

# SETTING THE TABLE FOR FOOD SECURITY: POLICY IMPACTS IN NUNAVUT

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## **Abstract / Résumé**

Food security comprises availability, accessibility, acceptability (by the population) and adequacy (for human health) of food. A number of federal and territorial legislative and policy initiatives impinge on food production or acquisition as well: the Federal Food Mail program and Firearms Act, and the Nunavut Social Assistance, Hunter Support, country food development and gas subsidy programs. The paper concludes with policy recommendations regarding meeting the four conditions of food security.

La sécurité alimentaire comprend la disponibilité et l'accessibilité de la nourriture. Cette nourriture doit aussi être acceptée (par la population) et adéquate (pour la santé). Un certain nombre de législations fédérales et territoriales et certaines politiques entravent la production et l'acquisition alimentaires : le pro-gramme Aliments-poste, la Loi sur les armes à feu, l'Assistance sociale du Nunavut, le programme d'aide aux chasseurs et le programme de subvention pour l'essence dans la poursuite des activités de chasse et de pêche. Cet article propose des recommandations concernant les quatre conditions de la sécurité alimentaire.

## **1.0 Food Security and Insecurity in Canadian Households**

Statistics Canada recently completed and released the National Population Health Survey (NPHS), which included content related to health status, use of health services, determinants of health and a range of demographic and economic information. According to the survey report, approximately 8% of Canadians were forced to compromise the quality or quantity of their diet at least once in 1998/99 due to a lack of money (The Daily 2001). The NPHS also found that approximately 3 million Canadians in 1998/99 were considered to be living in 'food-insecure' households.<sup>2</sup>

Food insecurity in Canada is strongly associated, although not exclusively so, with low household income, according to Statistics Canada. One-third of people residing in low-income households reported some form of food insecurity in 1998/99 and almost as many people reported that they felt their diet had been compromised (The Daily 2001). Approximately 58% of households relying on social assistance reported food insecurity.

Food security in Canada is defined as the requirement of adequate amounts of safe, nutritious, culturally acceptable food, accessible to all in a dignified and affordable manner (Koc & MacRae 2001,4). Food security further requires the fulfillment of four needs:

1. Availability – sufficient supplies of food for all people at all times
2. Accessibility- access to food for all at all times
3. Acceptability- culturally acceptable and appropriate food and distribution systems
4. Adequacy – nutritional quality, safety, and sustainability of available sources and methods of food supply.

For residents of the Canadian Arctic, the ready availability of nutritious foods, and an assured ability to acquire personally acceptable foods plays an essential role in meeting psycho-social and physiological needs (Campbell 1997, 107). Socio-economic and environmental factors have influenced food security in Nunavut, resulting in the need for coherent policy attention. Factors such as employment, contaminants and community lifestyles have fostered changes in food consumption patterns in Nunavut communities.

## **2.0 Food Security in Nunavut**

Food insecurity is an increasing concern for households in Nunavut communities. While 8% of Canadians reportedly were forced to compromise the quality or quantity of their diet, a substantially higher number of households in Nunavut communities have had similar experiences

(Lawn and Harvey, 2001). Addressing the four needs of food security as defined above, leads us to conclude that the ability of households in Nunavut to satisfy all the criteria of availability, accessibility, acceptability and adequacy of food is complicated by changing circumstances in arctic communities. However, it is also apparent that some socio-economic and cultural practices persist, which contribute to food production and sharing, and thereby to a degree of food security (Myers et al, *in prep.*).

## **2.1 Acceptability and Adequacy: Food Preferences Among Nunavut Inuit**

Food consumption patterns of the Inuit have undergone changes in recent years due to a number of socio-economic and cultural factors. The Inuit diet in Nunavut communities has for a long time consisted of a mix of traditional and imported food, but the balance between these components is changing, with more commercially produced, imported market food being used. Further, traditional food changes have become evident in the use of fewer species and decreased total quantities of local traditional food resources consumed (Kuhnlein & Chan 2000). This has implications for Inuit health, as obesity, diabetes, heart disease, dental caries and other afflictions are increasingly seen in northern communities, associated with the new diet that is heavier in saturated fats, sugars, salt and carbohydrates. The traditional foods, on the other hand, supply many critical nutrients. For many Inuit, these foods are still favoured, consumed and shared within the extended family and community, but many other Inuit find it more difficult to harvest or acquire such foods, or find that their children prefer the store-bought foods that are featured in advertisements and media (Myers et al, *in prep.*; Duhaime et al, 2001). In some communities, traditional foods are available from local stores, but this availability varies between communities and over time, and it appears that relatively few buy country food from such outlets.

