The Revised Northern Food Basket

Published under the authority of the Minister of Indian Affairs and Northern Development and Federal Interlocutor for Métis and Non-Status Indians Ottawa, 2007

<u>www.ainc-inac.gc.ca</u> 1-800-567-9604 TTY only 1-886-553-0554

QS-8575-010-EE-A1 Catalogue No. R3-56/2007E-PDF ISBN 978-0-662-46679-6

© Minister of Public Works and Government Services Canada

Cette publication peut aussi être obtenue en français sous le titre :

Le panier de provisions nordique révisé

Table of Contents

introdu	ICTION	1
Questi	ons and Answers	4
1.	Why is the Revised Northern Food Basket (RNFB) replacing the Northern	
	Food Basket (NFB)?	
2. 3.	What are the major differences in the content of the two baskets? Are there any differences between the nutrient standards used for the NFB	4
	and the RNFB?	9
4. 5.	Are there any differences in the composition of the reference family of four? What factors were considered to establish the energy needs of the	9
		9
6.	Given the prevalence of obesity in the North, would this energy level not be	
		10
7.	1	10
8.	, ,	10
9.	How do the sources of energy in the Revised Northern Food Basket	
	· · · · · · · · · · · · · · · · · · ·	10
10.	Does the RNFB completely satisfy the recommendations for energy and	
4.4		12
11.	1 0 0 0	16
12.	How many servings of each food group are supplied by the RNFB, and	40
40	· 1	16
13.	Does the RNFB meet the specific recommendations in Canada's Food	16
14.	Guide for certain food groups? How are the foods and their weightings determined?	
1 4 . 15.	Why doesn't the RNFB contain any traditional food?	
16.	Why doesn't the RNFB contain milk alternatives such as soy milk or tofu,	10
10.		18
17.	Why are foods such as wieners, bologna, luncheon meat, French fries,	10
17.	fish sticks, macaroni and cheese dinner and lard included in a "nutritious"	
	food basket?	18
18.	Why is there so much chicken?	
19.		19
20.	Is the amount of vegetables and fruit in the RNFB realistic, given current	
		19
21.	How does the RNFB compare with current food consumption patterns of	
	northern Aboriginal people?	19
22.	Why doesn't the RNFB contain dried and canned soups, since these	
	products are widely used?	21
23.	What about products such as baking powder, tea, coffee, and spices?	
24.	Is the RNFB more expensive than the NFB?	
25.	Why is the RNFB more expensive than the NFB?	22

26.	What procedure is used to calculate or select the price used for each item	
	in the RNFB, and how does this differ from that used for the NFB?	22
27.	Were convenience stores included in the price surveys?	23
28.	Were special or regular prices used?	24
29.	Would a family of four in isolated northern communities really have	
	to spend \$350 to \$450 per week to purchase a healthy diet?	24
30.	Does this basket represent the cost of a healthy diet in southern cities	
	where the basket has been priced?	24
31.	How much would someone buying this basket spend on different food	
	groups?	25
32.	How much does the cost of the Revised Northern Food Basket differ among	
	age/gender groups?	
33.	How much does the RNFB weigh?	
34.	How can I get more information about this basket?	26

List of Tables

Table 1	Revised Northern Food Basket (2007) for a family of four for one week 5
Table 2	Quantities of foods in the Revised Northern Food Basket (2007) and the
	original Northern Food Basket (1990) based on Food Groups in Canada's
	Food Guide (2007)
Table 3	Sources of energy in the Revised Northern Food Basket (2007) and the
	original Northern Food Basket (1990) for a family of four, based on
	Food Groups in Canada's Food Guide (2007) and the Canadian Nutrient
	File (2005) 11
Table 4	Percent satisfaction of the Recommended Daily Allowance or Adequate
	Intake for selected nutrients by age/gender group, Revised Northern Food
	Basket (2007)
Table 5	Servings in the Revised Northern Food Basket (2007) compared to
	Canada's Food Guide for the family of four
Table 6	Sources of energy in the Revised Northern Food Basket (2007) and in the
	diet of Inuit and First Nations women in three communities (2001-2002) 20
Table 7	Cost of the Revised Northern Food Basket (2007) and the original Northern
	Food Basket (1990) for a man and a woman in selected communities 22
Table 8	Cost of Food Groups in the Revised Northern Food Basket (2007) for a
	family of four in selected communities
Table 9	Cost of the Revised Northern Food Basket (2007) by age/gender group in
	selected communities
Table 10	Weekly "as purchased" quantities of foods in the Revised Northern Food
	Basket (2007) by age/gender group

Acknowledgements

The Revised Northern Food Basket was developed by Judith Lawn, Nutrition Consultant, Dialogos Educational Consultants Inc. under the direction of Fred Hill, Manager, Northern Food Security, Strategic Policy and Devolution Branch, Indian and Northern Affairs Canada. The text and tables for this publication were prepared by Judith Lawn and Fred Hill.

The Department also wishes to acknowledge the support and advice received from Lori Doran, Mary Trifonopoulos and Judy Halladay with the First Nations and Inuit Health Branch, Stefa Katamay, Michelle Hooper, Chantal Marineau and Isabelle Sirois with the Office of Nutrition Policy and Promotion and Josephine Deeks, Margaret Munro and Maya Villeneuve with the Food Directorate, Health Canada; Pat Lachance, Public Health Agency of Canada; Linda Robbins, Agriculture and Agri-food Canada; Michael Hatfield, Human Resources and Social Development Canada; Amy Caughey and Cindy Roache, Department of Health and Social Services and Sandy Teiman, Department of Education, Government of Nunavut; Elsie DeRoose, Department of Health and Social Services, Government of the Northwest Territories; Sue Vanstone, Ontario Ministry of Health and Long-term Care; Terry Ann Keenan, Saskatoon Regional Health Authority; Robert Ladouceur and Mandy Graham, Nunavik Regional Board of Health and Social Services; and Elisa Levi, Assembly of First Nations.

Luc L. Ladouceur, Food Mail Program Coordinator and Jennifer Baizana, Food Mail Research Officer at Indian and Northern Affairs Canada were responsible for processing the results of price surveys conducted in 2006 and 2007 and for conducting most of the price surveys, and assisted in the development of the price selection procedure.

Introduction

This introduction provides some key information on the Revised Northern Food Basket (RNFB) that will be used to present the results of food price surveys conducted by the Department in 2006 and subsequent years.

Since 1990, Indian and Northern Affairs Canada has been monitoring the cost of a thrifty northern food basket in isolated northern communities and in southern supply centres. The Northern Food Basket (NFB) was intended to provide a nutritious diet for a family of four, consistent with the 1990 Recommended Nutrient Intakes for Canadians. It was first used in the Air Stage Subsidy Review led by Indian and Northern Affairs Canada in 1990. Starting in 2003, the results of price surveys conducted in more than 75 communities over 16 years have been posted on the Department's Web site and updated on a regular basis. The results of all the surveys conducted between 1990 and 2006 are available at www.ainc-inac.gc.ca/foodmail.

In 1998, the Department developed a revised basket to take into account the results of nutrition surveys conducted in a number of northern communities during the 1990s.³ However, because Canadian nutrition recommendations were under review in the late 1990s by the Dietary Reference Intakes (DRI) Committee, the Department did not adopt the revised basket. Further revisions were made in 2004-2005, based on the recommendations of the DRI Committee, which were also reflected in the new version of Canada's Food Guide released in February 2007⁴ and in the Aboriginal version of the Food Guide released in April 2007.⁵ Final revisions were made to the basket to ensure it was consistent with the recommendations in Canada's Food Guide.

Key features of the Revised Northern Food Basket

The RNFB differs from the original NFB in a number of important respects.

it includes 67 foods rather than 46;

¹ Health and Welfare Canada, *Nutrition Recommendations: The Report of the Scientific Review Committee* (Ottawa, 1990).

