

Nutrition North Canada

April 3, 2015 | by Keita Hill

Overview of the Case Competition

Welcome to the 2015 Interdisciplinary Case Competition hosted by the the University of Alberta Interdisciplinary Consulting Association (ICA)! The ICA Case Competition invites teams of 3 to 4 students to formulate solutions to a complex, interdisciplinary challenge.

Teams will be ranked during two rounds of presentations on Saturday, each with the same format: a 12 minute presentation to a panel of judges, followed by 5 minutes of questions. Judging will proceed on the basis of merit in content (80%) and communication (20%). Teams will be randomly assigned to one of two rooms for the first round. The judges from each room will then select two teams to proceed to final round. A different group of judges will assess the final round, in which the top four teams will compete for overall 1st, 2nd, 3rd and 4th place. There are no spectators for the first round. The final round is open to all teams and guests to observe. Final rankings will be based on deliberation amongst the judges, so teams' numerical scores will not be made available.

Schedule Summary

Fri., April 3, 2015 - **10:00 AM** This case document released to all teams

Fri., April 3, 2015 - **6:30 PM** Slides due at ica@ualberta.ca**

Sat., April 4, 2015 - **8:00 AM** Teams meet at BUS 2-09**

Sat., April 4, 2015 - **8:30 AM** Presentations Begin

**Mandatory items. Presentation slide decks are due by 6:30 PM on Friday at ica@ualberta.ca. Slide decks must be small enough to successfully transfer by email, and must be submitted in PDF or Microsoft PowerPoint (PPT/PPTX) format. Judges will be informed of any late slide submissions and may deduct points or disqualify a team for a late submission.

Rules

Seeking external help of any kind, including deliberation with other teams, is not permitted until final rankings are released. Use of the internet is permitted, including all databases available through University of Alberta Libraries, but excluding all other databases or subscription data sources. Any violations of these rules or of good faith participation should be brought to the attention of ica@ualberta.ca.

Pangnirtung, Nunavut is a community of 1500 on Baffin Island. Grocery stores in Pangnirtung participate in the Nutrition North Program, which subsidizes the healthiest and most perishable foods.

(Photo: Keita Hill, 2013)



Description of Situation

Note: This section is reproduced from Chapter 6, Nutrition North Canada—Aboriginal Affairs and Northern Development Canada, as published in the *Fall 2014 Report of the Auditor General of Canada*. © 2014 Her Majesty the Queen in Right of Canada, represented by the Minister of Public Works and Government Services. [Click for source.](#)

Many communities across Canada's three territories, as well as in the northern parts of several provinces, are accessible only by air for part or all of the year. The cost of living and of doing business in these isolated communities is higher than in more southern regions. Necessities such as perishable foods must be flown in to these communities. Electricity, maintenance, and food storage costs are higher for stores and affect the prices of food on store shelves. For example, in April 2014, the price of two litres of milk was \$7.99 in Old Crow, Yukon, compared with \$3.35 in Edmonton, Alberta.

The amount spent on food is considerably higher in Canada's North: Statistics Canada reports that in 2009, the latest year for which comparable data are available, the average household expenditure on food in Canada was \$7,262—whereas it was \$7,496 in Yukon, \$9,509 in the Northwest Territories, and \$14,815 in Nunavut. The higher prices make it more difficult for Northerners to afford a nutritious diet essential to good health.

To help with the high cost of food in the North, the federal government created the Food Mail Program in the late 1960s. Since 1991, this Program was managed by Aboriginal Affairs and Northern Development Canada. Under the Program, Canada Post received a transportation subsidy from the Department to deliver items to isolated northern communities. Over the years, because of population growth and increasing fuel prices, expenditures increased, and the Program often exceeded its budget. In response, in 2006 the government

directed the Department to review the Food Mail Program and develop options to improve its efficiency, while maintaining financial sustainability and predictability.

