kg
Canned fruit cocktail in juice	Fruit and vegetables	0.855	L
Canned peaches in juice	Fruit and vegetables	0.285	L
Canned pineapple in juice	Fruit and vegetables	0.285	L
Fresh potatoes	Fruit and vegetables	3	kg
Frozen french fries	Fruit and vegetables	0.48	kg
Instant potato flakes	Fruit and vegetables	0.22	kg
Carrots	Fruit and vegetables	2	kg
Onions	Fruit and vegetables	0.695	kg
Cabbage	Fruit and vegetables	0.52	kg
Turnips	Fruit and vegetables	0.35	kg
Frozen broccoli	Fruit and vegetables	0.695	kg
Frozen carrots	Fruit and vegetables	0.26	kg
Frozen corn	Fruit and vegetables	0.26	kg
Frozen mixed vegetables	Fruit and vegetables	1.74	kg
Canned green peas	Fruit and vegetables	0.9	L
Canned kernel corn	Fruit and vegetables	1.09	L
Canned green beans	Fruit and vegetables	0.315	L
Canned carrots	Fruit and vegetables	0.325	L
Canned mixed vegetables	Fruit and vegetables	0.545	L
Margarine, non-hydrogenated	Oils, fats and sugar	0.715	kg
Butter	Oils, fats and sugar	0.065	kg
Canola oil	Oils, fats and sugar	0.185	L
Lard	Oils, fats and sugar	0.105	kg
Sugar, white	Oils, fats and sugar	0.6	kg

Appendix 1b: Food List from the National Nutritious Food Basket (2019)

Food item	Quantity	Unit
Milk, 2% M.F.	4120	kg
Partly skimmed mozzarella cheese	0.400	kg
Plain yogurt, 1-2% M.F.	0.650	kg
Egg, fresh	1	dozen
Margarine	0.907	kg
Fortified soy beverage	1.89	l

Hummus	0.200-0.300	kg
Tofu	0.350-0.530	kg
Chicken, legs	0.750-1.500	kg
Ground turkey	0.400-0.600	kg
Beef, round roast	1.500	kg
Pork chops	1.500	kg
Apples, fresh	1.00	kg
Bananas, fresh	1.00	kg
Winter (butternut) squash, fresh	1.00	kg
Green cabbage, fresh	1.00	kg
Cantaloupe, fresh	1.00	kg
Carrots, fresh	1.00	kg
Celery, fresh	0.800	kg
Cucumber, fresh	0.370	kg
Grapes, fresh	1.00	kg
Green pepper, fresh	0.119	kg
Iceberg lettuce, fresh	0.750	kg
Romaine lettuce, fresh	0.530	kg
Mushroom, fresh	1.00	kg
Onion, cooking, yellow, fresh	1.00	kg
Oranges, fresh	1.00	kg
Potato, fresh	1.00	kg
Sweet potato, fresh	1.00	kg
Tomato, fresh	1.00	kg
Whole wheat hamburger buns	0.568	kg
Whole wheat pita/roti/chappati	0.250-0.500	kg
White fish, frozen	0.680	kg
Broccoli, frozen	0.500	kg
Corn, frozen	0.750	kg
Green beans, frozen	0.750	kg
Peas, green, frozen	0.750	kg
Spinach, frozen	0.500	kg
Strawberries, frozen	0.600	kg
Mixed vegetables, frozen	0.750	kg
Black beans, canned	0.548	kg
Kidney beans, canned	0.583	kg
White beans, canned	0.599	kg
Chickpeas, canned	0.548	kg
Peaches, canned	0.410	kg
Pears, canned or container	0.410	kg
Pink salmon, canned	0.213	kg
Tuna, canned	0.170	kg

