



Methodology for the Implementation of the National Nutritious Food Basket in Alberta

THE COST OF HEALTHY
EATING IN ALBERTA 2015

Prepared by Registered Dietitians at Alberta Health Services with contributions from several Alberta Health Services departments and from stakeholders within other sectors. We wish to thank our numerous reviewers and contributors for their input and support.

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THE COST OF HEALTHY EATING IN ALBERTA

Methodology for the Implementation of the National Nutritious Food Basket in Alberta

Purpose

The purpose of this appendix is to describe the methodology used to calculate the individual and household food costs outlined in *The Cost of Healthy Eating in Alberta*. This appendix also includes an overview of nutritious food baskets in Canada and an in-depth review of the development and implementation of the Alberta Nutritious Food Basket (ANFB).

Background

Since 1996, various health authorities have collected food cost data in numerous communities across the province through a supportive partnership with the government ministry responsible for the agriculture and food industry, currently [Alberta Agriculture and Forestry \(AF\)](#). Alberta Health Services (AHS) has authored *The Cost of Healthy Eating in Alberta 2015* with the support of AF to outline the average provincial cost and community-specific costs of the ANFB for Albertans of defined age, sex, household and life stage groupings.

Nutritious food baskets

A nutritious food basket represents a population-based guide for stakeholders who wish to calculate a conservative estimate of the cost of basic, healthy eating in a particular region.¹ The contents of the basket align with typical household food consumption patterns and satisfy current nutrition recommendations for the general population.² A nutritious food basket could consist of many different combinations of foods that meet recommended energy and nutrient needs of healthy people.³ However, the specific food contents of a nutritious food basket do not represent a healthy eating grocery list and are not intended to guide household food purchases or replace individual dietary guidance.³

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I. National Nutritious Food Basket

Agriculture Canada (now [Agriculture and Agri-Food Canada](#)) first introduced the National Nutritious Food Basket (NNFB) in 1974 and remained its steward until 1995. During this period, 18 Canadian cities conducted regular food costing activities.⁴ In 1997, Health Canada assumed responsibility for the food basket and soon developed the 1998 NNFB, plus a general protocol to assist stakeholders who wished to design and implement their own local food costing process. In 2008, Health Canada revised the NNFB template to integrate the updated nutrition recommendations in the *Dietary Reference Intakes* and *Eating Well with Canada's Food Guide*.² The 2008 NNFB revision also incorporated items that more accurately reflected the population food consumption data from the *2004 Community Health Survey Cycle 2.2*.²

The NNFB has a significant history in health and social service contexts across Canada because it represents a consistent and reliable way to monitor the cost of healthy food choices that meet the energy and nutrient needs of most Canadians.^{2,5} As a population instrument, the NNFB can provide neither an individualized diet prescription, nor the least expensive pattern of healthy eating that a household could achieve at a specific point in time, in a particular geographical location. There are many possible permutations for a healthy pattern of eating so the NNFB cannot direct actual food spending patterns in households.

Several provinces use the 2008 NNFB on a regular basis to guide the measurement of regional food costs. Each province has adapted the food basket template to better reflect local food consumption patterns and food availability. In addition, these provinces have each developed a unique approach to the design and implementation of food cost protocols, including the methods for store selection, community inclusion and calculation of a provincial average food cost. Thus, it is not possible to directly compare food basket costs between provinces despite the common direction provided by the NNFB.

It is not possible to directly compare food basket costs between provinces despite the common direction provided by the National Nutritious Food Basket.

II. 2008 National Nutritious Food Basket Methodology

Health Canada followed a detailed, four-step methodology to specify the 67 food items that represent the 2008 NNFB. These four key steps include⁶

1. establishing food categories and popularity rankings
2. creating composites (based on weight, volume or units)
3. determining the amount of food in the basket
4. converting edible quantities of food into “as purchased” quantities

Step one: Establishing food categories and popularity rankings

Health Canada determined a popularity ranking for all of the 2008 NNFB items in each of the five Canada’s Food Guide (CFG) categories by analyzing how Canadians had ranked the frequency and preference of foods and beverages they consume in the 2004 Canadian Community Health Survey (CCHS). These rankings ensured that the NNFB would reflect current food consumption patterns across the country with the exception of those products that do not meet CFG, yet still constitute a portion of Canadians’ current dietary intake. Specific examples of items that are not included in CFG or NNFB include: highly processed foods, common snack items such as candy, chips, and soft drinks, and foods consumed away from home in restaurants or other food establishments. See Table A for a detailed list of the popularity rankings of food items.