In April 2011, Aboriginal Affairs and Northern Development Canada introduced the Nutrition North Canada (NNC) program. The objective of the Program is to make healthy foods more accessible and affordable to residents of isolated northern communities. The Program seeks to increase the consumption of healthy foods and contribute to better overall health of the population. Supporting Northerners' well-being is part of Canada's Northern Strategy.

NNC is a transfer payment program based on a market-driven model. It has an annual fixed budget of \$60 million. Of this, \$53.9 million is allocated annually to the subsidy component. The subsidy is provided directly to northern retailers, food suppliers and distributors, and northern food processors through **contribution agreements** to help lower the price of nutritious foods. Retailers make their own supply-chain arrangements, a practice that the Department expects to keep transportation costs low.

The Program specifies that retailers are responsible for passing on the full subsidy to consumers by reducing their prices on eligible foods. Retailers submit information on what was shipped and information on food prices to the Department. Payments to retailers are based on the weight of eligible foods shipped to eligible communities (**Exhibits 1 and 2**). About 40 retailers, suppliers, and food processors participate in the Program. Three northern retailers have accounted for about 80 percent of the subsidy each year.

Contribution agreement:

A transfer payment subject to performance conditions specified in a funding agreement. A contribution is to be accounted for and is subject to audit.

—Auditor General's Report



Produce section of grocery store,
Pangnirtung, Nunavut
(Photo: Keita Hill, 2013)



Produce section of grocery store,
Nuuk, Greenland
(Photo: Keita Hill, 2013)



The Department determines eligible foods (**Exhibit 3**) and eligible communities (**Exhibit 1**). Subsidy rates vary by community; some communities are eligible for a partial subsidy and others are eligible for a full subsidy. Subsidies range from \$0.05/kilogram for Stony Rapids, Saskatchewan to \$16.00/kilogram for Grise Fiord, Nunavut. As of June 2014, 103 communities across Nunavut, the Northwest Territories, Yukon, as well as northern Labrador, Quebec, Ontario, Manitoba, and Saskatchewan were eligible for the subsidy.

The Department reported that, in the 2012–13 fiscal year, for communities eligible for the full subsidy, the subsidized amount averaged \$808 per person. However, the Department recognizes that several factors affect accessibility and affordability of nutritious foods—including poverty, unemployment, limited infrastructure, and the high cost of living. While the Program is intended to make nutritious foods more accessible and affordable, it is not designed to address these factors or make the price of food in the North equal to the prices elsewhere.

Preparation of whale skin. Country food forms an important part of traditional northern diets. Transportation of country foods between northern communities is subsidized by Nutrition North. (Photo: Keita Hill, 2013)

Problem Statement

The goal of the Nutrition North Program is to increase the consumption of healthy foods and contribute to better overall health of the population in isolated northern communities. Assume that the Federal Government has engaged your team to identify how the Program can be improved over the next five years.

- ☐ What metrics (**performance indicators**) would your team propose to track progress of the Nutrition North Program towards increasing the consumption of healthy foods in Canada's northern communities?
- ☐ Without increasing the Program's \$60,000,000 annual budget, what changes would your team propose to improve the performance of the Nutrition North Program on the metric(s) you identified?
- ☐ (Optional) How would your team engage northern residents in the change process, and communicate program changes to residents of northern communities?
- ☐ (Optional) What are some factors that would encourage buy-in for your proposed changes from stakeholder groups? (Retail grocers, northern residents, politicians, transportation companies, etc.)

Performance indicator: A measurement which represents an aspect of the success of an initiative. Success can include the repeated, periodic achievement of some level of operational goal (e.g., calories of food shipped), or making progress toward strategic goals (e.g., reduce malnutrition rates in children).