² Indian and Northern Affairs Canada, *Food for the North: Report of the Air Stage Subsidy Review* (Ottawa, 1990).

³Judith Lawn, Frederick Hill, *Alternative Northern Food Baskets* (Ottawa: Indian and Northern Affairs Canada, 1998).

⁴ Health Canada, *Eating Well with Canada's Food Guide* (Ottawa, 2007).

⁵ Health Canada, *Eating Well with Canada's Food Guide: First Nations, Inuit and Métis* (Ottawa, 2007).

- it is more consistent with current food consumption patterns of northern residents;
- perishable foods comprise a much larger portion of the basket, to take into account changes in consumption since 1990;
- to the extent possible, the RNFB is consistent with recommendations of the DRI Committee and Canada's Food Guide;
- from a nutritional point of view, the RNFB is superior to the original NFB;
- the RNFB was designed to meet the energy requirements of people whose activity level is within the "low-active" range, the minimum level of activity recommended for good health:
- it uses average prices for each product in the basket, rather than the lowest price available in the community, so that it represents what consumers in these communities and in southern supply centres would typically pay to purchase the basket, rather than the lowest possible price; and
- price survey results are presented for a family of four that includes a boy and a girl aged 9 to 13, rather than a boy aged 13 to 15 and a girl aged 7 to 9.

Limitations of nutritious food baskets and the Revised Northern Food Basket

Most nutritious food baskets are based on average purchasing or consumption data for a particular population group as a starting point to determine the kinds and amounts of foods to be included. Therefore, they may not be typical of the food preferences of any specific individual or family. Furthermore, they do not allow for the cost of eating out. The exclusion of prepared convenience foods and foods of little nutritional value means that they are not representative of food consumption or expenditure in the population concerned. They do, however, provide a useful benchmark for comparing the cost of a nutritious diet in different communities over time.

Nutritious food baskets are not intended to recommend or promote the consumption of any specific food included in the baskets. The choices of items within each food group are not all of equal nutritional value, and are not necessarily the most economical or nutritious foods that could be consumed to meet nutrition recommendations.

The cost of the basket is affected not only by the choice of foods in the basket, but also by the purchase units, by the brand or brands that are chosen, and by the ways in which prices for each product in the basket are combined to calculate the price that is used for each product in calculating the total cost. The Department has developed and rigorously applied a realistic price selection procedure, in order to ensure consistency in the results from one community to another and from one time period to another.

Presentation of survey results

The survey results have been grouped by region for presentation. The introduction to each region identifies the designated food entry point and other southern supply centres from which the food generally is ordered, as well as the timing of the surveys in that region.

Results are presented separately for the perishable and non-perishable components of the basket, as well as the total cost of the basket. Normally only the perishable items in the basket are shipped under the Food Mail Program. Although the non-perishable items in the basket are also eligible for shipment at higher postage rates than the perishables, non-perishables are generally shipped to isolated northern communities by marine service or winter roads.

The perishable items in the RNFB for a family of four weigh approximately 37 kilograms, and non-perishables approximately 15 kilograms, excluding packaging. If we added 15 percent to the weight to cover packaging and spoilage, it would cost approximately \$38 to ship the perishable items in this basket under the Food Mail Program from the food entry point to final destination, at the postage rate of \$0.80 per kilogram plus \$0.75 per parcel. However, because of the higher costs of constructing and operating stores in the North, as well as the costs of local transportation from the airport to stores in the communities served, one would expect the gap in the cost of the perishable component of the RNFB between the food entry point and isolated northern communities to be larger than \$38.

Retailers in northern communities in a particular region can be expected to have similar transportation and operating costs. However, some costs that affect food prices, such as electricity, can vary substantially from one community to another within the same region.

The following Questions and Answers provide documentation on the foods included in the RNFB, nutritional considerations, the price selection procedure and other details.

For information on the price survey results for communities in each region and for southern supply centres serving each region, consult the Department's Web site.

Questions and Answers

1. Why is the Revised Northern Food Basket (RNFB) replacing the Northern Food Basket (NFB)?

- to reflect food consumption patterns based on information from the nutrition surveys of isolated communities conducted by Indian and Northern Affairs Canada (INAC) as well as information from other food consumption surveys among Inuit and First Nations;
- to use the most recent nutrient data from the 2005 Canadian Nutrient File;
- to use the most recent information to convert "as purchased" quantities to "edible portions"; and
- to ensure the basket meets the most recent dietary recommendations of the Dietary Reference Intakes (DRI) Committee, a joint Canada-United States committee of nutrition experts, and Canada's Food Guide.

2. What are the major differences in the content of the two baskets?

- 67 foods rather than 46;
- the RNFB includes yogurt, more cheese, less evaporated milk, 2% instead of whole evaporated milk, and more fluid 2% milk;
- mozzarella cheese replaces cheddar cheese, since mozzarella is more popular;
- more fruit and vegetables, but less canned vegetables, especially corn;
- a greater variety of fresh and frozen fruit and vegetables;
- inclusion of instant mashed potatoes;
- more meat to make the basket more consistent with northern Aboriginal food preferences, and a greater variety of meat alternatives;
- chicken drumsticks replace chicken legs without backs;
- lean ground beef replaces regular ground beef;
- more fish;
- inclusion of whole wheat bread to improve fibre intake;
- parboiled rice replaces regular long-grain white rice;
- less sugar, eggs, lard and butter, and more margarine and oil;
- canola oil replaces corn oil, and non-hydrogenated margarine replaces regular soft margarine; and
- no fruit drink crystals or soda crackers in the RNFB.

Table 1 shows the approximate amounts of each food and each food group in the RNFB. For a comparison of the content of the RNFB and the original NFB, see Table 2.

Table 1: Revised Northern Food Basket (2007) for a family of four for one week

Food Group	Perishable		Non-perishable	
Dairy products (Total: 15.35 L ¹)	2% milk, fresh or UHT Mozzarella cheese Processed cheese slices Yogurt	4.76 L 485 g 385 g 1.67 kg	Evaporated milk, 2% Skim milk powder*	1.58 L² 90 g
Eggs	Large eggs	8		
Meat, poultry, fish (Total: 6.7 kg)	Chicken drumsticks Pork chops, loin Ground beef, lean T-bone steak Sliced ham Frozen fish sticks	2.68 kg 1.21 kg 1.34 kg 470 g 135 g 135 g	Canned pink salmon Sardines in soya oil Canned ham	270 g 270 g 200 g
Meat alternatives and meat preparations (Total: 1 kg)	Bologna Wieners Peanut butter	60 g 100 g 90 g	Canned pork-based luncheon meat Canned corned beef Canned beans with pork Canned beef stew Canned spaghetti sauce with meat	50 g 40 g 290 mL 180 g 155 mL
Grain products (Total: 5.5 kg)	Bread, enriched white Bread, 100% whole wheat	660 g 660 g	Flour, all purpose Pilot biscuits Macaroni or spaghetti Rice, long-grain parboiled white Rolled oats* Corn flakes Macaroni and cheese dinner	1.92 kg 275 g 385 g 330 g 275 g 440 g 550 g
Citrus fruit and tomatoes (Total: 4.4 kg)	Oranges Apple juice, frozen Orange juice, frozen	1.23 kg 130 mL ³ 1.13 L ³	Apple juice, TetraPak* Orange juice, TetraPak* Canned whole tomatoes Canned tomato sauce	880 mL 375 mL 215 mL 300 mL
Other fruit (Total: 9.95 kg)	Apples Bananas Grapes	4.38 kg 3.58 kg 500 g	Canned fruit cocktail in juice Canned peaches in juice Canned pineapple in juice	855 mL 285 mL 285 mL
Potatoes (Total: 3.7 kg)	Fresh potatoes Frozen French fries	3 kg 480 g	Instant potato flakes	220 g
Other vegetables (Total: 8.7 kg ⁴)	Carrots Onions Cabbage Turnips Frozen broccoli Frozen carrots Frozen corn Frozen mixed vegetables	2 kg 695 g 520 g 350 g 695 g 260 g 1.74 kg	Canned green peas Canned kernel corn Canned green beans Canned carrots Canned mixed vegetables	900 mL 1.09 L 315 mL 325 mL 545 mL
Oils and fats (Total: 1.05 kg)	Margarine, non- hydrogenated Butter	715 g 65 g	Canola oil Lard	185 mL 105 g
Sugar (Total: 600 g)			Sugar, white	600 g
Miscellaneous			5% added to cost	