Step two: Creating composites

The popularity rankings then led to the creation of 10 NNFB food categories known as “composites.” These composite groupings are:

1. milk and alternatives
2. eggs
3. meat, poultry and alternatives
4. fish
5. orange vegetables and fruit
6. dark green vegetables
7. other vegetables and fruit
8. whole-grain products
9. non-whole-grain products
10. unsaturated fats and oils

Health Canada used the popularity of foods and CFG serving sizes to establish one kilogram composites for all of the groupings, except milk and alternatives and eggs. They chose kilograms as the base measurement since most foods in the basket are purchased by weight. However, the egg composite is expressed as a unit (e.g., an individual egg) and the milk composites are identified as litres. This “equivalence approach” ensures that all products within a category are represented by a similar measure.

The weighting of each food item in each composite is based on the CCHS food consumption data to best reflect typical eating patterns and preferences among the Canadian population (e.g., the popularity ranking). For example, the milk and alternative composite includes: milk, mozzarella cheese, cheddar cheese, cheese slices and yogurt. Based on the popularity of each of these items, milk has a weighting of 60%, each of the cheeses 14%, the cheese slices 6%, and yogurt the remaining 5%.

Step three: Determining the amount of food in the basket

Health Canada determined the amount of food in the basket required to meet energy and nutrient recommendations based on the CFG and Dietary Reference Intakes (DRIs). Specific goals included the daily provision of:

1. adequate servings of milk
2. at least half of all grain products as whole-grain items
3. one serving of dark green vegetables
4. one serving of orange vegetables
5. at least two servings of fish per week

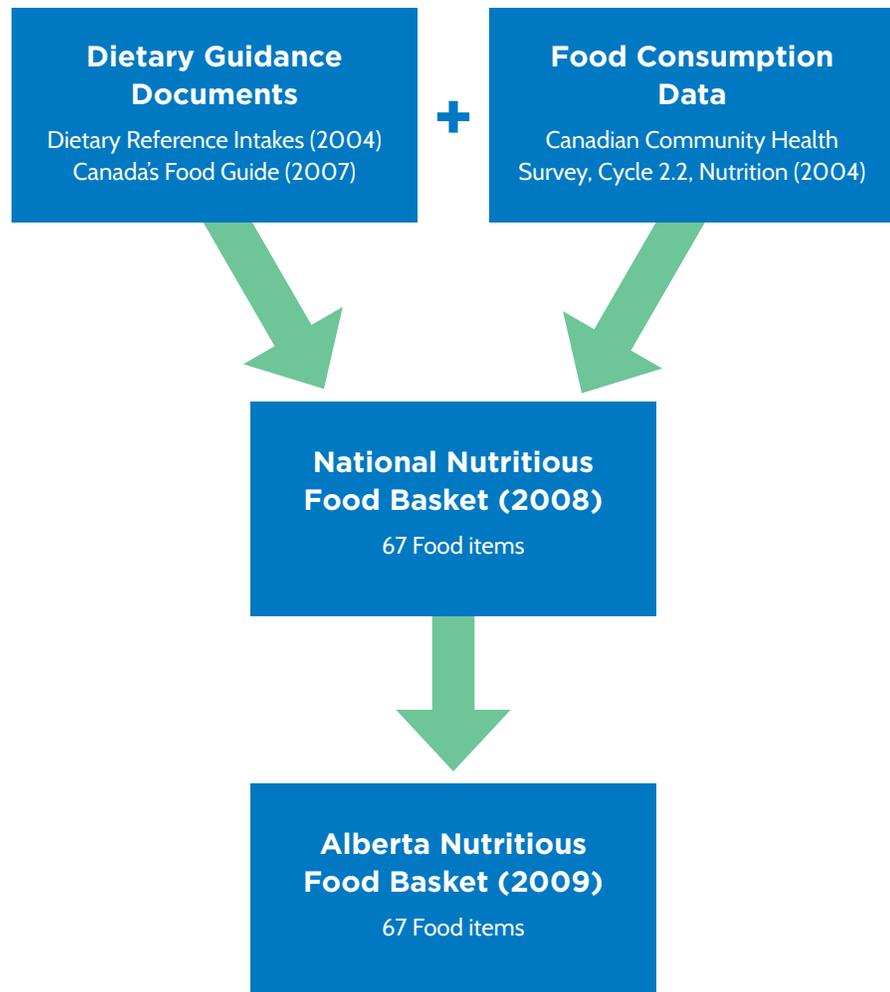
Step four: Converting edible quantities of food into “as purchased” quantities

The final step entailed the conversion of edible amounts of food to a quantity that consumers would typically purchase. Health Canada accessed [The Canadian Nutrient File](#) to determine all of the scalar conversion factors, which can be applied to the edible portion of an item to convert it to a common unit of measure. Certain items, such as peanut butter and some raw vegetables and fruit, did not require any adaptation because they incur no waste or change in weight or volume during preparation for consumption. See Table A for a detailed list of the scalar conversion factors for the NNFB food items.

The NNFB template also ensures that stakeholders can apply a single, generic version of a nutritious diet to an entire population by simply adjusting the required amounts of each food item needed to satisfy the specific energy or calorie requirements of defined age and sex categories as outlined in the DRIs.