The importance of traditional food for Inuit people is directly associated with physical health and well-being (Van Oostdam et al, 1999), with the processes of procuring, preparing and consuming country foods holding great social and cultural significance and forming an integral part of Inuit identity (Wein et al, 1996). Traditional food synthesizes two elements—the body (physical actuality and functioning of the human body) and the soul (spirit, mind, immediate emotional state or even the expression of consciousness) (Borre 1994). Sharing and communal processing of traditional foods are also important to community health (Van Oostdam et al, 1999). Further to the biological/nutritional needs sup-

plied, effort is also required for harvesting, which comprises extensive physical exercise (Kuhnlein et al, 1996); thus, dietary change has complex potential consequences for the health and well-being of Inuit populations.

Various food products of Arctic species continue to be consumed by Inuit in Nunavut. A food survey completed in Belcher Island reported that, as in other Aboriginal groups, preference for country foods remains high (Wein et al, 1996). However, there are generational and gender differences in preferences between adults and young people and between men and women (Wein et al, 1996; Van Oostdam et al, 1999; Kuhnlein et al, 1995). Adults identified and rated traditional foods more highly than imported foods, while younger people rated traditional foods lower and imported foods higher than the adults. A majority of the young people had not tasted traditional foods such as arctic fox, polar bear, capelin, and guillemot chicks, though they identified goose, beluga muktuk, blueberries, canned fruit and apples as favourite foods (Wein et al, 1996).

Food surveys and harvesting studies have suggested that traditional food consumption by Inuit has decreased in recent years (Blanchet et al, 2000). Most noticeable among the youth, there is a trend toward increased imported food consumption. Younger Inuit depend more on imported food than their parents (Blanchet et al, 2000). Decreasing traditional food consumption can be a threat to the health and cultural well-being of Inuit populations.

Traditional food and market foods consist of different nutrients and nutrient densities. Traditional foods are the main contributor of nutrients such as phosphorus, iron, zinc, magnesium, vitamin A, selenium, protein, vitamin B, niacin, thiamin and riboflavin (Blanchet et al, 2000; Receveur et al, 1997; INAC, 2002). These foods are also the main source for n-3 fatty acids, such as EPH (docosahexaenoic acid) and DHA (alpha linoleic acid), which are found to decrease chances of cardiovascular diseases (Kuhnlein et al, 1996). The most significant nutrients supplied by market foods are calcium and sodium. Furthermore, market foods are the main supplier of food dry weight, energy, fat and carbohydrates, but compared to market foods, traditional foods have a higher nutrient density (Kuhnlein et al, 1996). It has become apparent that contemporary Inuit nutrition is short of several dietary components such as calcium, vitamin A and dietary fibre, and includes consumption of too much unsaturated fat and carbohydrates (Blanchet et al, 2000; Receveur et al, 1997; Kuhnlein et al, 1996).

Dietary reliance on imported foods has been related to a number of chronic diseases, which are associated with poor diets (Kuhnlein et al, 1996). Obesity, diabetes and related complications such as cardiovas-

cular disease in Inuit populations can result from increased reliance on imported foods. Changing dietary patterns can be accompanied by lifestyle changes, such as reduced physical activity, which when coupled with an increased intake of saturated fat and sucrose can lead to greater incidences of diseases and poor health (Kuhnlein et al, 1996).

The quality of imported foods found in northern stores is often poor and has become an increasing concern for many northern residents. The household food survey respondents in three Nunavut communities (Myers et al, *in prep.*) reported a lack of fresh, affordable, perishable food items at the local stores. One respondent recalled buying a head of lettuce for \$5, which was completely rotten on the inside—according to him, a common occurrence.

