

Frequency of consumption of foods and beverages by Inuvialuit adults in Northwest Territories, Arctic Canada

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Abstract

Limited data exist regarding nutrient intakes and overall dietary quality in Canadian Arctic populations. This cross-sectional study determined the frequency of consumption of traditional meats (e.g. caribou, polar bear, seal, char and whale) and non-traditional store-bought foods including non-traditional meats (e.g. beef, pork and chicken), grains, dairy, fruits, vegetables and non-nutrient dense foods (NNDFs) (e.g. butter, chocolate, chips, candy and pop) by Inuvialuit adults (175 women, mean age 44 ± 14 years; 55 men, mean age 41 ± 13 years) in three remote communities in the Northwest Territories. Using a validated quantitative food frequency questionnaire, frequency of consumption over a 30-day period was determined for 141 commonly reported foods. Mean consumption of traditional meats (1.6 times/day), fruits (1 time/day) and vegetables (0.6 times/day) was less frequent than that of NNDFs (5.0 times/day). Nutritional intervention strategies are needed to promote more frequent consumption of nutrient-rich foods and less frequent consumption of NNDFs in these Arctic communities.

Keywords: Arctic Canada, food consumption, quantitative food frequency questionnaire, Inuvialuit

Introduction

Inuvialuit are indigenous peoples of the Northwest Territories (NWT), a Canadian territory located between the Yukon and Nunavut. For millennia, Inuvialuit were nomadic hunter-gatherers who survived on a diet of traditional foods provided by their local environment (Draper 1977; Kuhnlein et al. 2001; Kuhnlein and Receveur 2007). Depending on season, these foods included caribou, polar bear, seal, Arctic char, seasonal plants and berries (Draper 1977; Sharma 2010). Within the last century, Inuvialuit have become settled in permanent housing, and their lives have become much more strongly integrated into the cash economy (Shephard and Rode 1996; Bjerregaard and Young 1998; Bjerregaard et al. 2004; Boulton 2006; Berry 2008; Sharma 2010). As a result of the increasing Western influences, this remote population has experienced major changes in diet and lifestyle,

especially within the last few decades, including reduced consumption of traditional foods, increased consumption of store-bought market foods and reduced physical activity associated with hunting and fishing (Hopping et al. 2010; Sharma 2010).

At the same time as this diet and lifestyle transition has been taking place, Inuvialuit have been experiencing an increasing prevalence of diet-related chronic diseases and a shift in leading causes of death from communicable to non-communicable diseases (Young et al. 1993; Bjerregaard et al. 2004; Kuhnlein et al. 2004; Lix et al. 2009). During the period between 2005 and 2007, the leading cause of death in NWT was cancer (including that of the colorectum, breast, prostate and lung), followed by cardiovascular disease, injuries and respiratory disease (Circumpolar Inuit Review Working Group et al. 2008; NWT Health

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& Social Services 2011). The age-standardized obesity rate in the NWT in 2005 was 25%, which was the highest among Canadians (Human Resources and Skills Development Canada 2010). In 2009, 63% of residents surveyed in the NWT were overweight or obese (based on self-reported height and weight) compared with the national prevalence of 51% (NWT Health and Social Services 2011). Approximately, 200 new cases of diabetes are diagnosed each year in the (NWT Health and Social Services 2011).

To investigate the extent to which these increases in chronic disease prevalence rates amongst Inuvialuit may be related to the concurrent nutrition transition, information on prevailing food consumption patterns in this population is needed. Previous studies among Arctic indigenous peoples have shown that there have been consistent increases in the consumption of non-nutrient-dense foods (NNDs), such as processed meats, sugary beverages and chips, and that these foods have become the predominant foods in indigenous peoples' diets compared with traditional foods (Kuhnlein and Receveur 1996; Receveur et al. 1997; Kuhnlein et al. 2004; Erber et al. 2010a, 2010b). However, up-to-date information on such eating patterns among Inuvialuit is lacking. Recently, a culturally appropriate, community-based nutritional intervention programme called Healthy Foods North (HFN) was designed and implemented in several communities in NWT and the neighbouring territory of Nunavut with the overall objective of reducing obesity, diabetes and other chronic diseases (Sharma 2010; Sharma et al. 2010a, 2010b).