Health Canada provides even more detailed information on the history of food baskets in Canada and the specific methodology used to develop the 2008 NNFB. Figure 1 depicts how the 2008 NNFB provided a template to establish the 2009 ANFB.

Figure 1: Development of the 2009 Alberta Nutritious Food Basket



III. Alberta Nutritious Food Basket

The protocol that guides the ANFB design and data collection reflects a variety of key elements which influence the cost of the basket, including:

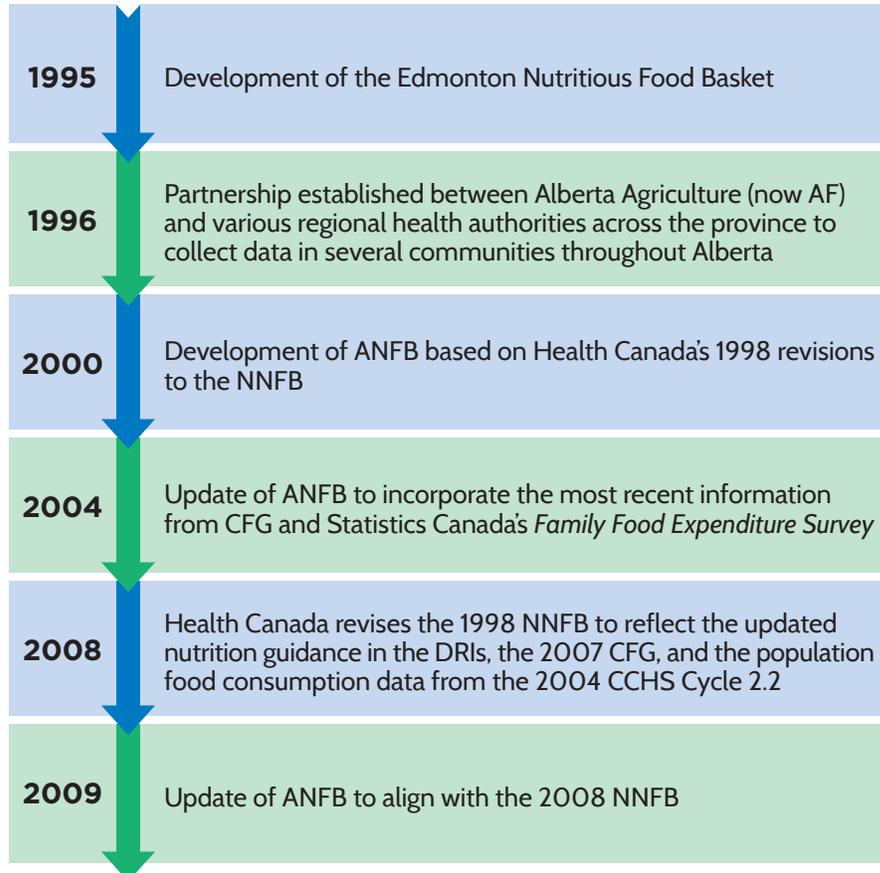
- specification of food items and brand names (when applicable)
- identification of common and consistent unit sizes or purchasing amounts of each food item
- inclusion or exclusion of sale prices or volume-based discounts

The protocol in Alberta also specifies packaging sizes, weights, volumes, and national or provincial food brands that are available in full-service stores across the province. This standardized food costing process helps ensure that community-specific ANFB costs reflect actual differences between local prices and provincial average prices.

ANFB costing currently supports:

- monthly monitoring for the City of Edmonton by AF
- annual (or more frequent) monitoring in many urban and rural communities by AHS public health dietitians and trained volunteers with analytical and strategic support from AF

Key milestones of ANFB implementation in Alberta:⁷



It is not possible to compare ANFB costs before 2009 with ANFB costs since 2009 due to the significant changes in the food items, which constitute the 2009 basket. It is also not possible to compare the provincial average ANFB cost from year to year because the community selection for food costing varies each year due to changes in grocery store eligibility and the availability of human resources to perform the costing duties.

Since 2009, the current ANFB has acted as the template to determine an estimate of the cost of healthy eating throughout the province. It is not possible to compare ANFB costs before 2009 with ANFB costs since 2009 due to the significant changes in the food items which constitute the 2009 basket. The current ANFB template includes an updated list of 67 food items separated into 10 categories (see Table B), whereas the previous basket only contained 51 food items divided into 11 categories.⁸ Other important changes include new age and sex categories and a different reference family of four to accurately reflect the DRIs and changes to the CFG.⁸ It is also not possible to compare the provincial average ANFB cost from year to year because the community selection for food costing varies over time due to changes in grocery store eligibility and the availability of human resources to perform the costing activities.

Alberta Retail Food Pricing Survey

AHS and AF price the ANFB in a variety of retail food stores across the province through the use of a standardized and detailed data collection tool called the Alberta Retail Food Prices Survey. Registered dietitians and trained volunteers act as food price surveyors within specified communities and they all complete the same survey in every grocery store within a specific four-day timeframe. The survey protocol includes a detailed description of each ANFB food product and provides specific instructions on how to choose an appropriate substitution if a particular item, brand or package size is not available.