The Revised Northern Food Basket

- 1 Calcium equivalent of 2% milk. The weight of dairy products as purchased is approximately 9.2 kg.
- 2 Undiluted quantity.
- Quantity as consumed, reconstituted from 33 mL of frozen apple juice concentrate and 282 mL of frozen orange juice concentrate.
- Total is based on the drained weight of canned vegetables (approximately 610 g of peas, 870 g of corn, 175 g of green beans, 175 g of carrots and 350 g of mixed vegetables). Quantities in millilitres are undrained, as purchased.
- * Skim milk powder, rolled oats and juice in TetraPaks are eligible for shipment under the Food Mail Program as "nutritious perishable food," but are normally considered non-perishable.

Table 2: Quantities of foods in the Revised Northern Food Basket (2007) and the original Northern Food Basket (1990), based on Food Groups in Canada's Food Guide (2007)

Revised Northern Food Basket (2007)		Original Northern Food Basket (1990)		
Milk and Alternatives		Milk and Alternatives		
2% milk	4.76 L	2% milk	3.88 L	
Mozzarella cheese	485 g	Cheddar cheese, medium	10 g	
Processed cheese slices	385 g	Processed cheese slices	60 g	
Yogurt	1.67 kg	1 10000000 0110000 011000		
Evaporated milk, 2%	1.58 L	Evaporated milk, whole	4.86 L	
Skim milk powder	90 g	Skim milk powder	30 g	
·		·		
Meat and Alternatives	8	Meat and Alternatives	18	
Eggs, large	_	Eggs, large		
Chicken drumsticks	2.68 kg	Chicken legs without backs	1.72 kg	
Pork chops, loin	1.21 kg	Pork chops, loin	570 g	
Ground beef, lean	1.34 kg	Ground beef, regular	1.01 kg	
T-bone steak	470 g	T-bone steak	70 g	
Sliced ham	135 g	Sliced ham	60 g	
Frozen fish sticks	135 g			
Canned pink salmon	270 g	Canned pink salmon	60 g	
Sardines in soya oil	270 g	Sardines in soya oil	60 g	
Canned ham	200 g			
Bologna	60 g	Bologna	80 g	
Wieners	100 g			
Peanut butter	90 g	Peanut butter	70 g	
Canned pork-based luncheon meat	50 g	Canned pork-based luncheon meat	80 g	
Canned corned beef	40 g			
Canned beans with pork	290 mL	Canned beans with pork	70 mL	
Canned beef stew	180 g	Canned beef stew	890 g	
Canned spaghetti sauce with meat	155 mL			
Grain Products		Grain Products		
Bread, enriched white	660 g	Bread, enriched white	1.28 kg	
Bread, 100% whole wheat	660 g	,		
Flour, all purpose	1.92 kg	Flour, all purpose	1.66 kg	
Pilot biscuits	275 g	Pilot biscuits	960 g	
	9	Soda crackers	680 g	
Macaroni or spaghetti	385 g	Macaroni or spaghetti	840 g	
Rice, long-grain parboiled white	330 g	Rice, long-grain white	340 g	
Rolled oats	275 g	Rolled oats	60 g	
Corn flakes	440 g	Corn flakes	600 g	
Macaroni and cheese dinner	550 g	Macaroni and cheese dinner	480 g	

The Revised Northern Food Basket

Revised Northern Food Basket (2007)		Original Northern Food Basket (1990)		
Vegetables and Fruit		Vegetables and Fruit		
Oranges	1.23 kg	Oranges	300 g	
Apple juice, frozen	130 mL ¹	Apple juice, frozen or TetraPak	1.14 L ¹	
Orange juice, frozen	1.13 L ¹	Orange juice, frozen or TetraPak	480 mL ¹	
Apple juice, TetraPak	880 mL			
Orange juice, TetraPak	375 mL			
Canned whole tomatoes	215 mL	Canned whole tomatoes	1.18 L	
Canned tomato sauce	300 mL			
Apples	4.38 kg	Apples	4.51 kg	
Bananas	3.58 kg	Bananas	1.1 kg	
Grapes	500 g			
Canned fruit cocktail in juice	855 mL	Canned fruit cocktail in juice	610 mL	
Canned peaches in juice	285 mL	•		
Canned pineapple in juice	285 mL			
Fresh potatoes	3 kg	Fresh potatoes	5.93 kg	
Frozen French fries	480 g	Frozen French fries	1.17 kg	
Instant potato flakes	220 g			
Carrots	2 kg	Carrots	970 g	
Onions	695 g	Onions	820 g	
Cabbage	520 g			
Turnips	350 g			
Frozen broccoli	695 g			
Frozen carrots	260 g			
Frozen corn	260 g			
Frozen mixed vegetables	1.74 kg			
Canned green peas	900 mL ²	Canned green peas	2.11 L ²	
Canned kernel corn	1.09 L ²	Canned kernel corn	3.86 L ²	
Canned green beans	315 mL^2			
Canned carrots	325 mL ²			
Canned mixed vegetables	545 mL ²			
Oils and Fats		Oils and Fats		
Margarine, non-hydrogenated	715 g	Margarine, soft	155 g	
Butter	65 g	Butter	155 g	
Canola oil	185 mL	Corn oil	130 mL	
Lard	105 g	Lard	520 g	
Sugar and Sweets		Sugar and Sweets		
Sugar, white	600 g	Sugar, white	390 g	
		Fruit drink crystals with	560 g	
		vitamin C added	l	
		<u> </u>	<u> </u>	

Quantity as consumed, reconstituted from frozen concentrate. In the original Northern Food Basket, the cheaper product (frozen or TetraPak) was used. In most cases, this was frozen juice.

² Undrained quantity, as purchased.

3. Are there any differences between the nutrient standards used for the NFB and the RNFB?

Yes. The NFB was based on the Thrifty Nutritious Food Basket developed by Agriculture Canada in the 1980s. The RNFB was designed to meet the Recommended Dietary Allowances (RDAs) or the Adequate Intakes (Als) proposed by the DRI Committee. The RDA is the average daily nutrient intake level sufficient to meet the needs of nearly all (97 to 98 percent) healthy individuals in a particular life stage and gender group. The RDA is based on the most recent scientific evidence on the intakes necessary to prevent deficiency diseases and chronic diseases. Where the scientific evidence was insufficient to establish an RDA (for example, for calcium), we have used the Al as a reference. The Al represents the best advice based on the observed mean intake of healthy individuals, but an intake less than the Al is not necessarily inadequate.

The RDA or AI for some nutrients (for example, calcium, magnesium, iron, potassium, folate, vitamin C) is higher than previous recommendations.

The age/gender groupings also differ from those used previously.

4. Are there any differences in the composition of the reference family of four?

Yes. The RNFB includes a man and woman 31 to 50 and a boy and girl 9 to 13. The NFB included a man and woman 25 to 49, a boy 13 to 15 and a girl 7 to 9.