## **2.2 Access and Availability: Income, Environment and Community Characteristics**

Consumption of imported foods has been influenced by their increased availability; in most communities in Nunavut, there are a variety of imported foods available in local stores and in some communities, there are also fast food outlets and restaurants. Media and travel have helped create a demand for a wider variety of foods (Van Oostdam et al, 1999). According to several dietary studies, imported food has become an important food source (Kuhnlein & Chan 2000). A dietary-pattern study completed in a Baffin Inuit community reported that men's intake of imported food ranged from 53% to 70.5% of total dietary energy expended, depending on season (Kuhnlein & Chan 2000). Other studies on dietary consumption patterns have had varying but similar results

Changes in economy have resulted in northern communities taking advantage of resources available outside the local environment; increased access to wages and monetary income, as well as improved transportation links, have helped Inuit to diversify their food consumption (Kuhnlein & Chan 2000; Duhaime et al, 2001). Employment and education have also placed demands on time and therefore require the convenience of food that can be readily obtained, stored and prepared (Van Oostdam et al, 1999). Income and thus the acquisition of equipment also influence the level of harvesting activities (Duhaime et al, 2001); having undergone changes in the means of production, due to mechanized transportation and the use of firearms, harvesting is generally more expensive nowadays.

Access to traditional foods in northern communities is also dependent on factors such as environment, climate and wildlife potential. Traditional food consumption studies found that there is a relationship between uses of traditional food and season. Kuhnlein et al (1996) indicate

that the energy input from traditional food is greatest during August/September and lowest during October/November, reflecting climatic conditions found in the arctic. Receveur et al (1997) found that while terrestrial animal-meat consumption is consistent throughout the year (as is the consumption of market foods), fish consumption was much higher during summer-time, a pattern similar to one found among the Inuvialuit in the Northwest Territories (Wein and Freeman, 1992). Seasons can affect access to harvesting, as indicated in the recent food survey in Nunavut (Myers et al, *in prep.*), where many respondents reported that there were only certain seasons in which they would or could harvest, due to a lack of equipment. For example, some respondents indicated that they hunted only in the winter because they did not have access to a boat for summer harvesting.

Finally, the use of traditional foods also depends on the location of the community. A comparison of studies conducted in the Yukon, NWT and Nunavut found that traditional foods were consumed up to three times as often in communities in the NWT and Nunavut than in the Yukon communities (Wein et al, 1995; Wein et al, 1996; Wein and Freeman 1992). As well, it appears that the further north a community is located, the more community members will rely on traditional foods (Receveur et al, 1997; Wein et al, 1995). This may be related to factors such as population size, road access, proximity to animal migration routes, prevalent fishing and hunting practices, costs and availability of market foods and general improvements of communication and transportation with the south (Blanchet et al, 2000). However, a household food survey in Nunavut did not find a clear, linear relationship between small, less economically diversified communities (where imported food took an important role) and larger, wealthier communities, where harvesting and country food consumption rates were relatively high (Myers et al, *in prep.*). Table 1 illustrates the situation in our study communities, regarding size, employment and harvesting rates.

Accessibility of imported foods can also be influenced by the availability of transportation and local market infrastructures (Duhaime et al, 2001). Increased consumption of imported foods is then influenced by the convenience of purchasing from local food stores. Overall, however, the availability of money coupled with the high costs of both imported food and harvesting activities is a major issue for Inuit (Duhaime et al, 2001).

### **Food Security Status in Nunavut**

Thus, Inuit in Nunavut have a more diversified diet available to them, through traditional harvesting or stores selling both traditional and im-

**Table 1**  
**Community Employment and Food Use Characteristics**

	Small community	Medium community	Regional centre
Population 1999 <sup>3</sup>	752	1276	1387
Population 2001	785	1220	1309
Labour force participation 1999 <sup>4</sup>	50.9	54.6	77.9
Employment rate 1999	34.9	39.	67.1
Country food harvesting <sup>5</sup>	65%	68%	60%
Country food consumption <sup>6</sup>	98%	98%	93%
>50% country food consumption <sup>7</sup>	40%	49%	30%

ported foods. Whether they have access to such foods depends increasingly on income—either for harvesting equipment and supplies or for store purchases. As well, factors of seasonality and climate may affect access, both for harvesting or for transportation of southern imports. Acceptability of foods appears to be changing, with tastes for different traditional and imported foods changing, and generational or gender differences affecting lifestyle and tastes. Finally, adequacy can be seriously questioned, when many families report lacking money or food, and when nutritional quality, especially of convenience foods and poor diets, is low.