As a part of the HFN programme, a quantitative food frequency questionnaire (QFFQ) listing 141 commonly consumed traditional and non-traditional food items was developed and validated specifically for this population (Pakseresht and Sharma 2010; Sharma 2010). The aim of this study was to use the validated QFFQ to determine the frequency of consumption of traditional and non-traditional store-bought foods and beverages by a representative sample of Inuvialuit adults living in three remote communities in the Beaufort Delta region of NWT. It is anticipated that NNDs would be consumed more often than traditional meats, fruits or vegetables.

The information obtained may be used to monitor the ongoing nutrition transition among Inuvialuit, improve dietary quality and develop culturally appropriate intervention strategies to help reduce the burden of diet-related chronic diseases in this unique and vulnerable population.

Methods

Study design

This cross-sectional study took place in three communities in the NWT, Canada, between July 2007 and July 2008. A culturally appropriate QFFQ

that had been developed specifically and validated for Inuvialuit populations in these communities was used to collect data on frequency of consumption of foods and beverages (Sharma et al. 2009; Pakseresht and Sharma 2010). Data on demographic information and the socioeconomic status (SES) of the participants were also collected. A supplementary survey was conducted by measuring heights and weights from which body mass index (BMI) was calculated. Height was measured using a wall-mounted stadiometer (Seca model 222; KWS Medical Supplies LLC, North Bend, WA, USA 98045) to the nearest 0.1 cm. Weight measurement was taken using an electronic body weight scale (Taylor Electronic scale model 70009EF, Homedics Group Canada, Ontario) to the nearest 0.1 kg.

Setting

The NWT population is approximately 42,000 people (Statistics Canada 2007a). To ensure sample representativeness, three communities in the Beaufort Delta region of the NWT (Communities A, B and C) were selected for the study. Inclusion criteria were based on varying levels of size, isolation, SES and reliance on traditional food systems. Individual community demographics are presented in Table I; this information has been reported in more detail elsewhere (Sharma 2010). In brief, Community A was the largest and least isolated community with the most access to foods from food shops and other food outlets such as restaurants. Of the three communities, it had the smallest percentage of Aboriginal (63%) and Inuvialuit (40%) residents (Sharma 2010; Statistics Canada 2007a, 2007b). Community B had limited access via ice road for about 4 months of the year. Eighty four per cent of residents of Community B self-identified as Aboriginal and 80% identified themselves as Inuvialuit (Statistics Canada 2007a, 2007b; Sharma 2010). Community C was the smallest, most isolated of the three communities and was accessible only by plane. Occasionally during the summer months, bulk supplies and food were shipped by barge. It had the highest percentage of residents who self-identified as Aboriginal (92%) and Inuvialuit (90%) (Statistics Canada 2007a, 2007b). Communities B and C had two grocery shops while community A had three. Median family income varied widely across communities, ranging from \$33,000 in community C to \$64,000 in community A (Sharma 2010).

Sampling

Houses were identified and randomly selected using housing maps in order to ensure a representative sample with regard to store proximity. Power calculations on a pilot sample and sample size calculations for the communities have been previously

Table I. Demographics of three remote Inuvialuit communities in NWT and characteristics of the study participants*.