Tomato, canned	0.870	kg
Cereal, hot, oats	1.00	kg
Cereal, shredded wheat, plain	0.425	kg
Cereal, O-shaped oats, plain	0.570	kg
Whole wheat flour	2.500	kg
Whole wheat pasta	0.375	kg
Brown rice	0.900-2.00	kg
Lentils, dry	0.900-0.907	kg
Peanut butter, natural	0.750	kg
Peanuts, unsalted	0.700	kg
Sunflower seeds	0.300-0.500	kg
Mayonnaise	0.445-0.890	L
Vegetable oil	0.400-1.00	L

Appendix 1c: Supplementary results

Table 1: Average monthly healthy food cost (Revised Nutritious Food Basket) for a family of four in 14 Northern Stores in Sioux Lookout area First Nations compared to four urban Thunder Bay grocery stores.

Community	Monthly Cost (\$CAD)	Percentage (%) difference compared to Thunder Bay average cost (\$949/month)
1	1,783.21	87.9
2	1,686.73	77.7
3	1,720.09	81.3
4	1,614.88	70.2
5	1,865.98	96.6
6	1,966.75	107.2
7	1,839.51	93.8
8	1,710.07	80.2
9	1,644.75	73.3
10	1,633.41	72.1
11	1,838.42	93.7
12	1,918.23	102.1
13	1,695.94	78.7
14	1,793.73	89.0
Average	1,765.12	86.0

Table 2: Cost per month for family of four, by food grouping and by Northern Store in Sioux Lookout area First Nations.

Community	Fruit and vegetables	Meat and alternatives	Dairy products	Grain products	Oils, fats, and sugars	Misc.
1	\$687.09	\$527.63	\$271.60	\$199.92	\$68.32	\$28.64
2	\$603.06	\$579.82	\$239.45	\$180.78	\$57.84	\$25.78
3	\$696.74	\$525.21	\$227.10	\$192.25	\$57.44	\$21.37
4	\$582.93	\$566.51	\$229.49	\$163.95	\$51.78	\$20.21
5	\$714.02	\$580.95	\$263.48	\$203.39	\$67.95	\$36.20
6	\$757.48	\$609.41	\$269.43	\$226.34	\$67.60	\$36.49
7	\$680.05	\$630.56	\$235.88	\$201.64	\$68.46	\$22.93
8	\$631.00	\$554.26	\$240.83	\$188.21	\$60.27	\$35.51
9	\$586.27	\$582.44	\$228.05	\$169.57	\$57.85	\$20.57
10	\$613.97	\$508.46	\$238.86	\$180.94	\$61.93	\$29.26
11	\$735.07	\$571.53	\$251.39	\$183.94	\$66.13	\$30.37
12	\$704.58	\$662.69	\$253.36	\$206.73	\$63.66	\$27.20
13	\$627.04	\$585.15	\$221.19	\$171.59	\$61.98	\$29.00
14	\$707.42	\$558.30	\$245.96	\$191.77	\$63.51	\$26.77
Average	\$666.19	\$574.49	\$244.00	\$190.07	\$62.48	\$27.88
Average % of total monthly cost of food	38%	33%	14%	11%	4%	2%

Appendix 2. Detailed Summary of Data Collection and Analysis

Approach to Collecting Food Cost Data

The goal for data collection was to mirror as much as possible the 2016 NWHU and SLFNHA “Northern Food Basket Report” where NFB data was collected in three Sioux Lookout area communities: Sachigo Lake First Nation, Wunnumin Lake First Nation, and Sandy Lake First Nation. This was not possible during the summer and autumn months of 2022 given the ongoing COVID-19 pandemic and competing priorities requiring attention of community leaders.

To provide a preliminary look at updated food affordability information, we gathered data from two sources. To assess the utility of the National NFB tool in the Sioux Lookout area First Nations, we performed a cost survey with three different stores in two communities between August and September 2022. We first provided a letter of information to Chief and Council in both communities. The Chief of both communities provided consent to participate in the surveying and contacting the managers in each of the stores to ask permission to carry out the surveys. We also received approval from the Regional Sales Office of the North West Company. Two SLFNHA staff members travelled to the communities and collaborated with staff who live and work in the communities for support in finding each of the food items in the stores. The completed NFB surveys were entered in the NFB Master Spreadsheet by a SLFNHA staff member and checked for quality and errors. Any discrepancies were cross-checked and resolved with the SLFNHA staff members who collected the data.