—Adapted from Wikipedia

The North West Company (TSE:NWC), which owns the Northern retail banner, is one of the three largest retailers participating in the Nutrition North Program. (Photo: Keita Hill, 2013)



Contextual Examples of Challenges Already Identified

- The program's transparency has been criticized by some northern residents, because the subsidy is passed on to retailers rather than directly to consumers.
- The subsidy is based solely on the weight of food shipped, which includes food which spoils at the retailer and never reaches the consumer.
- The rules for communities to qualify for the subsidy (Exhibit 5) lead to apparent inconsistencies. "For example, two communities in northern Ontario are about 20 kilometres apart; they both lack year-round road access and are about the same distance to the nearest town. However, one community is eligible for a full subsidy (\$1.60/kilogram) while the other is eligible only for the partial subsidy (\$0.05/kilogram)." (Auditor General's Report, 2014)
- The subsidy for the same item varies depending on how it is shipped. Products must generally be shipped by air to qualify for any subsidy, even if it is cheaper to ship by sea or road during certain periods of the year.
- The Auditor General found that "Aboriginal Affairs and Northern Development Canada has not verified whether the northern retailers pass on the full subsidy to consumers. The Department has not required the information it needs to verify this in the contribution agreements it has signed with northern retailers (**Exhibit 4**). It also has not required that compliance reviews of northern retailers include analysis of profit margins in order to verify that the full subsidy is being passed on. This finding is important because passing on the full subsidy to consumers is a program requirement, and is necessary to make nutritious food more accessible and affordable to Northerners."

This list is by no means exhaustive.



Exhibit 1. Examples of subsidy rates for select northern communities

Communities eligible for subsidized food

Community	Region	Full/Partial	Subsidy Rates (\$/kg)	
			Level 1 Food (High)	Level 2 Food (Low)
Aklavik	Beaufort-Delta	Full	1.60	0.05
Akulivik	Northern Quebec	Full	4.60	2.80
Arctic Bay	Baffin	Full	8.60	6.80
Angling Lake	Northern Ontario	Partial	0.05	0.05
Arviat	Kivalliq	Full	2.00	0.20
Attawapiskat	Northern Ontario	Full	1.40	0.05
Aupaluk	Northern Quebec	Full	4.60	2.80
Baker Lake	Kivalliq	Full	3.30	1.50

Exhibit 1 Source

(Click above for source)

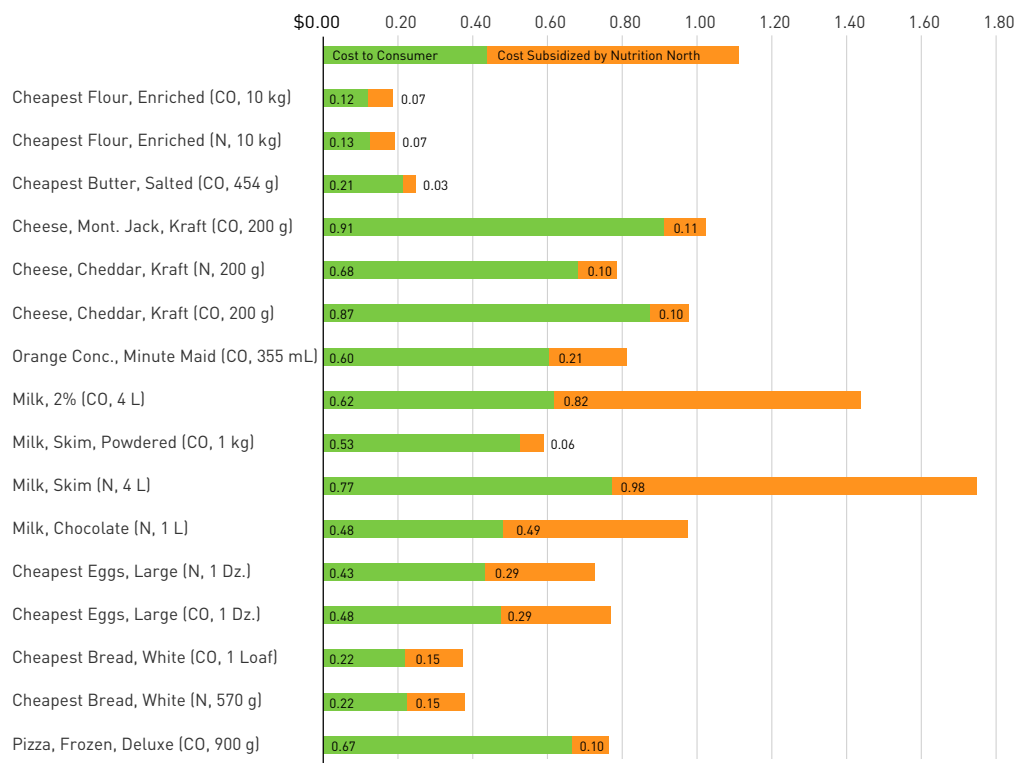
See Exhibit 3 for lists of foods qualifying under Level 1 (Higher) and Level 2 (Lower) of the subsidy.