### 3.0 Pressing Food Problems

Nunavut residents face a number of problems in terms of obtaining food. As suggested earlier, traditional food harvesting and production systems continue to operate in Inuit communities, but they have been increasingly afflicted, since people moved into permanent settlements, with rising costs. These costs are driven in part by increasing capitalization: skidoos, boats, motors, gasoline and ammunition are expensive, but they are now the accepted tools of the trade for efficient harvesting. Exacerbating this trend in costs is the persistent high unemployment levels in arctic communities, the lack of employment opportunities, and the relatively low cash incomes of residents (Myers, 2000). Consequent dependence upon Social Assistance affects peoples' abilities to go out hunting or fishing for food. Even those with cash incomes face difficulties: if they work for a non-government employer, they do not receive northern living allowance; prices for food and other items are high even

though housing costs may be subsidized; large and extended households require a lot of food. For those buying imported foods, the huge distance from southern suppliers adds heavy transportation costs to foods, and undermines their quality because of the conditions of warehousing and transport.

A new problem affecting country food use is their potential contamination with persistent organic pollutants (POPs). News of this possibility broke in the late 1980s and seriously undermined Inuit confidence in their traditional foods, causing some to move completely to imported foods. This switch, however, has often been correlated with poor nutrition and other, more immediate health effects, such as heart disease, diabetes, obesity, tooth decay and so on. Efforts are now being made to put out more balanced messages regarding the relative risks of POPs and the benefits of a traditional food diet (Kuhnlein & Chan 2000).

### **3.1 High Costs**

High costs of obtaining both traditional and imported foods are an increasing issue in Nunavut communities, especially when coupled with high rates of unemployment, and the pattern of increased use of imported food by the unemployed (Campbell, 1997, 107). This was supported by our household food survey: 73% of the unemployed reported participating in country food harvesting and 63% said that more than half of their diet was country food. On the contrary, only 57% of the employed participated in harvesting and only 23% consumed more than half of their diet as country food. Despite reports that young people are tending to consume more imported food, our survey of Nunavut communities showed that 97% of young people do consume country food to at least some degree, and 24% said that more than half of their diet was country food.

Costs of non-perishable and perishable items in the "Northern Food Basket" show the higher costs borne by northern residents (INAC, 2004a) (see Table 2). It is interesting to note that the price gap between Ottawa and northern communities narrowed significantly over that time period, and also that prices actually fell over the decade, both reflecting changes made to the food mail program between 1991 and 1993.

At least partially as a result of these costs, half of the respondents in two Inuit communities felt that most people in the community, whether or not they were on Social Assistance, could not afford to buy enough food to feed their families during the survey period in 1997 (Lawn & Harvey 2001). On the contrary, a study by Sante Quebec in Nunavik asked people if they went without food, and only 20% said yes. Alternatively, one of our social-service oriented informants felt that a lack of food may reflect

**Table 2**  
**Northern Food Basket Costs**

<b>Community</b>	<b>1991 costs</b>	<b>2002 costs</b>
Ottawa	\$109	\$152
Iqaluit	\$238	\$240
Clyde River	\$262	\$253
Pond Inlet	\$259	\$248

family spending habits, as well as the local price structures, not necessarily the absence of adequate wages or social assistance. It may be that respondents do not expect to buy all their food, assuming harvesting or sharing to provide a part of their diet. It is important to note that over 85% of people surveyed by Lawn and Harvey in Pond Inlet (2001) felt that most families had access to country food; indeed, our household food survey indicated that 65% of households received country food and 53% gave it in sharing relationships during the week of our survey. This may be an important complement to expensive imported food, but it also a way to ensure that people have access to traditional foods and that social connections are maintained. Sharing transactions also involve imported food, with households in three Nunavut communities giving imported food as often as country food (Myers et al, in prep.).

Even the country food, available in some communities from local commercial country food outlets, tends to be expensive in some consumers' minds. We found that relatively few northern residents bought country food, though we did hear reports of people making purchases from individual harvesters, presumably at more "affordable" rates.