Each month, Nutrition North Canada publishes data publicly on their website, showing the cost per week of the Revised Nutritious Food Basket in as many of the eligible communities that have retailers that receive NNC subsidies as possible. Statistics Canada and Crown Indigenous Relations and Northern Affairs Canada provided us with expanded data that showed the cost per week per community of the Revised Nutritious Food Basket, broken down by food group. We received the data for March 2021 because it was the most complete set of data (greatest number of eligible retailers had submitted their data to NNC).

Approach to Data Analysis

For data collected using the Nutritious Food Basket survey, the total average weekly cost for the three stores was calculated using the NFB Master Spreadsheet. We did not calculate the individual store cost in the spreadsheet to avoid unfair comparisons from being made between community stores when cost assessment is only done at only one point in time. To calculate the monthly cost, we used the weekly average, divided by seven and multiplied by 30.5 (because the costing took place in August – 31 days, and September – 30 days).

We received the cost per food group per week from each of the retailers that provided data to NNC for the month of March 2021. From here, we calculated the sum per week by adding all of the food groups together. We then calculated the total cost per month in each community by dividing the cost per week by seven to get the daily cost and multiplying by 31 days in the month.

We calculated the mean (average) cost per month for Sioux Lookout area First Nations communities using 2021 RNFB and 2022 NFB data separately and then calculated the percentage difference from the average monthly food cost from the 2022 NWHU, Ottawa Public Health, Timiskaming Health Unit, and TBDHU NFB surveys (NWHU, 2022; Ottawa Public Health, 2022; Timiskaming Health Unit, 2022; TBDHU, 2023).

In the NFB costing tool, there is a narrow description and package or unit size for each food item. When foods in the store matched this description, they were considered “preferred”, when there was a difference such as package size or flavored nuts instead of plain nuts, these foods were considered “alternative”, and when the food in any format or flavour was not available for purchase in the store it was labelled as “missing”. For these three stores, we calculated an

average for the percentage of preferred, alternative, and missing foods in store.

In order to calculate hypothetical levels of monthly income for the Sioux Lookout area First Nations, we used the income scenarios worksheet developed in 2019 by the Ontario Dietitians in Public Health (ODPH, 2019). The tool provided the publicly available references for calculating each of the social assistance and other average income amounts. We used each of the references to calculate three income scenarios (Family of four with a single earner on Ontario Works, family of four with a single earner receiving minimum wage, and a family of four with a median income [Ontario]) for the tax year of 2020, assuming the wage rates for between the months October 1, 2020 to September 2021.

Next Steps

Sioux Lookout area First Nations have a vast understanding about how to live well with foods and medicines from the land. While continuing traditional practices like hunting, fishing, and gathering, communities also rely on costly foods imported by, and sold at, local stores. Communities have raised concerns about the high cost of food and its relationship to illnesses like diabetes. In response to the Sioux Lookout First Nations Health Authority (SLFNHA) Shookaawaap-inewini Maawantoonikewin (Diabetes Report), Sioux Lookout area Chiefs-in-Assembly passed resolution 22-24 directing SLFNHA "...to advocate for resources and supports to address the high cost of healthy food and other inequities impacting First Nations and remote communities."

These efforts will include:

Regular Analysis and Monitoring: It is essential to conduct regular analysis and monitoring of food costs to identify any discrepancies or trends. It is necessary to implement a system where food costs are reviewed on a regular basis to ensure accurate tracking and early detection of any issues. ACW will target conducting a food costing study every two years. This may include research to help determine the amount of the Nutrition North Canada subsidy that is actually going towards reducing food costs in communities.