While INAC normally publishes the cost of food baskets only for a family of four, both the NFB and the RNFB were developed and priced for all age/gender groups. The NFB had 19 age/gender groups, plus 12 combinations of age and stage of pregnancy and four different ages of women who were breastfeeding. The RNFB uses 12 age/gender groups, plus three ages of pregnant women (under 19, 19 to 30 and 31 to 50) and six combinations of age and duration of lactation (first and second six months).

5. What factors were considered to establish the energy needs of the age/gender groups?

Since there is very little information available to assess the activity level of northern Aboriginal populations, we selected the Canadian Estimated Energy Requirements for the mid-point of the low-active range (at least 30 minutes of walking or similar exercise per day), plus 5% to compensate for the additional energy needs of the cold climate.

The RNFB is not a recommended diet for individuals. It is a convenient way of costing a basket of food which would meet the average energy requirements for a group of individuals in the low-active range of activity. An individual's energy requirements would depend on height, weight and activity level.

6. Given the prevalence of obesity in the North, would this energy level not be excessive?

It was important to ensure that the energy level of this basket was adequate for the average healthy individual with the minimum activity level recommended for good health. It is recommended that obese individuals become more physically active.

Given that the basket will be used for many purposes, including an assessment of the adequacy of income support, it would not be appropriate to cost a basket that would only meet the energy needs of sedentary people.

7. Will the basket provide sufficient energy for a very active individual?

No. Very active, or even moderately active, individuals would require more energy. Sedentary people would require less.

8. Would the original NFB satisfy the new energy and nutrient requirements?

The NFB had too much energy for some age/gender groups and not enough for others. It would have exceeded the recommendations for saturated fat for all members of the family of four. It would not have met the requirements for vitamin A for any of the family members. The NFB had about 35% more saturated fat than the RNFB. It also had more sodium and less protein, fibre, vitamin A, vitamin D, zinc, magnesium, potassium and selenium. The RNFB is nutritionally superior in every respect, and would also be more acceptable to the population of northern communities from the point of view of the choice and weighting of foods.

9. How do the sources of energy in the Revised Northern Food Basket compare with those in the original Northern Food Basket?

Table 3 compares the sources of energy in the RNFB and the NFB for the family of four, based on the food groups in Canada's Food Guide. The NFB had more energy in total, but the RNFB has more energy from Meat and Alternatives as well as Vegetables and Fruit, and much less energy from sugar. The RNFB has a higher percentage of energy from protein and less from carbohydrate and saturated fat.

Table 3: Sources of energy in the Revised Northern Food Basket (2007) and the original Northern Food Basket (1990) for a family of four, based on Food Groups in Canada's Food Guide (2007) and the Canadian Nutrient File (2005)

	Revised Northern Food Basket (2007)	Original Northern Food Basket (1990)
Food Groups	Calories per week	Calories per week
Milk and Alternatives	8,756	8,993
Meat and Alternatives: Meat, poultry, fish Eggs Other meat alternatives and preparations ² Total	7,691 620 1,836 10,147	4,330 1,395 1,811 7,536
Grain Products	19,189	25,400
Vegetables and Fruit: Citrus fruit and tomatoes ³ Other fruit Potatoes Other vegetables Total	1,756 5,180 4,249 3,793 14,978	1,097 3,017 6,260 3,888 14,262
Oils and Fats	7,999	7,970
Sugar and Sweets	2,322	3,671
Total energy	63,391	67,831
Macronutrients ⁴	Percent of energy	Percent of energy
Protein Carbohydrate Fat Saturated fat	16% 56% 29% 8.9%	13% 59% 29% 11.3%

- The Revised Northern Food Basket was designed for a man and a woman aged 31 to 50 and a girl and a boy aged 9 to 13. The original Northern Food Basket was designed for a man and a woman aged 25 to 49, a girl aged 7 to 9 and a boy aged 13 to 15.
- Includes some processed meats, canned beef stew, spaghetti sauce with meat, canned beans with pork, and peanut butter.
- 3 Includes apple juice with vitamin C added.
- The percentage of energy from protein, carbohydrate and fat was calculated using the commonly rounded figures of 4, 4 and 9 Calories per gram, respectively. This calculation will not produce the exact amount of energy available from each of these components because the energy available to the body depends on the chemical composition of the food, the amount of fibre and the digestibility, and therefore varies from one food to another. For example, the energy available from fruits and vegetables excluding potatoes and from whole grain cereals is less than 4 Calories per gram of carbohydrate.

10. Does the RNFB completely satisfy the recommendations for energy and various nutrients?

In the design of a nutritious food basket there are many competing targets making it impossible to achieve 100% of the RDA or AI for every nutrient and still stay within the energy, fat, saturated fat and fibre guidelines while respecting food preferences of the population concerned. For this reason, choices must be made regarding the most important targets. In order to reduce the risk of heart disease and cancer, we have given priority to maintaining energy, fat and saturated fat within recommended levels and accepted a lower percentage satisfaction for calcium and iron, while respecting food preferences and availability as much as possible.

As shown in Table 4, the RNFB meets the RDA or AI for most nutrients for the majority of age/gender groups. For vitamin C, it exceeds the requirements for non-smokers. However, smokers require about 58% more vitamin C than non-smokers. The basket does not meet the RDA for vitamin C for smokers in some age/gender groups.

The RNFB does not meet the AI for calcium for all age/gender groups. However, it provides 76 to 101% of the AI for calcium for the age/gender groups in the family of four and 70 to 81% of the AI for adults 51 and over. Furthermore, if the flour in the basket is used for making bannock or in other recipes using baking powder, the baking powder will increase the amount of calcium in the basket by about 19 percent for the family of four. In addition, the AI is based on much less data than Estimated Average Requirements or RDAs and incorporates substantially more judgment. Failure to meet the AI does not necessarily mean an inadequate intake. More research is needed to determine what constitutes an adequate calcium intake for this population.

The RNFB does not meet the AI for potassium. However, again, an intake below the AI is not necessarily inadequate. It would be very difficult to design a basket that would meet the AI for potassium using foods that are popular and available in the North.

The RNFB provides 30% or less of energy from fat and less than 10% of energy from saturated fat for every age/gender group, well within the new guidelines. Although it does not contain the exact amount of unsaturated fat (non-hydrogenated margarine and oil) recommended in Canada's Food Guide, it does provide 5% of energy from linoleic acid and between 0.8% and 1% of energy from linolenic acid.

The basket would contain very little *trans* fat, other than that occurring naturally in the dairy products. Small amounts would be found in the pilot biscuits, peanut butter and some brands of French fries.

The RNFB contains 10 to 11 grams of dietary fibre per 1000 Calories compared to the recommended 12 to 15 grams of total fibre, which includes dietary fibre and functional fibre. Since the Canadian Nutrient File database does not include functional fibre, the amount of total fibre would be underestimated. To improve the fibre content, the basket would have to be modified to include more whole grain products.