### **3.2 Contaminants**

Concern surrounding the contamination of the food supply in the Canadian north first emerged in the late 1960s after levels of methylmercury were found in Arctic ecosystems (Bocking 2001; Usher et al, 1995). From that time on, contaminants such as organochlorines, heavy metals, cadmium, lead, radionuclides and arsenic have been the focus of Canadian research in the north. While some of these contaminants originate from local sources, such as DEW Line sites and mining, most are transported long distances from industrial centres in North America, Europe and Asia, via wind and ocean currents (Barrie et al, 1992). Of particular concern are the persistent organic pollutants (POPs), which are widely dispersed into the environment due to their chemical and

physical characteristics. Over time, POPs build up in the fatty tissues of organisms, where they are very slow to change form or break down (INAC 1997). These contaminants also biomagnify, which results when a predator essentially consumes all the contaminants consumed by, and stored in its prey. As a result, species higher up in the food chain, such as some marine mammals, will have higher levels of contaminants than species lower in the food chain such as plants. Fundamentally, contaminants such as POPs, taken up in the food chain, pose a serious risk to Inuit country food consumers.

The presence of contaminants in such Arctic species as caribou, seals and beluga whales has heightened concerns for the health of people in northern Canada over the last decade. Health risks associated with consumption of contaminated country foods range from immunosuppressive, carcinogenic and hormone disturbing effects to potential neurodevelopmental and reproductive disorders (Colborn 1999). Despite these potential risks, country foods are still important to cultural and personal well-being and essential to nutritional and social health of Nunavut communities, as discussed above. As well, the affordability of country food versus market foods has placed stress on northern communities, where employment rates are low and the price of nutritious market foods are high, thereby making country food the only viable option, although there are still costs associated with country food harvesting.

In summary, Inuit in Nunavut find their traditional food systems changing, due to a number of influences—both negative and supportive. In turn, these food systems are under influence from a number of federal and territorial laws and policies, as will be outlined below. Without attention to the needs of food security, extreme or unbalanced changes in the food systems could lead, at the very least, to increased health problems for Inuit.

#### **4.0 Legal/Policy Context for Country Food Production**

A number of federal and territorial legislative and policy initiatives affect the ability of Nunavut residents to feed themselves, with either imported or traditional foods. In reviewing their sometimes conflicting influences, locals might be forgiven for thinking “the Lord giveth with one hand and taketh away with the other.” The Federal government provides various standard types of income support, available to all Canadians such as Employment Insurance and Old Age Security, northern tax benefits, and assistance to support housing programs. All of these potentially contribute to food security by relieving some of the other living costs in the North. Of specific interest and direct impact on food pro-

duction and purchase in the North are the Food Mail program and the Federal Firearms Act.

The Nunavut Government has a number of policies which influence their residents' abilities to harvest and purchase food. Of interest here are the Social Assistance practices, the Hunter Support Program, and the development of country food retail sales.

#### **4.1 Federal Food Mail Program and Freight Subsidies**

The Food Mail program of the Northern Air Stage Program has been administered by Indian and Northern Affairs Canada (INAC) for many years now, in order to make healthy foods more available and affordable, improve nutrition and health, and supplement traditional foods (INAC, 2001; INAC 2004b). In 2000/01, INAC spent \$22.5 million for Food Mail service – approximately 61% was used to service Nunavut communities (INAC 2001; INAC 2004b). As a result, the perishable part of the northern food basket cost less in 2002 than in 1991. All northern communities which lack year-round surface transportation access (except during brief freeze-up or break-up periods) are included in the program, and it can be used either by stores or by individuals, though most subsidized shipments go to stores. Through the Program, reduced postage rates are available for nutritious perishable foods such as fresh and frozen meat, vegetables, fruit, dairy products, eggs and some prepared foods containing such ingredients. Currently, this rate is \$0.80 per kilogram for perishable foods, and \$2.15/kg for non-perishable and non-food items (INAC, n.d., Food Mail Brochure), with an additional charge of \$0.75 per parcel. This also covers non-perishable foods such as canned food, cereal and pasta, and essential non-food items like clothing and cleaning supplies. Foods of little nutritional value (pop, potato chips, candy), some convenience foods like fried chicken and prepared sandwiches, and tobacco and alcohol are not eligible.