	Community A	Community B	Community C
<i>Demographics of the communities</i> [†]			
Population in 2006 (<i>n</i>)	3500	900	400
Total Aboriginal population (%) [‡]	63	84	92
Inuvialuit population (%) [¶]	40	80	90
Median age (years) [§]	24	26	25
Median family income in 2005 – all private households (CAN\$)	64,000	37,000	33,000
Employment rate (%)	60	35	50
<i>Characteristics of the participants</i>			
Respondents (<i>n</i>)	66	87	77
Gender (%)			
Men	23	22	27
Women	77	78	73
Median age (years)	46	46	39
Mean BMI (SD)	33.9 (8.3)	29.1 (8.6)	28.3 (8.1)
BMI categories (%)			
Normal (< 25 kg/m ²)	21	45	44
Overweight (25–29 kg/m ²)	22	19	19
Obese (≥ 30 kg/m ²)	57	36	37

NNDFs, non-nutrient-dense foods; NTMs, non-traditional meats; TMs, traditional meats; * Information was extracted from Sharma (2010); Source: [†]Statistics Canada (2007a); values are rounded to protect communities' identity; [‡]Source: Statistics Canada (2007a); Includes North American Indian, Metis, and individuals with multiple aboriginal identity responses; [¶]Source: Statistics Canada (2007b); [§]For all populations in the community; ^{||}Results from study participants.

reported elsewhere (Sharma 2010). In brief, 50 individuals per community were computed as the minimum detectable figure. One participant per household was asked to participate if they met the following criteria: Inuvialuit, age ≥ 19 years and resident in the community for 6 months or more. In each household, the main food shopper or preparer was targeted for selection. As pregnant or breastfeeding women have different nutritional requirements and possible changes in dietary habits and energy expenditure, they were excluded from this study.

Data collection

Standard procedures for data collection were developed by a member of the nutrition team and strictly followed by data collectors (Canadian university students and members of the communities). Data collectors were trained for 5 days and certified by the principal investigator of the research project. All participants were contacted by the data collectors for the interview. If a participant agreed to do the interview at that time, then it was conducted immediately. If they preferred to wait, then the interview was scheduled for another time. Participants were contacted up to seven times; if still unavailable, the interviewers moved on to the next household using the pre-planned map. Participants were informed about the objectives of the study and asked to sign a consent form prior to the start of the interview. Per respondent preference, the questionnaire was administered in English or the local language, Inuvialuktun or Inuinnaqtun (conducted by a bilingual collector or collector using an interpreter). As an incentive to complete the interview, each participant was given a

CAD \$25 gift certificate for a local store in their community. Institutional Review Board approval was obtained from the Committee on Human Studies at the University of Hawaii and the Office of Human Research Ethics at the University of North Carolina at Chapel Hill, and a scientific license was granted by the Aurora Research Institute.

Food consumption and the QFFQ

The QFFQ was developed specifically for Inuvialuit in NWT and is described in detail elsewhere (Sharma 2010). In brief, frequency of consumption during the previous 30 days was determined for 141 food items on the QFFQ and categorized into food groups which consisted of 39 traditional meats, 21 non-traditional meats, 26 non-nutrient dense store-bought foods, 11 fruits, 5 vegetables, 13 grain products, 9 dairy products, 8 other foods and 9 beverages (Appendix 1). Frequency of consumption (times/day) was calculated as follows: never was converted to 0 time/day, one time/month to 0.03 time/day, 2–3 times/month to 0.08 time/day, 1 time/week to 0.14 time/day, 2–3 times/week to 0.36 time/day, 4–6 times/week to 0.71 time/day, 1 time/day remained the same and 2 or more times/day was converted to 2 times/day. The QFFQ had been validated previously against three 24-hour dietary recalls and showed good agreement (Pakseresht and Sharma 2010).

Data analysis

The data for the frequency of daily consumption of the different food groups were skewed. Thus, in addition to mean and SD, median values were reported.

All statistical analyses were carried out using the SAS statistical software, version 9.2 (SAS Version 9.2, SAS Institute Inc., Cary, NC, USA).

Results

The demographics of the communities and characteristics of the participants are presented in Table I. Participants consisted of 230 Inuvialuit adults (175 women and 55 men). Median ages of the participants were 46, 46 and 39 years for communities A, B and C, respectively. Response rates ranged from 65% to 85%. The mean (SD), BMI for the participants from communities A, B and C was 33.9 (8.3) kg/m², 29.1 (8.6) kg/m² and 28.3 (8.1) kg/m², respectively. Most participants were either overweight or obese with combined percentages of 79%, 55% and 56% for community A, B and C, respectively.