AF and AHS update the Alberta Retail Food Prices Survey and its accompanying protocol each time there is a shift in the market place, including changes in the availability of a food item across the entire province, modifications to common package sizes and/or access to specific brands. This approach optimizes the standardization of data collection to help ensure all region-specific food costs reflect the actual prices of the same basket of food items rather than the prices of variable product package sizes and brands.

Figure 2 demonstrates an example of how a specific food item – canned salmon – was adapted from the 2008 NNFB template to establish the 2009 ANFB and the Alberta Retail Food Prices Survey in order to reduce the risk of multiple surveyor interpretations when determining the cost of all food basket items.

Figure 2: Food Item Specification in the Alberta Retail Food Prices Survey

National Nutritious Food Basket	Pink Salmon, Canned
Alberta Nutritious Food Basket	Salmon, Sockeye, Canned
Alberta Retail Food Prices Survey	Salmon, Sockeye, Canned, 213 g Cloverleaf®, Gold Seal® or Ocean's®

It is important to note that there is a total of 74 food items listed within the Alberta Retail Food Pricing Survey. AF uses the 74 items to create a trend report titled *Alberta Retail Food Prices* that aims to support business analysis and planning. This report does not outline ANFB costs and is distinct from *The Cost of Healthy Eating in Alberta*. A subset of just 67 specific items comprises the contents of the ANFB. See Table B for a comparison of the full list of food items in the 2008 NNFB, the 2009 ANFB and the Alberta Retail Food Prices Survey.

Community selection

AF and AHS developed a provincial approach to community selection for food costing in Alberta. The goals of this approach are to:

- continue to survey in communities that participated since 1996
- ensure representative coverage of the population of all five [AHS Zones](#)
- include all urban centres in the province (> 1,000,000 population)
- include at least one large city (>50,000 population) in each zone
- choose at least one small city (>10,000 population) in each zone
- choose at least one rural community or rural cluster (<10,000 population) in each zone
- group communities with fewer than three grocery stores into geographical clusters to protect the anonymity of individual stores and to adhere to confidentiality requirements
- rotate food costing between two sets of smaller rural and remote communities in the North Zone each year to ensure representative coverage of this expansive geographical area within realistic resource allocation
- consider current resource capacity before adding new communities or community clusters

Grocery store selection

AF and AHS developed a systematic store selection process to ensure the final set of stores includes representation from each of the full-service, major grocery chains and full-service, independent grocery stores operating in each community or community cluster. AF and AHS review the roster of grocery stores by community and AHS zone prior to each food cost cycle to identify the need to add or adjust stores. The following parameters guide grocery store selection:

- include full-service grocery stores that consistently carry all of the items included in the Alberta Retail Food Prices Survey
- exclude stores that limit consumer access or do not carry all of the food items in the Alberta Retail Food Prices Survey, such as
 - stores that require paid membership for shopping privileges
 - stores that carry a limited selection of groceries, including “corner stores,” “convenience stores” and gas stations
- ensure representation of each of the chain and independent full-service grocery stores that operate in the community or community cluster

Food basket data collection

Edmonton Nutritious Food Basket

AF collects food cost data in the City of Edmonton each week using the Alberta Retail Food Prices Survey.

Alberta Nutritious Food Basket

Trained AHS staff and volunteers conduct food costing using the Alberta Retail Food Price Survey in approximately 50 communities across the province annually or more frequently. The food cost data collection occurs each year over a four-day period during the third week of June.

Data analysis

AF analyzes the costs of the food basket items within the Alberta Retail Food Prices Survey to generate an ANFB cost report for each community or community cluster. AF calculates the estimated weekly food costs of the ANFB for specified age and sex categories, a reference family of four and both pregnant and breastfeeding women.

Community and community cluster comparisons

The implementation of a standardized, provincial food costing methodology helps prevent discrepancies in the process of data collection or data analysis between communities across Alberta. It is important to recognize that the variance in food prices at the community and community cluster level can have a significant impact on households in the region. Local food costs can inform calculations around the true cost of living in a specific area or the development of new social, economic, health, food or agriculture policies and programs.

However, it is not accurate to assume that variations in the cost of the ANFB are the direct result of local grocery stores choosing to charge higher or lower food prices within certain geographical locations. Instead, it is important to consider how several other factors significantly impact the actual cost of food for households within every community across the province:

- the amount it costs the grocery stores to transport food products into a community
- the price competition between national, regional, generic and house brands within and between grocery stores
- the food supply and demand within a community (e.g. larger communities demand larger amounts of foods, which may lead to lower costs per unit; certain food items may be more popular in specific regions of the province)

It should also be noted that the food cost estimates could be subject to error. Some of the possible causes of error include: data coding, data entry, editing and tabulation. Nonetheless, the data published in *The Cost of Healthy Eating in Alberta* report are reliable estimates for the province.