This rate is not available to northern country food producers, sending food to other northern communities, except now, as part of a new pilot project being tested in a few communities. One country food entrepreneur in Iqaluit noted that he pays more for freight than he does for the actual fish he buys from other communities' fisheries. In reality this means that communities further from Iqaluit than Pangnirtung are out of the running for marketing their fish catches. Current practices have the airlines giving lower freight rates from the Baffin communities to Ottawa than to Iqaluit, and even backhaul rates from the communities to Iqaluit are higher than for the northward transport. Northern enterprises have an extra burden keeping them from "taking off."

#### 4.2 Federal Firearms Act

In February 1995, Bill C-68, *An Act Respecting Firearms and Other Weapons* was introduced in Canada which required Canadians to apply for gun licences controlling possession and purchase of any firearms or ammunition. Bill C-68 further required every firearm to be registered within two years and new applicants to pass the Canadian Firearms Safety Test. This became an immediate concern for Inuit, who use firearms as tools for feeding their families and securing their livelihood.

A number of problems have resulted from the new legislation. The process of compliance has been seriously compromised for Inuit in Nunavut, as language barriers, lack of firearms officers or supporting information, and time delays have interfered with the issuing of licences. These delays are not limited to Aboriginal peoples, but have been experienced by gun owners across Canada, however, the perceived counter-cultural influence has made it an especially sore point with Aboriginal communities. The law has practical impacts, for instance, some people have found themselves in a position, six months after applying for their licence, of not having received it, and not legally being able to buy ammunition. Along with other Indigenous peoples in Canada, the Inuit have made the case that their traditional harvesting rights must not be blocked by this legislation, and some say they fear the legislation is one more way southern society and politicians are trying to undermine the northern harvesting-based way of life.

In response to concerns, the Minister of Justice asked for the establishment of an Inuit Working Group on Firearms, under the direction of Senator Charlie Watt. The working group identified the scope and details of Inuit concerns and provided recommendations to the Minister. They wish to create a balance between legitimate safety concerns and their ability to harvest food resources (Watt, 2001).

#### 4.3 Nunavut Social Assistance

Given the large unemployment rates in Nunavut communities, Social Assistance has acquired an important role in ensuring access of Inuit families to cash income. But how does it help them with food acquisition? The Nunavut *Social Assistance Act* emphasizes cash-based income but does acknowledge earned income from hunting, trapping and fishing, and in one section suggests that Officers may suggest to claimants that they pursue work in traditional activities that are not wage-employed. Social assistance (SA) is not normally allowed to be used to support hunting activities – instead, recipients are to buy food and other needs from local stores. In practice however, each community makes

the decision about how the money is released, whether through funds lodged for the recipient with the Northern or Co-op store, or released directly to the recipient. Recipients can earn \$150-300/month in wages without threatening their SA payment, and harvesting income is part of the monthly income used to calculate benefits. In a recent review of the Nunavut Income Support program (Income Support Review Panel, 2000), communities frequently raised issues with how IS money is paid out (whether to individuals or stores, and whether to hunters or to family food and other purchases), stressing a desire for encouraging self-reliance rather than dependency.

#### **4.4 Nunavut Hunter Support Program**

Under the new Nunavut regime, a Hunter Support Program (HSP) has been established, which is designed to encourage participation in country food harvesting. Again, each community is empowered to make their own decisions about who receives funding. In some instances, young, new, ill-equipped people may receive funding for a major piece of capital equipment such as a boat or a snowmobile, and in other instances, established, reputable harvesters may receive support. This has had the effect of increasing the numbers of active harvesters, which may increase the amount of country food available in communities.

Ironically, the HSP may conflict with another policy avenue – promotion of commercial country food opportunities as one element of Nunavut's economic development. In one community, the previously active country food outlet operated by the Hunters' and Trappers' Association is now radically less involved in local sales, because it could not compete with the direct sales between consumers and HSP-supported or other hunters (Anaviapik, pers. comm., 2000).

#### **4.5 Nunavut Country Food Development**

Country food has been recognized as a potential part of Nunavut's economic development, and over the past two decades significant effort and millions of dollars have been put into developing this sector: community freezers were installed in many Nunavut communities; training programs were provided in food preparation, processing and packaging; several country food outlets were supported and developed. Some of the latter are now EU-certified, which means they can market their unique products into the lucrative European market. Indeed, Chris Hadfield, Canada's astronaut, took musk-ox jerky from Kitikmeot Foods in Cambridge Bay into space with him. Typically, such outlets process and sell caribou or muskox, depending on what is available through commercial quotas, and often they process char. Some have diversified

with other products as well; an outlet in Iqaluit sells scallops and shrimp, and other products as available.