Figure 1 shows the mean (SD) frequency of consumption of foods by Inuvialuit participants across all three communities, grouped according to the categories listed in the QFFQ. Appendix 1 shows the individual food items that made up each category. NNDFs were by far the most frequently consumed foods (5.0 times/day), followed by grains (2.2 times/day), non-traditional meats (1.6 times/day), traditional meats (1.6 times/day), dairy (1.5 times/day) and fruits (once/day). Vegetables were the least frequently consumed foods (0.6 times/day).

The mean (SD) and median frequency of consumption of the 30 most frequently consumed food items by Inuvialuit participants from the three communities are shown in Table II. The three most frequently consumed foods were NNDFs, namely coffeemate (0.83 times/day), butter/margarine (0.82 times/day) and sugar/honey (0.82 times/day). Other NNDFs including crackers, candy and chips were also consumed frequently (≥ 0.25 times/day). White bread was the most frequently consumed grain (0.49 times/day) and was eaten 1.5 times more often than whole

wheat bread. Frozen vegetables were the most often frequently consumed vegetable (0.21 times/day). Carrots were the only other vegetable that ranked among the 30 most frequently consumed foods. Fruits appearing among the 30 most frequently consumed foods included orange, banana and canned fruit in syrup. The only traditional meat appearing in the 30 foods listed in Table II was caribou (baked/boiled roasted).

Table III shows the mean (SD) and median frequency of consumption of beverages by Inuvialuit participants from the three communities. The most frequently consumed beverages were coffee (1.52 times/day) and water (1.14 times/day), followed by high calorie sweetened juices with added sugar (0.82 times/day). Regular pop and sweetened juices were consumed more often than unsweetened drinks, diet pop or unsweetened juices.

Discussion

Determining the frequency of consumption of commonly consumed foods and beverages in a population is vital for an assessment of dietary intake and the implementation of a culturally appropriate nutritional intervention. This study has presented data on the frequency of food and beverage consumption amongst Inuvialuit populations in three isolated communities in NWT. Traditional meats (e.g. caribou, polar bear, Arctic char and seal) were consumed relatively infrequently by this population. In fact caribou (boiled/baked/roasted) was the only traditional meat consumed more than once per week. These data are consistent with previous reports on the decreasing frequency of traditional food consumption by Canadian Indigenous Peoples and their replacement by NNDFs (Kuhnlein and Receveur 1996; Receveur et al. 1997; Kuhnlein et al. 2004). Given that traditional foods are considered highly nutritious and have been shown to be linked to

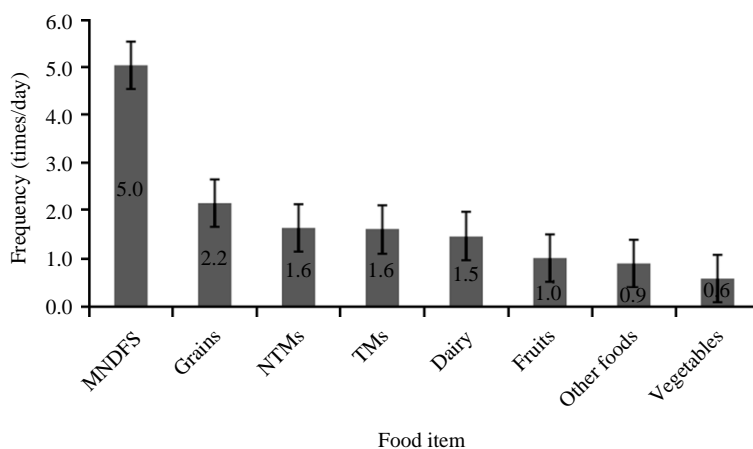


Figure 1. Frequency of consumption of food groups by Inuvialuit adults in three remote communities in NWT. NNDFs, non-nutrient-dense foods; NTMS, non-traditional meats; TMs traditional meats.

Table II. Frequency of consumption (times/day) of the top 30 foods consumed by Inuvialuit adults in three remote communities in NWT.