Table 4: Percent satisfaction of the Recommended Daily Allowance or Adequate Intake (AI) for selected nutrients by age/gender group, Revised Northern Food Basket (2007)

Age/gender group	Energy requirement (Calories)	Energy	Calcium (AI)	Magne- sium	Pota s- sium (AI)	Iron	Zinc	Sodium % > UL
			(% satisfaction	on			
Child								
1-3	1260	102	147	218	61	127	230	
4-8	1601	101	105	172	65	110	165	
Males								
9-13	2205	100	84	126	74	208	145	
14-18	2914	101	96	96	88	195	142	29
19-30	2861	100	103	94	84	268	135	22
31-50	2704	101	101	86	80	252	131	18
51-70	2494	100	81	79	76	220	122	9
Over 70	2284	100	80	73	70	204	118	4
Females								
9-13	1916	102	76	110	66	156	121	
14-18	2179	102	88	85	73	96	137	
19-30	2231	101	91	96	69	88	160	
31-50	2126	102	89	90	68	83	152	
51-70	1969	102	72	86	65	174	138	
Over 70	1811	101	70	81	63	153	125	
Pregnancy								
< 19	2467	102	86	86	82	63	111	7
19-30	2519	101	99	99	81	66	131	7
31-50	2414	101	97	91	78	62	126	2
Lactation, < 19								
First 6 months	2509	102	91	97	82	179	107	13
Second 6 months	2579	102	88	100	85	184	112	14
Lactation, 19-30								
First 6 months	2561	102	110	114	83	204	130	13
Second 6 months	2631	100	110	115	84	208	131	14
Lactation, 31-50								
First 6 months	2456	102	101	107	80	202	127	10
Second 6 months	2526	102	110	110	82	207	131	14

The Revised Northern Food Basket

Age/gender group	Vitamin A	Vitamin C	Folate	Vitamin B ₆	Vitamin B ₁₂	Vitamin D
			% s	atisfaction		
Child						
1-3	307	365	256	215	307	115
4-8	281	382	237	245	266	136
Males						
9-13	232	279	222	203	239	177
14-18	167	182	236	212	244	210
19-30	158	153	235	208	223	186
31-50	156	144	220	198	219	184
51-70	155	142	192	141	207	91
Over 70	148	137	178	127	206	56
Females						
9-13	221	264	190	174	202	165
14-18	206	194	155	176	206	187
19-30	184	158	166	166	212	166
31-50	188	159	158	161	199	162
51-70	180	159	150	131	176	72
Over 70	184	161	127	125	164	47
Pregnancy						
< 19	180	176	116	135	231	191
19-30	170	166	123	138	220	177
31-50	159	161	113	133	216	175
Lactation, < 19						
First 6 months	129	121	147	125	220	197
Second 6 months	126	123	148	134	231	195
Lactation, 19-30						
First 6 months	110	116	146	134	233	192
Second 6 months	110	116	150	134	233	192
Lactation, 31-50						
First 6 months	107	112	145	130	225	183
Second 6 months	110	114	149	131	233	192

The Revised Northern Food Basket

Age/gender group	Dietary fibre	Protein	Carbohydrate	Fat	Saturated fat
	grams per 1000 Calories		Percent of	energy	
Child					
1-3	10	17	54	30	9.8
4-8	10	16	56	29	9.2
Males					
9-13	10	16	56	29	9.2
14-18	10	16	57	28	8.5
19-30	10	16	58	27	7.9
31-50	10	16	57	28	8.2
51-70	10	16	55	29	8.6
Over 70	10	17	54	29	8.9
Females					
9-13	10	15	57	30	9.3
14-18	10	17	55	30	9.6
19-30	10	17	54	29	8.8
31-50	10	17	55	30	8.8
51-70	11	17	57	28	8.5
Over 70	11	17	56	28	8.8
Pregnancy					
< 19	10	18	55	29	8.9
19-30	10	17	56	28	8.4
31-50	10	17	55	28	8.5
Lactation, < 19					
First 6 months	10	18	54	29	9.1
Second 6 months	10	18	54	28	8.9
Lactation, 19-30					
First 6 months	10	18	54	29	8.8
Second 6 months	10	18	54	28	8.8
Lactation, 31-50					
First 6 months	10	19	53	29	8.8
Second 6 months	10	19	53	29	9.0

To meet the higher requirements for iron during pregnancy, and the additional requirements for calcium and vitamin D after age 50, supplements would be necessary.

The sodium content of the basket ranges from 1379 mg for a child aged 1 to 3 to 2960 mg for males aged 14 to 18 and exceeds the Tolerable Upper Intake Level (UL) established by the DRI Committee for males aged 14 and over and for pregnant and lactating women. Again, if the flour in the basket is used for making recipes with baking powder, this will increase the sodium content of the basket by about 12 percent. Adding salt to bannock could further increase the sodium content by 13 percent. Even with these additions, however, the amount of sodium in the basket is far less than the average intake of Canadians.

11. What assumptions were made regarding cooking methods?

All of the fat necessary for cooking is included in the oils and fats group. Chicken drumsticks are assumed to be roasted and eaten without skin. Other meats are assumed to be broiled, roasted or braised. All vegetables except cabbage are cooked. The nutrient values would apply to boiled or steamed vegetables. The nutrient values for fruit are based on raw or canned fruit.

12. How many servings of each food group are supplied by the RNFB, and how do they compare with the recommendations in Canada's Food Guide?

Table 5 compares the number of servings in the RNFB to the recommendations of Canada's Food Guide for each member of the family of four.

The RNFB contains more servings of grain products for the boy and man, more meat and alternatives for the woman, and more servings of vegetables and fruit for the girl and boy. The number of servings in Canada's Food Guide are based on the needs of a sedentary population, whereas the RNFB is based on the energy requirements of individuals in the middle of the low-active range, in order to ensure that the basket provides sufficient energy for those with the minimum level of activity recommended for good health as well as the additional energy needed in an extremely cold climate.

The basket contains less than the recommended number of servings from the Milk and Alternatives group for the girl and boy, but still provides between 76% and 84% of the Al for calcium.

13. Does the RNFB meet the specific recommendations in Canada's Food Guide for certain food groups?

- At least 2 servings per week of fish. **Yes**. The RNFB provides between 1.4 and 2.8 servings per week for the members of the family of four.
- Half of grain products as whole grain. No. The RNFB contains between 1 and 2 servings of whole grain cereals per day less than the amount recommended.

- At least 1 serving of orange vegetables and 1 serving of dark green vegetables per day. Yes.
- Vegetables and fruit more often than juice. Yes. The basket contains only about 1 Food Guide Serving of juice per person per day.
- 30 to 45 ml of unsaturated fat per day. **Yes.** The RNFB contains a total of 28 ml of non-hydrogenated margarine and oil for the girl, boy and woman and 34 ml for the man.

Table 5: Servings in the Revised Northern Food Basket (2007) compared to Canada's Food Guide for the family of four

Food Group	Examples of Food Guide Servings (calculated from edible portion)	Girl 9 to 13	Boy 9 to 13	Woman 31 to 50	Man 31 to 50
Milk and Alternatives	1 cup 2% milk; ½ cup evaporated milk; 50 grams cheese; 175 grams yogurt	2	3	2	2
CFG Recommendation		3 to 4	3 to 4	2	2
Meat and Alternatives	75 grams meat, poultry, fish; 2 tbsp peanut butter; ½ cup canned baked beans, canned beef stew, spaghetti sauce with meat; 2 eggs	2	2	3	3
CFG Recommendation		1 to 2	1 to 2	2	3
Grain Products	1 slice white or whole wheat bread; 1 pilot biscuit; 175 ml cooked rolled oats; 30 grams corn flakes; ½ cup rice, macaroni, macaroni and cheese dinner	6	7	7	11
CFG Recommendation		6	6	6 to 7	8
Vegetables and Fruit	½ cup apple or orange juice; 1 medium apple, orange, banana; ½ cup tomato sauce or canned tomatoes; 20 grapes; ½ cup canned fruit; ½ cup boiled potato; 20 French fries; ½ cup prepared instant mashed potato; ½ cup cooked carrots, corn and other vegetables.	7	8	8	9
CFG Recommendation		6	6	7 to 8	8 to 10
Oils and Fats: non-hydrogenated margarine oil		23 ml 5 ml	23 ml 5 ml	23 ml 5 ml	28 ml 6 ml
CFG Recommendation		30 to 45 ml	30 to 45 ml	30 to 45 ml	30 to 45 ml
Sugar		21 grams	21 grams	21 grams	21 grams

14. How are the foods and their weightings determined?

- The individual foods chosen for inclusion are based on food consumption surveys of Inuit and First Nations conducted by INAC and other researchers.
 They are generally available in stores in northern communities.
- Some foods have been replaced with more nutritious alternatives. For example, non-hydrogenated margarine replaces some of the lard and butter, and canola oil replaces corn oil.
- The weightings within each food group are generally based on food preferences, with some adjustment, where necessary, to meet nutrition recommendations.
- The food groups are then adjusted to meet the RDA and AI and the number of servings of food groups or foods recommended in Canada's Food Guide.