Ironically, relatively few Nunavut residents reported purchasing country foods, in our household surveys. Country food prices tend to be the same as, or higher than those of imported foods, reflecting the higher costs of operating in the North. Most of the large outlets focus on retail sales to restaurants and institutions just as jails, schools, seniors' homes and hospitals. Much of the produce is sold to the south, as well as in the Nunavut centres and elsewhere in the North. The smaller outlets in more remote communities may participate in this type of market as well.

#### **4.6 Gas Subsidy Program for Harvesters**

As an interim measure to offset increases in fuel prices in 2001, the *Gas Subsidy Program for Harvesters* was implemented in Nunavut. The gas subsidy took the form of a \$300 gas credit, which was made available to full-time, "intensive" harvesters. The program was administered at the community level by Hunters and Trappers Organizations and Wildlife Officers (Government of Nunavut, 2001). Harvesters are eligible if they are at least 16 years of age, repeatedly and regularly engage in hunting activities during the annual cycle and do not have an income.

### **5.0 Food Policy Recommendations for Nunavut**

The definition of Canadian food security suggests that there are four key components: availability, accessibility, acceptability and adequacy. Satisfying these four components of food security is not always straightforward in Nunavut communities. Sufficient supplies of food may usually be *available*, but for reasons such as weather, cost, harvest participation or policy/legislation, they may not always be *accessible* to all people living in Nunavut communities. Culturally *acceptable* and nutritionally *adequate* foods are also problematic in some instances, affected by changing traditional food systems, and the increasing use of imported foods. According to the Canadian definition, then, it seems that there are potential challenges to food security amongst Nunavut households. Despite this, it must be noted, a recent study of food production and sharing in Nunavut households concluded that traditional Inuit socio-cultural processes persist which help to share country food and its means of production – and that these sharing practices now extend to imported foods (Myers et al, *in prep.*). In sum, Inuit food security appears to be relatively secure, but it faces some pressures, particularly around access and adequacy.

People in Nunavut face decisions regarding food security on a daily, personal basis, in terms of what to buy or access, according to what is

available, but the Nunavut and Federal governments also face some decisions on a larger policy basis – what kinds of food are people being encouraged to consume? Given the acknowledged benefits of traditional country foods, the evidence that some people are not able to afford expensive store-bought foods, and that cheaper, non-nutritious foods are increasingly consumed, some questions are begged about inherent food policy in Nunavut.

Despite the excellent intent of the Food Mail Program in making nutritious foods more affordable, the federal programs have the general effect of moving Inuit away from a traditional diet, by supporting subsidized imports of southern foods but not northern-produced foods,<sup>9</sup> and also by making ownership and use of firearms much more difficult. The Government of Nunavut programs more openly support the country food sector, both in terms of domestic harvest and commercial harvest. It is apparent, however, that northern residents seldom buy country foods themselves. Whether it is cost or philosophy which drives this choice is not clear, but this is an obvious piece of needed information, which could determine how to make northern-produced country foods more appealing to northern customers.

*Canada's Action Plan for Food Security* (Agriculture and Agri-Food Canada, 1998) focussed on reducing food insecurity at home and abroad, through ensuring a safe and nutritious food supply for all, finding economically and environmentally sustainable ways to increase food production, and promoting health and education. Priority 5, *Traditional Food Acquisition Methods of Aboriginal and Coastal Communities* acknowledged the important role that hunting, fishing, gathering and trading play in food security of many communities in Canada. It advocated awareness of traditional foods, reduction of environmental contaminants, sustainable management of resources and appropriate supplementation with high-quality commercial foods as a way to strengthen communities' access to food.

This suggests some policy and program needs for food security in Nunavut. First, the safety and nutritiousness of northern foods needs to be ascertained and ensured. This will take continued scientific studies about the nature of POPs contamination, and the relative benefits of traditional food versus store-bought food diets. Education about nutritious versus non-nutritious store-bought foods is desperately needed in northern communities, as well as information about the benefits of continued consumption of country foods.