Age and sex categories

The 22 age and sex categories of the ANFB align with the age and sex groupings of the DRIs. Age and sex are the two major factors which impact the daily energy and nutrient needs of every individual. These categories also include three different age categories for breastfeeding women and three different age categories for pregnant women.

Reference family

The 2008 NNFB and 2009 ANFB reference family consists of a 31- to 50-year-old male, a 31- to 50-year-old female, a 9- to 13-year-old boy and a 4- to 8-year-old girl. These age ranges correlate with the revised age and sex categories of the DRIs.

Calculation of Alberta Nutritious Food Basket costs

There is a specific methodology used to calculate the ANFB food costs for each community and community cluster based on the results of the Alberta Retail Food Prices Survey. This calculation is based on the prices recorded during the four-day period during the third week of June. The calculation incorporates the following factors from Health Canada:

- the scalar conversion factor from the Canadian Nutrient File to translate purchased food amounts to edible portions (Table A)
- the popularity ranking derived from the 2004 CCHS, Cycle 2.2, Nutrition (Table A)
- the quantity of each food composite required to meet the DRIs for each age and sex category (Table C)

Figure 3 depicts a sample calculation for the weekly ANFB food costs for the fish composite category for females aged 19 to 30. The costs in this example are entirely fictitious and do not reflect current costs of fish in Alberta.

Figure 3: Sample calculation for the weekly ANFB cost of fish for females aged 19 to 30.

	Retail Food Price	Scalar Conversion Factor	Standard Unit Price	Popularity Ranking	Weighted Price		
Fish; sole, tilapia, haddock, pollock, halibut (frozen)	\$3.00	x 2.5000	= \$7.50	x 0.4479	= \$3.36		
Salmon; sockeye (canned)	\$2.00	x 4.6948	= \$9.39	x 0.3571	= \$3.35	Weekly Quantity for Females 19-30 (see Table C)	Weekly Fish Cost for Females 19-30
Tuna; light (canned in water)	\$1.00	x 5.8824	= \$5.88	x 0.1951	= \$1.15		
Total Weighted Fish Composite Cost:					\$7.86		

To determine the total cost of the ANFB, this process is repeated for each food composite. The composite costs are then added together to derive a weekly value. The steps to calculate the cost of all of the food composites in the ANFB for a week include the following:

- | | | |
|---------------|--|--|
| STEP 1 | Determine retail food price for each item. | A simple average is calculated from all of the prices for each food item from all participating grocery stores in the community or community cluster. |
| STEP 2 | Identify the scalar conversion factor needed to price a standard unit for each item. | The price per package size (weight or volume) for each food item is converted to a price per standard unit (usually one kilogram, but one litre for milk and alternatives and one unit for eggs) using a scalar conversion factor from the Canadian Nutrient File (see Table A). |
| STEP 3 | Calculate the price of the standard unit of each item. | Multiply the retail food price (Step 1) by the scalar conversion factor (Step 2). |
| STEP 4 | Locate the popularity ranking of each food item within each composite grouping. | Identify the popularity ranking outlined in the 2008 NNFB for each item within each of the 10 food composite groupings (see Table A). |
| STEP 5 | Calculate the popularity weighted price for each food item. | Multiply the price of the standard unit of each item (Step 3) by the popularity ranking of each item (Step 4). |
| STEP 6 | Calculate the total price for each food composite grouping. | Add all of the popularity weighted prices for all of the items within a composite grouping to determine the total price of each composite grouping. |
| STEP 7 | Identify the amount of each food composite that is required to meet the DRI for each age and sex category. | Determine the amount of each food item required to meet the Daily Recommended Intake for specific age and sex categories (see Table C). |
| STEP 8 | Calculate a weekly food cost for each composite grouping for each age and sex category. | Multiply the total price of each composite grouping (Step 6) by the DRI (Step 7) to calculate the weekly food cost of each of the 10 total composite groupings for each of the age and sex categories. |
| STEP 9 | Calculate a total weekly ANFB cost for each age and sex category. | Add the total price of all 10 composite groupings for each population category to determine the total weekly ANFB cost. |

Calculation of monthly ANFB costs

The monthly nutritious food basket costs are calculated from the weekly costs through the following process:

1. Weekly ANFB food costs for each age and gender category are multiplied by the average number of weeks in each calendar month (4.33) to calculate a monthly ANFB food cost.
2. An additional 10 per cent is added to the cost of the basket to cover the following Health Canada recommendations and other common food items:
 - vitamin D supplementation for adults older than 50
 - a multivitamin containing iron for pregnant women
 - other household food products, including condiments, baking supplies, tea and coffee

$$\text{Monthly ANFB Food Cost} = \text{Weekly ANFB Food Cost} \times 4.33 \times 1.10$$

Household size adjustment factor

The size of the purchase unit for each food item in the Alberta Retail Food Prices Survey is based on a reference family of four people: a male adult, a female adult, a male child and a female child. Across the history of nutritious food baskets in Canada, there has been a longstanding assumption that households with fewer than four people spend more per person on food and that households of more than four people spend less per person. However, as early as 1980, reports on revisions of the NNFB noted the absence of reliable data to support this theory.⁹ A current literature search and scan of cost of eating reports did not uncover any evidence upon which to support the application of adjustment factors for household size. Thus, *The Cost of Eating Healthy in Alberta* does not include any adjustments to the cost of the ANFB based on household size.