15. Why doesn't the RNFB contain any traditional food?

Traditional food is extremely important to most Inuit and First Nations living in the North, and most Northern diets contain some traditional food. However, it would be impossible to design and price a food basket using traditional foods that are consumed throughout the North. The traditional foods that are consumed vary from one region to another, based on the species available and cultural preferences. Furthermore, most traditional food consumed in northern communities is obtained through subsistence activity, rather than purchased from stores. Costs depend on a host of factors, including the species harvested, distances that must be travelled, the cost of equipment and supplies, and the existence and type of hunter support programs.

Regional Inuit food baskets containing traditional food were developed by INAC in 1998, but the Department did not continue pricing these baskets because nutrition recommendations were under review and because of resource constraints. If there is sufficient interest and if funds permit, INAC will consider updating these and developing regional baskets for First Nations as well.

16. Why doesn't the RNFB contain milk alternatives such as soy milk or tofu, considering the high level of lactose intolerance?

Soy products are not widely available in the North. Research has demonstrated that allergies to soy occur in infants, children and adolescents and, to a lesser extent, in adults. Therefore, there is no guarantee that these foods would be well tolerated. The Milk and Alternatives group includes cheese, yogurt and evaporated milk, all of which are better tolerated than fluid milk.

17. Why are foods such as wieners, bologna, luncheon meat, French fries, fish sticks, macaroni and cheese dinner and lard included in a "nutritious" food basket?

These foods are popular in the North and they are only included in small amounts and intended to be served occasionally. Many of these foods are convenient and provide

satisfying, inexpensive sources of energy. Lard is a traditional ingredient in bannock. The fact that these foods are included but in small amounts can serve as a teaching point in nutrition education.

The basket does not contain popular but less nutritious foods such as pop, chocolate bars, fruit drink crystals and other foods of little nutritional value, or prepared foods such as pizza or fried chicken.

18. Why is there so much chicken?

Chicken is the most popular store meat, so it has the highest weighting. Also, the yield of skinless roasted chicken from chicken drumsticks with skin is only 41%, due to the loss of skin and bone and cooking losses.

19. Why doesn't the RNFB include more high-fibre grain products?

Whole wheat bread is now commonly available, but other products such as whole grain pasta and flour and brown rice are not always available in isolated communities and these products are not yet popular.

20. Is the amount of vegetables and fruit in the RNFB realistic, given current food consumption patterns?

In Canada's Food Guide, Health Canada recommends that adults have 7 to 9 servings of vegetables and fruit a day, depending upon age and gender, and that we have at least one serving each of orange and dark green vegetables daily. Most Canadians do not meet the recommended number of servings of vegetables and fruit. The gap is wider for Inuit and First Nations.

Vegetables and fruit play a very important role in health. They are an important source of vitamins, minerals and fibre, as well as antioxidants and phytochemicals which are known help to prevent heart disease and cancer. In the traditional northern diet, these nutrients were provided by organ meats from game and birds, fish eggs and liver, and by wild plants. However, the consumption of these foods is very low today and Northern diets have been found to be lacking many of these essential nutrients.

21. How does the RNFB compare with current food consumption patterns of northern Aboriginal people?

Current patterns vary from one region and population to another across the North. Table 6 compares the sources of energy in the RNFB for a woman aged 19 to 30 with the diet of Inuit and First Nations women of childbearing age in three communities where Food Mail Pilot Projects are under way, based on 24-hour diet recalls before the pilot projects started.

Table 6: Sources of energy in the Revised Northern Food Basket (2007) and in the diet of Inuit and First Nations women in three communities (2001-2002)

Food group	Energy in the RNFB for a woman	Mean energy intake of women aged 15 to 44 (Calories per day) ¹			
	aged 19 to 30 (Calories per day)	Kugaaruk	Kangiqsujuaq	Fort Severn	
Milk and Alternatives	265	61	40	114	
Meat and Alternatives: Store meat, poultry, fish Country/traditional food Eggs Other meat alternatives and preparations ² Total	369 - 22 52 443	267 201 14 16 498	246 218 22 -	294 80 55 11	
Grain Products	676	279	277	282	
Vegetables and Fruit: Citrus fruit and tomatoes ³ Other fruit Potatoes Other vegetables Total	63 179 131 131 504	13 11 121 12 156	74 37 43 26 180	48 12 34 16 110	
Oils and Fats	272	67	40	62	
Sugar and Sweets	83	576	447	158	
Other foods of little nutritional value	-	17	131	15	
Miscellaneous foods ⁴	-	386	356	256	
Total energy	2,243	2,040	1,955	1,438	

Mean intakes presented are not necessarily typical of women in these communities or other Inuit and First Nations communities in the North. No potato chips (classified here as "other foods of little nutritional value") were available in Kugaaruk during most of the survey period, and many women in the Fort Severn survey were participating in a weight loss contest. Intakes also vary by season.

In the RNFB, this category includes some processed meats, canned beef stew, spaghetti sauce with meat, canned beans with pork and peanut butter. In the nutrition survey data, processed meats (wieners, bologna, etc.) were included with meat, poultry and fish, while stew and spaghetti sauce with meat were classified as miscellaneous foods.

³ Includes apple juice with vitamin C added.

In the nutrition survey data, this category includes frozen pizza, macaroni and cheese dinner, canned and dried soup, canned stew, packaged sandwiches and burgers and other foods purchased as mixed dishes.

While some foods are classified differently in the nutrition surveys and in the RNFB, it is clear that Inuit and First Nations women in these communities were eating less than half the amounts of Milk and Alternatives, as well as Vegetables and Fruit, included in the RNFB, and were obtaining much more energy from sugar and sweets (drink crystals, pop, chocolate bars, etc.) than is provided in the RNFB. The RNFB also has more Oils and Fats (mostly margarine and canola oil) than women reported in those surveys, although those foods may have been under-reported. Women also obtained large amounts of energy from foods that were classified as "miscellaneous foods" in the nutrition surveys. While combination foods (as purchased, such as pizza, stew and soup) include foods from various food groups in Canada's Food Guide, there is clearly a very large gap between the RNFB and the pattern of food consumption recommended in Canada's Food Guide, on the one hand, and the foods being purchased and consumed in the North, on the other, even though the foods in the RNFB are generally available in northern communities.

22. Why doesn't the RNFB contain dried and canned soups, since these products are widely used?

Dried and canned soups are very high in sodium and therefore generally nutritionally inferior to home-made soup. However, the RNFB does contain the ingredients needed to prepare soup.

23. What about products such as baking powder, tea, coffee, and spices?

An additional allowance of 5% is included to cover the purchase of miscellaneous foods. These are not intended to contribute substantially to energy, but they do provide other nutrients.

24. Is the RNFB more expensive than the NFB?

The RNFB was between 20 and 35 percent more expensive for the family of four in most isolated northern communities and southern supply centres surveyed in 2006. However, a comparison between the total cost of the two baskets for a family of four is problematic when the ages of the children in the two families differ.

The results for the man and woman of comparable age present a more legitimate comparison. Table 7 presents the cost for a man and woman in selected communities in 2006. For the man, the RNFB cost between 25 and 35 percent more than the NFB. For the woman, the RNFB cost between 35 and 45 percent more. The cost difference is greater for the woman since the NFB did not meet her energy needs, while it exceeded the energy needs of the man.