Food item	Frequency of consumption (times/day)		
	Mean	SD	Median
Coffeemate, regular*	0.83	0.87	0.71
Butter/margarine, regular*	0.82	0.66	0.71
Sugar/honey*	0.82	0.48	1.00
White bread ^{†‡}	0.49	0.51	0.36
Crackers*	0.38	0.41	0.36
Candy*	0.33	0.46	0.14
Eggs [¶]	0.33	0.28	0.36
Whole wheat bread [†]	0.31	0.46	0.08
Cheese, hard or processed [¶]	0.30	0.35	0.14
Milk, 2% [¶]	0.29	0.37	0.08
Rice [†]	0.25	0.26	0.14
Chips, regular*	0.25	0.36	0.14
Mash potato [§]	0.22	0.22	0.14
Low fat butter*	0.21	0.49	0.00
Canned milk, regular [¶]	0.21	0.37	0.00
Bannock, baked [†]	0.21	0.42	0.03
Mayonnaise*	0.21	0.34	0.08
Bacon [¶]	0.21	0.23	0.14
Frozen vegetable [#]	0.21	0.28	0.08
Bannock, fried [†]	0.20	0.33	0.08
Yogurt [¶]	0.19	0.33	0.08
Caribou, baked/boiled/roasted**	0.18	0.26	0.08
Oranges ^{††}	0.18	0.28	0.08
Bananas ^{††}	0.16	0.21	0.08
Canned fruit in syrup ^{††}	0.15	0.23	0.08
Chocolate*	0.15	0.24	0.08
Vegetable soup [§]	0.15	0.23	0.08
Carrots [#]	0.15	0.19	0.08
Beef, ground/ravioli [¶]	0.15	0.17	0.08
Potato, fried [§]	0.15	0.20	0.08

* NNDFs; [†] Grains; [‡] including toast, sandwiches, rolls and bagels; [¶] Dairy; [§] Other foods; [¶] Non-traditional meats; [#] Vegetables; ** Traditional meats; ^{††} Fruits.

a previously low prevalence of cardiovascular diseases and diabetes (Bjerregaard et al. 2000; Jørgensen et al. 2002; McLaughlin et al. 2005; Nobmann et al. 2005; Kuhnlein and Receveur 2007), a high frequency of consumption of these foods is not considered to be of concern for this population. Overall, non-traditional meats (e.g. beef, pork, chicken and their products) were consumed at about the same frequency as traditional meats (1.6 times/d) (Figure 1). Thus, although this and other studies suggest that consumption of traditional meats is on the decline, frequency of total meat and meat product consumption still appears to be high. However, the non-traditional meats category includes such processed food items such as hot dogs, sausages and lunch meat, which do not compare well nutritionally with traditional meats.

In contrast to traditional meats, this study has also shown that the foods consumed most frequently by Inuvialuit adults in these three Arctic communities were NNDFs and beverages. Because of their high sugars and/or fat content (especially saturated fats), consumption of these foods is undesirable and could

lead to obesity. Previous studies (Erber et al. 2010b) have shown that NNDFs make a large contribution to energy intake in this population. As an example of the difference between NNDFs and traditional meats in terms of nutritional composition, pepperoni pizza per 100 g has 296 kcal, 11.2 g protein, 15.2 g fat, 46.3% of calories from fat, 0.57 µg vitamin B12 and 2.4 mg iron (Lawn and Harvey 2003), whereas roasted caribou per 100 g has 142.5 kcal, 27.3 g protein, 2.8 g fat, 19.0% of calories from total fat, 6.5 µg vitamin B12 and 5.2 mg iron (Canadian Nutrient File 2011).

The low frequency of consumption of fruits and vegetables may be due to the high cost and lack of availability of fruits and vegetables in the grocery shops in these communities (Lawn and Harvey 2003; Ricciuto and Tarasuk 2007) since for almost 9 months of the year the landscape in these areas is covered with snow and so they have to rely completely on fruits and vegetables brought in by air freight.