Exhibit 2. Cost and subsidy per calorie for reference foods from June 2013, Pangnirtung, NU

Cost to consumer and Nutrition North subsidy program of various foods, per 100 Calories

\$CAD before any taxes, as observed in Pangnirtung, Nunavut, June 2013.

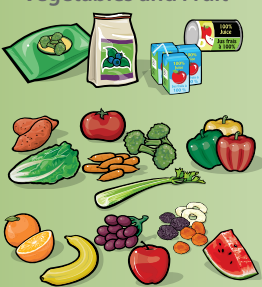





Original Data



Price data from in-store observations on June 20th and 21st at Pangnirtung Inuit Co-operative Ltd. (CO) and Pangnirtung Northern Store #510 (N). "Cheapest" refers to the lowest cost per calorie combination in-stock per product category, regardless of quantity or type. Nutrition Data from Product Packaging and Google. Nutrition North Tier 1 subsidy of \$4.10/kg applied to all products except Pizza, Butter and Flour, which received a Tier 2 subsidy of \$2.30/kg. Calculated subsidies do not include packaging weight, although this is included in the actual subsidy. Density of milk and orange concentrate taken as 1.0g/mL. Research and graphic, Keita Hill.

Exhibit 3. Subsidy categories for qualifying foods

Exhibit 3 Source (Click above for source)

FOOD GROUP	HIGHER SUBSIDY LEVEL	LOWER SUBSIDY LEVEL
Vegetables and Fruit 	<ul style="list-style-type: none"> Fresh and frozen vegetables and fruit Dried vegetables and fruit (unseasoned or unsweetened) Frozen unsweetened juice concentrate Unsweetened juice in individual containers of 250 ml or less, except cans 	<ul style="list-style-type: none"> Unsweetened juice in containers larger than 250 ml, except cans
Grain Products 	<ul style="list-style-type: none"> Bread and bread products without filling or coating Ready-to-eat cereals Cook-type cereals 	<ul style="list-style-type: none"> Flour Crackers, dry crisp breads and Pilot biscuits Arrowroot and social tea cookies Fresh pasta, without sauce
Milk and Alternatives 	<ul style="list-style-type: none"> Milk (e.g., fresh, UHT, powdered, canned evaporated) Buttermilk Fortified soy beverages Cheese and processed cheese slices Cottage cheese Yogurt and yogurt drinks 	<ul style="list-style-type: none"> Cream Sour cream Cream cheese Processed cheese spread Ice cream and ice milk, sherbet and sorbet, and frozen yogurt
Meat and Alternatives 	<ul style="list-style-type: none"> Fresh and frozen meat, poultry, fish and seafood Eggs and egg substitutes Unsweetened nuts and seeds Peanut butter and other nut or seed based spreads "Vegetarian" products (e.g., tofu, vegetable-based patties) 	<ul style="list-style-type: none"> Side bacon
Country or Traditional Foods 	<ul style="list-style-type: none"> Country or traditional foods when available through local stores or when purchased from processing plants that are registered with the program. 	
Other Foods 	<ul style="list-style-type: none"> Infant formula, infant cereals and other infant foods 	<ul style="list-style-type: none"> Margarine, butter, lard and shortening Salad dressing, mayonnaise and dips Fresh, frozen and refrigerated combination foods, <i>except</i> items that are breaded, battered or in pastry, desserts, poutine, prepared sandwiches, hamburgers, hot dogs, prepared salads. Cooking oils (e.g., canola, olive, peanut)
Non-food items		<ul style="list-style-type: none"> Non-prescription drugs

This list will take effect in stores participating under Nutrition North Canada on October 1, 2012.