Provincial average food cost methodology

Surveillance and Reporting within AHS Population, Public and Indigenous Health calculated the provincial weekly average cost of the ANFB for the reference family of four, and each age and sex category. They determined this provincial cost by using the *weighted* weekly costs of the ANFB for each community and community cluster involved in the Alberta Retail Food Prices Survey. The purpose of weighting the weekly costs is to ensure that the provincial average ANFB cost proportionally represents the population within each participating community and community cluster. Thus, the costs of the ANFB of larger communities account for a greater proportion of the provincial average. Surveillance and Reporting used mid-year (e.g., June 30) population estimates based on Alberta Health Care Insurance Plan registrants for the corresponding year of data to determine community and community cluster populations, and weights.

Surveillance and Reporting calculated the provincial weekly average cost of the ANFB through the following steps:

1. A community or community cluster population weight was calculated as a proportion of the total population of all participating communities.

$$\text{Community or Community Cluster Population Weight} = \frac{\text{Community or Community Cluster Population}}{\text{Sum of All Participating Community and Community Cluster Populations}}$$

2. Next, the weighted ANFB cost is determined by multiplying the weekly ANFB cost for each community or community cluster by the respective population weight.

$$\text{Weighted ANFB Cost} = \text{Community or Community Cluster ANFB Cost} \times \text{Community or Community Cluster Population Weight}$$

3. Lastly, the weighted ANFB costs for each community and community cluster are summed together to establish the provincial average weekly cost of the ANFB.

$$\text{Provincial Average ANFB Cost} = \text{Sum of Weighted Community and Community Cluster ANFB Costs}$$

Table A: Popularity rankings and scalar conversion factors of 2009 Alberta Nutritious Food Basket items in each composite grouping

Food basket item	Popularity ranking	Scalar conversion factor
Milk and alternatives		
Milk, partly skimmed, 1%	0.6019	0.5000
Cheddar cheese, medium	0.1398	0.06486
Mozzarella cheese, partly skimmed (<21% M.F.)	0.1430	0.08066
Cheese, processed food, cheddar, slices	0.0621	0.4202
Yogurt, 2% M.F or less	0.0531	1.3180
Total	1.0000	
Eggs		
Eggs, grade A, large	1.0000	0.0833
Total	1.0000	
Meat, poultry and alternatives		
Beans, baked, canned in tomato sauce	0.0193	2.3394
Beef, ground, lean	0.1251	1.0000
Beef hip, inside round roast	0.0947	1.0000
Beef hip, inside round steak	0.0886	1.0000
Chicken, breast, boneless, skinless	0.4090	1.0000
Ham, sliced, regular	0.0441	5.7143
Lentils, dried	0.0077	2.2222
Peanut butter, smooth or crunchy type, fat, sugar and salt added	0.0386	1.0000
Peanuts, dry roasted	0.0565	1.4286
Pork, loin, centre-cut chop, bone-in	0.1163	1.0000
Total	1.0000	
Fish		
Fish, sole, tilapia, haddock, pollock or halibut, frozen	0.4479	2.5000
Salmon, sockeye, canned	0.3571	4.6948
Tuna, light, canned in water	0.1951	5.8824
Total	1.0000	
Orange vegetables and fruits		
Carrot, raw	0.2581	1.0000
Melon, cantaloupe, raw	0.5126	1.0000
Peach, canned halves or slices, juice or water pack	0.1200	2.3975
Sweet potato or yam, raw	0.1092	1.0000
Total	1.0000	
Dark green vegetables		
Beans, snap (Italian, green or yellow), frozen	0.1132	1.3333
Broccoli, bunches, raw	0.4110	1.0000
Lettuce, romaine, raw	0.1893	1.0000
Peas, green, frozen	0.0566	1.3333
Pepper, sweet, green bell, raw	0.1085	1.0000
Vegetables, mixed, frozen	0.1213	1.3333
Total	1.0000	