Table 7: Cost of the Revised Northern Food Basket (2007) and the original Northern Food Basket (1990) for a man and a woman in selected communities

Community	Date	Man, 3	Woman, 31 to 50			
		RNFB		RNFB	NFB	
Ottawa	May 2006	\$60	\$47	\$52	\$38	
Nain	March 2007	\$82	\$61	\$70	\$49	
Pond Inlet	February 2006	\$110	\$86	\$96	\$69	
Kangirsuk	August 2006	\$103	\$79	\$89	\$64	
Repulse Bay	April 2006	\$122	\$96	\$106	\$76	
Deline	September 2006	\$117	\$88	\$103	\$71	

The original Northern Food Basket (NFB) was intended to meet the needs of a man and a woman aged 25 to 49. However, it would have provided only 95 percent of the energy required by a woman in the "low-active" range of activity level, while providing 104 percent of the energy required by a man with that level of activity. The Revised Northern Food Basket (RNFB) provides between 101 and 102 percent of the energy required by both the man and the woman.

Costs differences reflect not only the differences in the foods contained in these baskets, but also differences in the price selection procedure.

25. Why is the RNFB more expensive than the NFB?

In order to meet the new nutrition recommendations and to reflect food preferences and availability, it was necessary to increase the amount of some of the more expensive items such as meat, fruit and vegetables and replace some items with more expensive alternatives such as lean ground beef for regular ground beef, non-hydrogenated margarine for regular soft margarine, and more citrus fruit and juice for fruit drink crystals.

A new, more realistic price selection procedure, updated conversion factors and revised weightings within some food groups also contribute to a higher cost.

26. What procedure is used to calculate or select the price used for each item in the RNFB, and how does this differ from that used for the NFB?

A new procedure has been developed to calculate the prices used for each of the 67 items in the RNFB. The objective was not to produce the lowest possible cost for the basket, assuming that shoppers are aware of prices and always buy each item at the lowest possible price available in the community, or the most economical brands and sizes. An approach based on average prices, rather than lowest prices, has been adopted, to give results that are more typical of what consumers would pay to purchase

this basket in various communities. However, this does not mean using average prices for all brands and all sizes of every product in the basket.

Different approaches were used for selecting prices, depending upon the nature of the product, the relevance of brand name, the availability of different brands, the dominance of a particular brand and purchase size in the market, the different purchase units available for products that may be sold both by weight and in standard-sized bags, and the different varieties that may be available for products such as apples, oranges and potatoes.

In northern communities, for some items, the average price for all brands recorded at all stores for a predetermined, common purchase size was used. For products where one national brand is almost always available and dominates the market, the average price for that specific national brand in a predetermined, common purchase size was used. Substitution procedures were developed to deal with situations where the predetermined sizes or brands were not available.

Special procedures were used to calculate average prices for certain products where neither of the above approaches seemed reasonable.

This procedure is different from that used in selecting prices used in the NFB. For the NFB, the lowest price in the community was used for each product in the basket, though in some cases only the lowest price for a specific brand was used if that brand was available in the community. While the requirement to use only national brands for certain products may have tended to increase the cost of the basket, the use of the lowest price in the community would have reduced the cost of the basket in communities with more than one store. Since shoppers could never be expected to buy each item at the lowest price in the community, the procedure would not have resulted in a price that was typical of each community. The new price selection procedure adopted for the RNFB, on the other hand, produces a cost for the basket that is much more realistic and representative of what shoppers would pay to purchase the basket in various northern communities. It is also a better approach for identifying communities where one or more retailers do not appear to be passing the transportation subsidy provided by the Food Mail Program on to their customers.

In southern communities, price surveys were generally conducted in only one supermarket. While using average prices based on surveys in several stores in southern communities may produce slightly different results, such differences would be minor compared to the north-south differences that the Department's price monitoring activity is intended to measure.

27. Were convenience stores included in the price surveys?

Although the Department sometimes conducts price surveys in convenience stores that use the Food Mail Program, we have excluded prices from small stores that sell only a limited range of nutritious food items in calculating the cost of the basket. In deciding whether to include a store in the survey results, we did not consider whether the store

was called a "convenience store". Instead, the size of the store and the range of food items sold were considered. In northern communities, general stores, hardware stores and even lumber stores were included in the survey results, provided that they sell most of the items included in the basket.

In the south, the Department conducts price surveys only in supermarkets.

28. Were special or regular prices used?

Special prices were used for items on sale at the time of the survey. However, prices that were reduced because the products were past their "best before" date or of poor quality were not used.

29. Would a family of four in isolated northern communities really have to spend \$350 to \$450 per week to purchase a healthy diet?

This is what this basket would *typically* cost in these communities, even though the RNFB is a basic nutritious food basket, rather than a "luxury" food basket.

This basket could be purchased for less than this typical cost by carefully comparing prices at different stores in the community, where there is more than one store, and by choosing the most economical purchase sizes and brands for each product. A test in one northern community with two stores showed that the cost of the basket could be reduced by 14 percent by choosing the lowest price in the community, in the most economical purchase size and brand, for each of the 67 products in the basket.

Most Aboriginal people in these communities also eat traditional foods which in some cases would be less expensive to harvest than the store meat, poultry and fish included in this basket.

30. Does this basket represent the cost of a healthy diet in southern cities where the basket has been priced?

Yes. However, the cost of this basket in southern Canada would not represent the cost of a healthy food basket that families there would be likely to purchase. The mix of foods in this basket reflects northern food preferences as much as possible. Families in the south, for example, would not purchase much evaporated milk. The purchase sizes chosen for the basket also reflect the most common sizes available in the North. For some products, these would not be the most common sizes purchased in southern Canada.

Costs are presented for this basket in southern cities so that we can compare the cost of an *identical* food basket in the south and in isolated northern communities. This helps the Department in monitoring the impact of the Food Mail Program on northern food prices.

31. How much would someone buying this basket spend on different food groups?

Table 8 shows the cost of the foods in each food group for a family of four in a few representative communities. In the northern communities shown here, Meat and Alternatives accounted for about 30 percent of the total cost, and Vegetables and Fruit between 34 and 42 percent. In Ottawa, these two food groups each accounted for about one third of the total cost. The price difference between the north and south was greater for Vegetables and Fruit than for other food groups.

About two thirds of the total cost was for perishables, both in Ottawa and in the northern communities shown in this table.

Table 8: Cost of Food Groups in the Revised Northern Food Basket (2007) for a family of four in selected communities¹

Food Groups	Ottawa May 2006	Nain March 2007	Pond Inlet February 2006	Kangirsuk August 2006	Repulse Bay April 2006	Deline September 2006
Milk and Alternatives	\$37	\$57	\$60	\$62	\$61	\$62
Meat and Alternatives: Meat, poultry, fish Eggs Other meat alternatives and preparations ² Total	\$59 \$1 \$5 \$66	\$67 \$3 \$7	\$97 \$2 \$9 \$109	\$99 \$2 \$9 \$110	\$108 \$3 \$9 \$120	\$100 \$3 \$9 \$111
Grain Products	\$18	\$28	\$36	\$33	\$36	\$30
Vegetables and Fruit: Citrus fruit and tomatoes ³ Other fruit Potatoes Other vegetables Total	\$8 \$29 \$7 \$23 \$68	\$11 \$43 \$9 \$36 \$99	\$20 \$59 \$13 \$54 \$146	\$14 \$48 \$11 \$47 \$120	\$19 \$67 \$18 \$65 \$170	\$21 \$67 \$16 \$68 \$173
Oils and Fats	\$6	\$8	\$9	\$10	\$11	\$11
Sugar	\$1	\$1	\$2	\$1	\$2	\$1
Miscellaneous foods	\$10	\$13	\$18	\$17	\$20	\$19
TOTAL	\$206	\$283	\$380	\$353	\$420	\$408
Perishable Non-perishable	\$139 \$67	\$194 \$89	\$252 \$128	\$241 \$113	\$295 \$125	\$296 \$112

¹ Figures may not add to the totals due to rounding.