Despite the contaminants issue, scientific studies have reiterated that a traditional country food diet is a healthy and desirable one for northern peoples (INAC, 1997). Nunavut policy should clearly support

continued use of country foods. Part of that policy should consist of increasing both domestic and commercial production of country food, within sustainable limits, as well as its marketing in northern communities and southern markets. This has a dual benefit of encouraging employment, whether in traditional harvesting or in processing/retailing, and of encouraging healthier diets. The additional potential for SA to support harvesting should be explicitly addressed by Nunavut politicians and communities—what is the policy intent—to keep people in the community, buying food from the stores, or to encourage development of self-reliant solutions to a lack of wage-paying employment? The HSP contributes to this ethic and may also warrant expansion, or at least coordination with the other initiatives regarding food security, harvest support, and social assistance.

In addition, the Food Mail program could assist the distribution of quality northern foods if it were expanded to allow subsidization of country food freight rates between northern communities. The idea of intersettlement trade is not new, but if the “table were laid for dinner”—including country food production, “fast-food/country food” processing enterprises, intersettlement Food Mail, nutrition education programs emphasizing the benefits of traditional foods—it might be seen to contribute to important food security and development needs in Nunavut.

Store-bought food will continue to be valued by northerners, in the same way that most people value food variety. It does seem that the Food Mail Program may have enhanced consumers’ abilities to access nutritious foods – a recent survey of food use showed that nutritious perishable foods contributed significant amounts of nutrients, along with country foods (INAC, 2002). Improvements in quality and cost are desired by consumers however; given the growing overweight and health concerns in northern communities, further improvements in terms of nutritional quality/access are still desperately needed. It will be up to the stores as well as consumers to assist in achieving this. The solution may lie partly in, as one store manager suggested, “more nutritious fast-food” – he argued that people want convenience, lacking time, experience or perhaps skills to cook more raw forms of foods, and that if such fast foods could be made with less fat and more nutrients it would be better. This would be a good start.

Finally, the federal Firearms Act needs to respect and recognize that some Canadians use guns regularly and safely as a part of their livelihoods. Given the deep urban/rural split in Canada over this issue, it is the least likely influence on Inuit food security to be amended.

## 6.0 Conclusion

The food security situation in Nunavut is complex and changing. It comprises a traditional food production and diet as well as components of imported southern foods. Like most parts of North America, consumers' understanding of nutrition and food-values is limited; in Nunavut, this may be contributing to a severe imbalance and health impacts.

As Nunavut continues to change, through economic influences, social/cultural influences, demographic changes, and legal/political pressures, food patterns will continue to change. Ensuring continued health and a degree of self-reliance for Nunavut consumers will require policy/legal action from the territorial and federal governments. Key among these actions will be those which promote better nutrition and health, as well as sustainable use of local resources, and the ability of local northern harvesters to both produce food for consumers and to support themselves.

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### Notes

1. This research was funded by SSHRC, Major Collaborative Research Initiatives program, as part of a project called "Sustainable Development in the Arctic. Conditions for Food Security" (Gerard Duhaime, principal investigator).
2. For the purposes of the NPHS, food insecure households were household respondents that acknowledged any of the three circumstances stemming from a lack of money: worry that funds would be insufficient to buy food; not eating the quality or variety of food desired; or not having enough to eat.
3. Nunavut Bureau of Statistics, 2000
4. Labour force and employment statistics for 1999 are from Nunavut Bureau of Statistics, Sept. 10, 1999, Labour Force Activity, by selected characteristics, *1999 Community Labour Force Survey*.
5. Percentage of respondents in household food survey who reported harvesting country food during the year (Myers et al, *in prep.*).
6. Percentage of respondents in household food survey who reported eating country food during the survey week (Myers et al, *in prep.*).

7. Percentage of respondents in household food survey who reported eating more than 50% of their food intake from country food during the survey week (Myers et al, *in prep.*).
8. A pilot program is being conducted with Kitikmeot Foods in Kugaruk (Pelly Bay), which further reduces freight costs for nutritious imports (@\$0.30/kg), and adds country food transport from Cambridge Bay to Kugaruk @\$0.30/kg as well (Fred Hill, pers.comm., 2003).

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