Food basket item	Popularity ranking	Scalar conversion factor
Other vegetables and fruits		
Apple juice, unsweetened, added Vitamin C	0.0525	0.7280
Apple, raw	0.0933	1.0000
Bananas, raw	0.1121	1.0000
Cabbage, green, raw	0.0202	1.0000
Celery, stalks, raw	0.0363	1.0000
Corn, canned, vacuum-packed	0.0162	3.6800
Cucumber, long English, raw	0.0406	1.0000
Grapes, red or green, seedless, raw	0.0261	1.0000
Lettuce, iceberg, raw	0.0744	1.0000
Mushrooms, white, bulk, raw	0.0156	1.0000
Onions, cooking, yellow, raw	0.0494	1.0000
Orange juice, frozen concentrate	0.0547	2.6777
Oranges, raw	0.0720	1.0000
Pears, raw	0.0165	1.0000
Potato, white or red, raw	0.1253	0.2203
Raisin, seedless (Sultana or Thompson)	0.0131	1.3333
Rutabaga or turnip, raw	0.0048	1.0000
Strawberry, frozen, unsweetened	0.0323	1.6667
Tomatoes, canned, whole	0.0596	1.2389
Tomatoes, red, fresh, raw	0.0588	1.0000
Vegetable juice cocktail	0.0263	0.5172
Total	1.0000	
Whole grain products		
Bread, whole wheat	0.1884	1.4706
Cereal, bran flakes with raisins	0.2263	1.4815
Cereal, oats, quick cooking	0.0116	1.0000
Cereal, toasted oats O's	0.2263	1.9048
Flour, whole wheat	0.1895	0.2000
Pita, whole wheat	0.1579	3.0864
Total	1.0000	
Non-whole grain products		
Bread, white	0.3572	1.7544
Buns, hamburger, white	0.1191	1.8519
Cookie, arrowroot	0.0714	2.8571
Cracker, saltine, unsalted top	0.0714	2.2222
Flour, white, all-purpose, enriched	0.2143	0.2000
Pasta, macaroni or spaghetti, enriched	0.0759	1.1111
Rice, white, long-grain, parboiled	0.0906	1.1111
Total	1.0000	
Unsaturated oils and fats		
Margarine, soft, canola, tub, non-hydrogenated	0.3000	1.1025
Salad dressing, Italian, regular	0.2000	2.0140
Mayonnaise	0.2000	2.3392
Vegetable oil, canola	0.3000	1.1490
Total	1.0000	

Table B: Comparison of food items in the 2008 National Nutritious Food Basket and the 2009 Alberta Nutritious Food Basket

2008 NNFB	2009 ANFB
Milk and alternatives	
2% milk	Milk, partly skimmed, 1%
Cheddar cheese	Cheddar cheese, medium
Mozzarella cheese	Mozzarella cheese, partly skimmed (<21% M.F.)
Processed cheese slices	Cheese, processed food, cheddar, slices
Yogurt, fruit	Yogurt, 2% M.F or less
Eggs	
Eggs	Eggs, grade A, large
Meat, poultry and alternatives	
Baked beans, canned in tomato sauce	Beans, baked, canned in tomato sauce
Ground beef, lean	Beef, ground, lean
Beef hip, inside roast	Beef hip, inside round roast
Round steak, inside	Beef hip, inside round steak
Chicken, legs	Chicken, breast, boneless, skinless
Sliced ham	Ham, sliced, regular
Lentils, dried	Lentils, dried
Peanut butter	Peanut butter, smooth or crunchy type, fat, sugar and salt added
Peanuts	Peanuts, dry roasted
Pork chops, centre cut	Pork, loin, centre-cut chop, bone-in
Fish	
Fish fillets, frozen	Fish, sole, tilapia, haddock, pollock or halibut, frozen
Pink salmon, canned	Salmon, sockeye, canned
Tuna, light, canned in water	Tuna, light, canned in water
Orange vegetables and fruits	
Carrots	Carrot, raw
Cantaloupe	Melon, cantaloupe, raw
Peaches, canned in juice	Peach, canned halves or slices, juice or water pack
Sweet potatoes (or winter squash)	Sweet potato or yam, raw
Dark green vegetables	
Green beans, frozen	Beans, snap (Italian, green or yellow), frozen
Broccoli	Broccoli, bunches, raw
Lettuce, romaine	Lettuce, romaine, raw
Green peas, frozen	Peas, green, frozen
Green pepper	Pepper, sweet, green bell, raw
Mixed vegetables, frozen	Vegetables, mixed, frozen

2008 NNFB	2009 ANFB
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Other vegetables and fruit	
Apple juice, shelf-stable	Apple juice, unsweetened, added Vitamin C
Apples	Apple, raw
Bananas	Bananas, raw
Cabbage	Cabbage, green, raw
Celery	Celery, stalks, raw
Corn, vacuum-packed canned	Corn, canned, vacuum-packed
Cucumber	Cucumber, long English, raw
Grapes, red or green	Grapes, red or green, seedless, raw
Lettuce, iceberg	Lettuce, iceberg, raw
Mushrooms	Mushrooms, white, bulk, raw
Onions	Onions, cooking, yellow, raw
Orange juice, frozen concentrate	Orange juice, frozen concentrate
Oranges	Oranges, raw
Pears	Pears, raw
Potatoes	Potato, white or red, raw
Raisins	Raisin, seedless (Sultana or Thompson)
Turnips	Rutabaga or turnip, raw
Strawberries, frozen	Strawberry, frozen, unsweetened
Tomatoes, canned	Tomatoes, canned, whole
Tomatoes, fresh	Tomatoes, red, fresh, raw
Tomato juice	Vegetable juice cocktail