Nutrition North Canada:

- provides the highest subsidy to the most nutritious, perishable foods such as milk, eggs, meat, cheese, vegetables and fruit
- subsidizes commercially produced country foods
- continues to subsidize direct orders

Other foods not covered by the Nutrition North Canada subsidy are available in local grocery stores and can be obtained via winter roads or sealift.

Exhibit 4. Information needed to determine whether the subsidy is fully passed on to consumers

Exhibit 4 Source
(Click above for source)

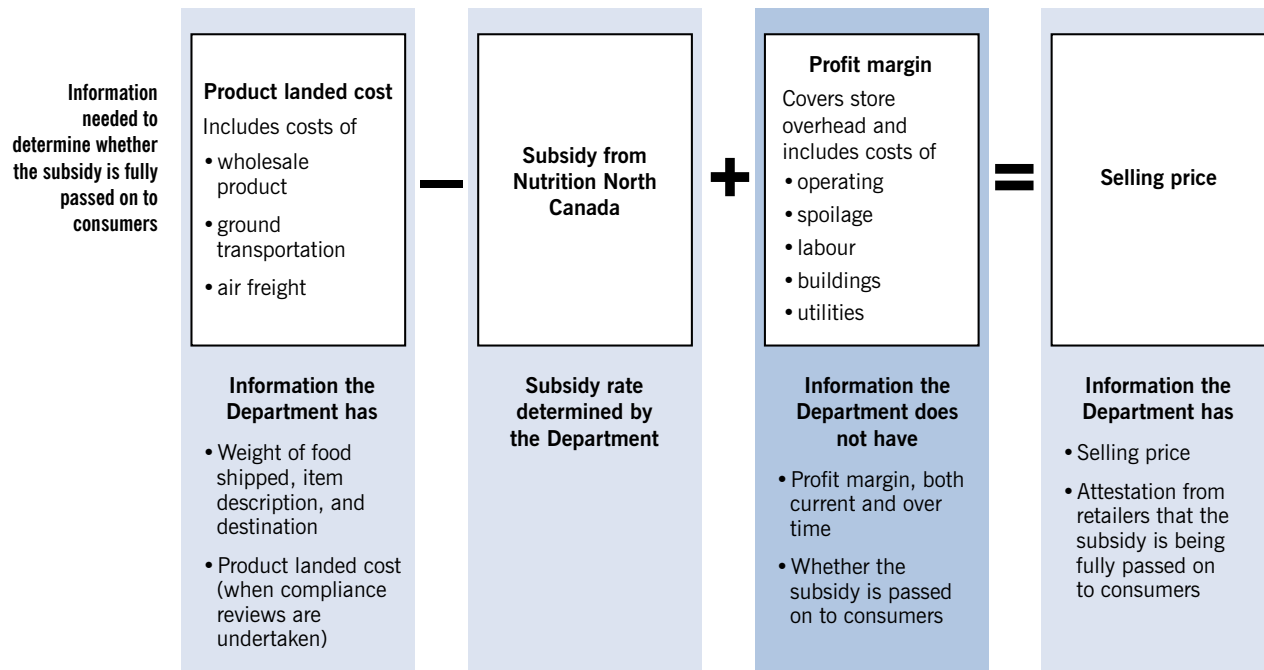


Exhibit 5. Requirements for a community to qualify for Nutrition North subsidy

Exhibit 5 Source
(Click above for source)

To be eligible for Nutrition North Canada (NNC), a community must:

- lack year-round surface transportation (for example, no permanent road, rail or marine access) and
- have used Food Mail, the department's previous northern transportation subsidy program