In contrast, sweetened drinks (with added sugar), regular pop and sweetened juices were consumed frequently by Inuvialuit adults in the three communities. The consumption of these sweetened beverages is of concern as the excess calories can contribute to weight gain and lead to an increased risk of obesity and chronic diseases such as cardiovascular diseases and diabetes (Malik et al. 2010). The high frequency of consumption of coffee may simply be due to the extreme weather conditions experienced by people in these communities. However, provided artificial sweeteners and sugar are used sparingly, this may not contribute to excess caloric intake.

There was a widespread prevalence of overweight and obesity levels amongst the Inuvialuit across all three communities. BMI can be used to predict disease risk and these data suggest that Inuvialuit may be increasingly at risk of chronic disease development.

The results of this study suggest that nutritional interventions in this population should provide education on healthier approaches to meals, snacks and beverages in the home, with an emphasis on increased consumption of economical and nutrient-rich foods and healthy beverages, such as traditional

Table III. Frequency of consumption (times/day) of beverages by Inuvialuit adults in three remote communities in NWT.

Beverage	Frequency of consumption (times/day)		
	Mean	SD	Median
Coffee	1.52	0.67	2.00
Water	1.14	0.74	1.00
Sweetened drink with added sugar	0.82	0.75	0.71
Tea	0.80	0.79	0.71
Regular pop	0.52	0.61	0.36
Sweetened juice	0.20	0.42	0.00
Unsweetened drink	0.14	0.37	0.00
Diet pop	0.09	0.35	0.00
Unsweetened juice	0.08	0.24	0.00

meats, frozen vegetables and water. In contrast, nutrient-poor, energy-dense store-bought foods and beverages should be targeted for reduction in the diet. It is reasonable to suggest that interventions encouraging a reduction in the frequency of consumption of these foods could be an effective means for improving dietary quality and reducing chronic disease risk. Interventions that extend beyond the household food environment and also include other food venues and points-of-sale will likely have increased effectiveness. For example, interventions could educate retailers and home food preparers about the detrimental health effects of over-consumption of NNDFs. The results of this study are useful for identifying specific foods to be targeted for nutritional and lifestyle intervention programmes such as HFN (Sharma 2010; Sharma et al. 2010a, 2010b). The data could also be used to determine the differences in dietary quality between Inuvialuit who were frequently consuming a traditional diet and those on non-traditional diets, and thus identify novel strategies to reduce dietary risk factors for chronic disease in Inuvialuit.

The strengths of this study include the use of a culturally appropriate and validated QFFQ developed based on 24-hour dietary recalls with input from local staff and the communities (Sharma et al. 1996; Sharma et al. 2009) and with experience from previous studies (Sharma et al. 2007, Sharma et al. 2008; Sharma et al. 2010a, 2010b). The QFFQ was chosen for assessing food consumption patterns in this study because it has advantages over 24-hour dietary recalls, including lower participant burden, which is an important factor in large population-based dietary studies (Cade et al. 2004). The random selection of the participants from three communities with different degrees of isolation and SES also increased the representativeness of our sample. Data collection was undertaken between July 2007 and July 2008 and so captured the seasonality of traditional food consumption.

This study has several limitations. First, its generalizability outside of the sample population is limited due to its small sample size. Second, the sample consisted of a disproportionate number of females compared to males as the study was targeted at the primary food shoppers and preparers within the household. Third, the QFFQ data are self-reported and therefore may have resulted in under- or over-reporting of food consumption.

Conclusion

Up-to-date information on food consumption patterns in vulnerable populations is essential in order for health professionals, programme planners and policy-makers to be able to develop effective initiatives for preventing diet-related chronic diseases. This study among Inuvialuit in NWT identified specific food consumption patterns such as a high frequency of consumption of NNDFs such as sugar, pop and

sweetened juices and a low frequency of consumption of traditional meats (e.g. caribou, polar bear, seal and char), fruits and vegetables. These data could be used to monitor the nutrition transition taking place in this population and to develop culturally appropriate nutritional intervention plans aimed at reducing the high consumption of NNDFs and increasing the frequency and variety of consumption of nutrient-dense traditional meats.