Whole grain products	
Bread, whole wheat	Bread, whole wheat
Bran flakes cereal with raisins	Cereal, bran flakes with raisins
Oatmeal, quick cooking	Cereal, oats, quick cooking
Toasted oats O's cereal	Cereal, toasted oats O's
Flour, whole wheat	Flour, whole wheat
Pita, whole wheat (or white)	Pita, whole wheat

Non-whole grain products	
Bread, white	Bread, white
Hamburger buns	Buns, hamburger, white
Social teas	Cookie, arrowroot
Soda crackers, unsalted tops	Cracker, saltine, unsalted top
Flour, white all-purpose enriched	Flour, white, all-purpose, enriched
Spaghetti/macaroni, enriched	Pasta, macaroni or spaghetti, enriched
Rice, white parboiled	Rice, white, long-grain, parboiled

Unsaturation oils and fats	
Non-hydrogenated margarine	Margarine, soft, canola, tub, non-hydrogenated
Italian salad dressing	Salad dressing, Italian, regular
Mayonnaise	Mayonnaise
Canola oil	Vegetable oil, canola

Extra Items included in the Alberta Retail Food Prices Survey but not in the ANFB
Ice cream
Butter
Sugar, white granulated
Honey, creamed, pasteurized
Chicken, grade A, whole fryer
Chicken thighs
Chicken drumsticks

Table C: Weekly quantity of food “as purchased” required for each sex and age category to meet dietary reference intakes

	Milk and alternatives (litres)	Number of eggs	Fish (kilograms)	Meat, poultry and alternatives (kilograms)	Orange vegetables and fruit (kilograms)	Dark green vegetables and fruit (kilograms)	Other vegetables and fruit (kilograms)	Whole grain foods (kilograms)	Non-whole grain foods (kilograms)	Unsaturated oils and fats (kilograms)
Males										
2-3	4.49	3.50	0.20	0.30	0.62	0.67	1.30	0.35	0.33	0.21
4-8	5.39	3.50	0.20	0.46	0.62	0.67	2.27	0.50	0.47	0.21
9-13	7.19	3.50	0.20	0.96	0.62	0.67	2.92	0.59	0.57	0.26
14-18	7.19	3.50	0.20	2.13	0.62	0.67	4.54	0.79	0.75	0.37
19-30	4.94	3.50	0.20	1.96	0.62	0.67	5.19	0.89	0.85	0.42
31-50	4.49	3.50	0.20	1.63	0.62	0.67	4.54	0.89	0.85	0.42
51-70	5.39	3.50	0.20	1.63	0.62	0.67	3.89	0.89	0.57	0.37
>70	5.39	3.50	0.20	1.63	0.62	0.67	3.89	0.89	0.57	0.26
Females										
2-3	4.49	3.50	0.20	0.30	0.62	0.67	1.30	0.30	0.28	0.21
4-8	5.39	3.50	0.20	0.46	0.62	0.67	2.27	0.50	0.47	0.21
9-13	5.84	3.50	0.20	0.63	0.62	0.67	2.59	0.59	0.57	0.26
14-18	6.29	3.50	0.20	0.96	0.62	0.67	3.56	0.69	0.57	0.26
19-30	3.59	3.50	0.20	1.30	0.62	0.67	4.21	0.74	0.66	0.32
31-50	4.04	3.50	0.20	1.30	0.62	0.67	3.89	0.69	0.66	0.32
51-70	5.39	3.50	0.20	0.96	0.62	0.67	2.92	0.59	0.57	0.21
>70	5.39	3.50	0.20	0.96	0.62	0.67	2.92	0.59	0.57	0.21
Pregnancy										
≤18	6.29	3.50	0.20	1.30	0.62	0.67	3.89	0.79	0.57	0.37
19-30	5.39	3.50	0.20	1.30	0.62	0.67	4.21	0.79	0.75	0.42
31-50	5.39	3.50	0.20	1.30	0.62	0.67	3.89	0.79	0.75	0.37
Lactation										
≤18	7.19	3.50	0.20	1.30	0.62	0.67	4.05	0.74	0.66	0.37
19-30	5.39	3.50	0.20	1.63	0.62	0.67	4.21	0.79	0.75	0.42
31-50	5.39	3.50	0.20	1.63	0.62	0.67	3.89	0.79	0.75	0.37
Family of 4	21.11	14.00	0.82	4.35	2.49	2.70	13.61	2.67	2.54	1.21

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