Includes some processed meats, canned beef stew, spaghetti sauce with meat, canned beans with pork and peanut butter.

Includes apple juice with vitamin C added.

32. How much does the cost of the Revised Northern Food Basket differ among age/gender groups?

Table 9 shows the cost in a selected communities for each age/gender group in 2006. The basket is more costly for men than women, and the cost increases during pregnancy and lactation. These differences arise from differences in the quantities of various food groups by age/gender, as shown in Table 10.

33. How much does the RNFB weigh?

For the family of four for a week, the food in the RNFB weighs approximately 52 kilograms, as shipped, excluding the weight of food containers and packaging. Of that amount, approximately 37 kilograms are perishable foods (fresh and frozen), and 15 kilograms are non-perishable. The original NFB weighed about 47 kilograms (25 kilograms of perishables and 22 kilograms of non-perishables). The higher percentage of perishables in the RNFB is consistent with changes that have occurred in food consumption patterns in the North since 1990, when the NFB was developed.

34. How can I get more information about this basket?

By contacting the Food Mail Program Co-ordinator at <u>foodmail@inac.gc.ca</u>, you can obtain more information about:

- the nutrient content of the basket;
- the Recommended Daily Allowances and Adequate Intakes that were used to determine the percent satisfaction for each nutrient;
- the percent satisfaction for additional nutrients that were examined (sodium, copper, selenium, thiamin, riboflavin, niacin, linolenic and linoleic acid);
- the nutrients provided by each food group;
- the conversion factors used to convert "as purchased" quantities to edible quantities for each food in the basket;
- the cost of each food group for each age/gender group in the communities surveyed;
- the price survey method; and
- the price selection procedure.

Table 9: Cost of the Revised Northern Food Basket (2007) by age/gender group in selected communities

Age/gender group	Ottawa May 2006	Nain March 2007	Pond Inlet February 2006	Kangirsuk August 2006	Repulse Bay April 2006	Deline September 2006
Child						
1-3	\$30	\$42	\$55	\$51	\$60	\$59
4-8	\$37	\$52	\$69	\$64	\$76	\$74
Males						
9-13	\$50	\$69	\$92	\$85	\$101	\$99
14-18	\$64	\$88	\$117	\$110	\$130	\$125
19-30	\$61	\$83	\$112	\$105	\$125	\$120
31-50	\$60	\$81	\$110	\$103	\$122	\$117
51-70	\$56	\$76	\$102	\$95	\$114	\$110
Over 70	\$56	\$76	\$102	\$95	\$114	\$110
Females						
9-13	\$44	\$62	\$82	\$76	\$91	\$89
14-18	\$53	\$74	\$98	\$91	\$108	\$105
19-30	\$54	\$73	\$99	\$93	\$110	\$106
31-50	\$52	\$70	\$96	\$89	\$106	\$103
51-70	\$48	\$66	\$89	\$83	\$99	\$96
Over 70	\$46	\$64	\$86	\$80	\$96	\$94
Pregnancy						
under 19	\$63	\$85	\$114	\$107	\$127	\$123
19-30	\$62	\$83	\$113	\$105	\$126	\$121
31-50	\$60	\$81	\$110	\$103	\$122	\$118
Lactation, under 19						
First 6 months	\$63	\$86	\$116	\$109	\$128	\$124
Second 6 months	\$66	\$88	\$120	\$113	\$133	\$128
Lactation, 19-30						
First 6 months	\$65	\$87	\$119	\$112	\$132	\$127
Second 6 months	\$65	\$88	\$119	\$112	\$132	\$127
Lactation, 31-50						
First 6 months	\$63	\$84	\$115	\$108	\$128	\$123
Second 6 months	\$65	\$86	\$117	\$111	\$130	\$125

Table 10: Weekly "as purchased" quantities of foods in the Revised Northern Food Basket (2007) by age/gender group

	Dairy products	Eggs	Meat, poultry, fish	Meat alternatives and meat preparations	Grain products	Citrus fruit ¹	Other fruit	Potatoes	Other vegetables ²	Oils and fats	Sugar
	L^3	Units	kg	kg	kg	kg	kg	kg	kg	kg	kg
Child											
1-3	3.20	1	0.85	0.05	0.85	0.30	1.30	0.25	1.50	0.15	0.05
4-8	3.50	1	1.05	0.05	1.00	0.85	1.70	0.60	1.85	0.20	0.05
Males											
9-13	4.50	2	1.35	0.30	1.25	1.10	2.40	0.95	2.20	0.25	0.15
14-18	4.75	3	2.25	0.30	2.05	1.10	2.75	1.50	2.20	0.30	0.15
19-30	3.50	3	2.25	0.30	2.05	1.20	2.75	1.50	2.20	0.30	0.15
31-50	3.50	2	2.25	0.30	1.90	1.10	2.75	1.30	2.20	0.30	0.15
51-70	3.50	2	2.05	0.30	1.55	1.10	2.40	1.30	2.20	0.30	0.15
Over 70	3.50	2	2.05	0.30	1.40	1.20	2.65	1.20	2.20	0.25	0.15
Females											
9-13	4.15	2	1.05	0.20	1.10	1.10	2.40	0.65	2.10	0.25	0.15
14-18	4.75	2	1.75	0.20	1.15	1.10	2.40	0.90	2.30	0.25	0.15
19-30	3.25	2	2.25	0.20	1.35	1.10	2.40	0.80	2.10	0.25	0.15
31-50	3.20	2	2.05	0.20	1.25	1.10	2.40	0.80	2.20	0.25	0.15
51-70	3.20	2	1.70	0.20	1.15	1.10	2.40	0.80	2.20	0.20	0.15
Over 70	3.50	2	1.55	0.10	0.95	1.10	2.40	0.80	2.30	0.20	0.10
Family of four ⁴	15.35	8	6.70	1.00	5.50	4.40	9.95	3.70	8.70	1.05	0.60

	Dairy products	Eggs	Meat, poultry, fish	Meat alternatives and meat preparations	Grain products	Citrus fruit ¹	Other fruit	Potatoes	Other vegetables ²	Oils and fats	Sugar
	L^3	Units	kg	kg	kg	kg	kg	kg	kg	kg	kg
Pregnancy											
< 19	4.25	3	2.55	0.15	1.40	1.30	3.15	1.15	2.05	0.25	0.15
19-30	3.50	3	2.55	0.20	1.50	1.30	3.15	1.30	2.05	0.25	0.15
31-50	3.50	2	2.55	0.15	1.40	1.30	3.15	1.20	1.85	0.25	0.15
Lactation, < 19											
First 6 months	4.60	3	2.55	0.15	1.50	1.25	2.65	0.95	2.55	0.25	0.15
Second 6 months	4.25	3	2.85	0.15	1.50	1.25	2.65	1.25	2.50	0.25	0.15
Lactation, 19-30											
First 6 months	4.00	3	2.95	0.15	1.50	1.25	2.65	1.25	2.30	0.25	0.15
Second 6 months	4.00	3	2.95	0.15	1.55	1.25	2.65	1.25	2.30	0.25	0.15
Lactation, 31-50											
First 6 months	3.50	3	2.95	0.15	1.50	1.25	2.40	1.20	2.30	0.25	0.10
Second 6 months	4.00	3	2.95	0.15	1.55	1.25	2.40	1.20	2.30	0.25	0.10

Includes apple juice with vitamin C added and tomatoes. Weight is based on the reconstituted weight of frozen apple juice and frozen orange juice concentrate.

Weight is based on the drained weight of canned vegetables.

³ Calcium equivalent of 2% milk.

A man and woman aged 31 to 50 and a girl and boy aged 9 to 13.