Promote and Support Traditional Food Access: Provide support and resources for the preservation and revitalization of traditional Indigenous food systems. This begins in infancy: breastmilk is the first traditional food and supports the health of both the parent and infant, including the reduced risk of diabetes. Support traditional food practices such as fishing, hunting, and gathering, and seek funding for resources for community programs for items like fishing nets, trapping kits, and hunting tools. Support land-based programs to gain and/or enhance skills related to traditional food gathering, particularly for youth. Support and promote wild food gathering practices such as berry-picking, wild rice cultivation, or foraging for mushrooms.

Vendor Negotiations: Explore opportunities for presenting report findings and negotiating prices with vendors to reduce the financial burden on community members, including North West Company, Fresh Market Foods, to secure better deals on food items without compromising quality. Building strong relationships with suppliers can lead to favorable pricing agreements and discounts. Additionally, provide support for the implementation of efficient inventory management practices in community food stores to minimize food waste and control costs, and establish proper stock rotation procedures. This advocacy area will also include exploration of potential for grocery programs for northern communities with other "big box stores" in the region, such as Loblaws and Walmart.

Seek Funding for Resources for Communities to Enhance Food Storage: Freezers, refrigerators, and dry storage racks support food preservation, key to reducing waste. Additionally, seek funding for food preparation items, such as canning supplies.

Provide Community Training: Provide training to community staff and students on canning, preserving, pickling, and cooking techniques and the importance of minimizing food waste. Provide resources and workshops on gardening and small animal husbandry. Determine interest in other programs, such as bee keeping.

Support Community Knowledge Sharing and Traditional Events: Recognize the cultural significance of traditional foods and food practices and support efforts to preserve and transmit Indigenous food knowledge, culinary traditions, and language, including opportunities for Elder teachings on traditional foods, recipe sharing, and communal traditional food preparation and community feasts. Co-create opportunities for community leaders and partners to come together to discuss issues around food access and developing community-led solutions (i.e., Taking Back Our Food Chain Forum).

Support School Nutrition Programming: Support communities to secure adequate funding for school nutrition programs, such as breakfast programs and weekend food security programs for students. This should also include food preparation classes.

Promote and Support Community Growing

Projects: This includes greenhouses, hoop houses, and personal and community gardens.

Utilize Technology: Consider implementing food cost management software or tools to streamline the process of tracking and analyzing food costs. These tools can provide valuable insights and help identify areas for improvement more effectively.

Promote Policy Reform: Advocate for policy changes at local, national, and international levels that prioritize Indigenous food sovereignty and address issues such as land rights, food security, and environmental protection.

Support Research and Collaboration: Support research initiatives that are led by First Nations communities and focus on Indigenous food systems, traditional ecological knowledge, and the impacts of colonialism on food sovereignty. Foster collaboration between communities and researchers, policymakers, and practitioners that abide by the First Nations data sovereignty principles of ownership, control, access, and possession (OCAP®).

Honour Indigenous Environmental Stewardship: Promote sustainable land and resource management practices that align with First Nations principles of stewardship, respect for biodiversity, and resilience to climate change.

Support Food Security: Work with community leadership to develop strategies that promote food security and support existing food sovereignty, such as supporting communities in owning their own stores to keep profits in the community. Work with communities to improve access to nutritious, culturally appropriate foods, and work to address underlying factors such as poverty, inequality, and discrimination.

Demonstrate Respect for Self-Determination: Respect the autonomy and self-determination of communities in determining their own food systems, priorities, and development pathways.

Promote Understanding of Underlying Causes: Foster solidarity and allyship with communities in their struggles for food sovereignty, recognizing that food sovereignty is interconnected with broader struggles for Indigenous rights, environmental justice, and social justice.

Industry Level Change: Support industry level change to promote access to foods that support health and wellbeing and reduce reliance on processed food.

By implementing these recommendations, governments, institutions, and communities can contribute to the realization of Indigenous food sovereignty and support the wellbeing and resilience of First Nations Peoples and their culture.