Acknowledgement

We would like to thank the Aurora Research Institute in Inuvik for the tremendous help and support of our work. We thank the many staff involved in this work as well as all the community organization and residents for their incredible assistance, support and participation.

Declaration of interest: The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the paper. The study was funded by the American Diabetes Association Clinical Research award (1-08-CR-57), Department of Health and Social Services (HSS) of the Government of NWT, and Health Canada. SS developed the conception and design of the study. FZ analysed the data and drafted the manuscript with inputs from TS, ML, FK and AC. SS had primary responsibility for final content. All authors have critically reviewed and approved the final manuscript.

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APPENDIX 1: Food items that contributed to each food group used in QFFQ

Food or food group	Items on food-frequency questionnaire
Fruits	Dried fruits, including raisins; apple; orange; banana; grapes; strawberries/other berries; pears; any fruit in syrup, canned; fruit salad, fresh; frozen fruit; any fruit in natural juice, canned.
Vegetables	Carrots; canned vegetables; frozen vegetables, including mixed; cauliflower or broccoli; vegetable salad.
Grains	Bannock, fried; bannock, baked; white bread; whole wheat bread; pancakes; high fibre cereals; sweet cereals; cream of wheat/oats/porridge; low sugar cereals; spaghetti/noodles; pizza/pizza bits; homemade pizza; rice, any.
Non-traditional Meats (NTMs)	Beef steak, fried with vegetables; beef steak, fried with no vegetables; beef burger patties; soup with beef or hamburger; meat pie/shepherd's pie; lunch meat; chicken wings; chicken soup; chicken, boiled, baked or roasted; chicken drumsticks; chicken burger; chicken nuggets; turkey, baked/roasted; beef jerky; ground beef or beef ravioli; pork chops; ham; sausages, hotdog, or wieners; bacon; fish patties; fish, canned.
Traditional meats (TMs)	Polar bear, raw, boiled/roasted; seal meat, boiled; muktuk, raw including fermented; caribou, boiled/baked/roast; caribou, frozen/raw; caribou, dried; caribou, fat, hard; caribou burger; caribou, offal; caribou, fried including steak; caribou stir fry with vegetables; caribou, soup; caribou, stew; blood soup; Eskimo ice cream, caribou fat; rabbit/muskrat; musk ox, dried; musk ox burger; musk ox, boiled/baked/roasted; musk ox, fried including steak; musk ox, stir fry with vegetables; moose, dried; moose, boiled/baked/roasted; moose, fried including steak; moose, burger; moose stir fry with vegetables; wild birds; char, frozen, raw; char, baked/fried; char, stir fry with vegetables; char, dried; white fish, boiled/baked; fish soup; smoked fish not including char; dried fish, not including char; fried fish, not including char; frozen fish not including char; fish eggs; whale fat/oil including fermented.
Dairy (including eggs)	1% skimmed milk; 2% skimmed milk; milk, whole; canned milk, regular; canned milk, low fat; yoghurt; eggs, any kind; cheese, hard/processed; chocolate milk/hot chocolate.
Non-nutrient-dense foods (NNDs)	Butter/margarine, regular; butter, low fat; ice cream; cake; pie, fruit; pastries; chocolate/chocolate bar; chips, fried; biscuits, any kind; cereal bar; cream crackers; cookies; hard candy; pop corn, regular; popcorn, low fat; granola bars; coffeemate, regular; coffeemate, lite/fat-free; artificial sweetener; sugar/honey; salad dressing, regular; salad dressing, lite/fat-free; mayonnaise; jelly or jelly-O; gravy; stuffing.
Other foods	Vegetable soup; potato salad; mashed potato; potato boiled; potato, fried; chips, baked; peanut butter; nuts.
Beverages	Coffee; tea; sweetened drink with added sugar; regular pop; sweetened juice; diet pop; unsweetened juice; unsweetened drink; water.