

Recommendations of Dietitians of Canada for Nutrition North Canada

Sent by email on November 9, 2016 to: nutritionnorth@aadnc-aandc.gc.ca

Many factors contribute to food security challenges in Canada's north and amongst Indigenous Peoples. The following recommendations of Dietitians of Canada (DC) focus on issues within the scope of the Nutrition North Canada (NNC) program, as it currently operates. In addition, we include general recommendations for consideration by Indigenous and Northern Affairs Canada (INAC) and federal, provincial and territorial governments, to address broader issues related to health, nutritional status and household food insecurity, especially among Indigenous Peoples and people living in isolated northern communities.

We are pleased that a formal engagement process, examining the NNC program is underway. As noted in recommendations of the Nunavut Food Security Coalition¹ and summaries of community meetings for the Nutrition North Canada engagement in 2016², it continues to be important to dialogue with and solicit feedback from people living in northern and Indigenous communities, as well as to establish a process for periodic review and policy discussion regarding food items and community eligibility related to NNC. Data collection is essential to inform trend analysis and monitor change and effectiveness; there must be full transparency with respect to data sharing and publications of analyses, recommendations and follow up.

Based on our consultation with DC members (registered dietitians living and working in the three territories), there was concern that participation in the official NNC consultation meetings were, in some cases, limited by invitation or insufficient notice to attend the session. Only one of the DC members with whom we spoke had attended a community meeting. The engagement process did not include communities currently not eligible for NNC, communities that although ineligible for NNC support still struggle to have access to healthy foods needed as the foundation of a healthy diet. The recommendations and comments of our members are summarized and provided below; our scope is not limited to NNC-eligible communities and includes northern and isolated communities and First Nation reserves in more southern locations.

The recommendations of Dietitians of Canada, for action by NNC and INAC, are based on consultation and discussion with dietitians and community colleagues working in Yukon, Northwest Territories and Nunavut, with reference to the review of the NNC program published by the Nunavut Food Security Coalition (2015)¹.

Introduction

Household food insecurity in Canada's north and amongst Indigenous People

Residents of our northern territories endure the highest rates of household food insecurity in all of Canada³. In 2014 in Nunavut and the Northwest Territories, the prevalence of household food insecurity rose to the highest levels observed since monitoring began in 2005⁴. Indigenous Peoples in Canada are twice as likely to experience food insecurity as the general population. Household food insecurity in First Nation reserves and communities varies geographically, with remote communities experiencing an even higher prevalence. Amongst Canada's Inuit population, the highest rates of household food insecurity were in Nunavut and Nunavik. Half of all Inuit children in Nunavik experience food insecurity³.

A growing body of evidence suggests that the inability to afford a healthy, nutritious diet has a measurable negative impact on the physical and mental wellbeing of individuals of all ages. Adults and children in food insecure households have poorer physical and mental health, often with multiple conditions. The presence of household food insecurity is associated with more illness including poor self-rated mental, physical and dental health, physical limitations, diabetes mellitus, heart disease and other chronic conditions. Low income and household food insecurity also interferes with the management of chronic conditions.

In our position statement on household food insecurity, released earlier this year, we assert that there is good evidence to support the need for both physical and economic access to healthy food for all residents in Canada. This is critical in isolated northern communities and especially amongst Indigenous Peoples, who experience the highest rates of household food insecurity - up to 70% prevalence in some local regions. In Nunavut, nearly half of all households experience some degree of food insecurity; it is notable that the majority of residents (86.3%) in Nunavut are of Aboriginal identity, compared to the 4.3% of the total Canadian population who are of Aboriginal identity³.

When NNC replaced the Food Mail program in 2011, some of the deficiencies of the Food Mail program were addressed. NNC addressed challenges for Northerners accessing country foods through subsidies for transportation and processing facilities. The program also focused on food products and promoted access to foods that may not be locally available, instead of providing a general subsidy on freight rates.

While successes of NNC were acknowledged by the dietitians with whom we consulted, the high rates of food insecurity across the north signal the need for significant enhancements to the NNC program. At present, NNC "provides Northerners in isolated communities with improved access to perishable nutritious food"⁵, as part of the Government of Canada's Northern Strategy. NNC funds currently subsidizes specific foods, in eligible communities. **It is the position of Dietitians of Canada that NNC must contribute to ongoing efforts to narrow the gap between disposable incomes and the price of a healthy food basket, thereby ensuring more equitable access to healthy food by residents and households who are experiencing food insecurity³.** In our view, addressing food insecurity in the north is the highest priority; the federal government should recognize and target the needs of vulnerable populations as future program changes are implemented¹. Such efforts could see NNC dollars going directly toward income subsidy or to subsidy of basic foods, including staples, needed as the foundation of a healthy diet, for food

insecure households. A focus on reducing food insecurity within vulnerable populations, rather than on the provision of perishable foods to the general population, will result in more long-term benefits to health within a population currently experiencing a greater rate of chronic health conditions and the social challenges associated with poverty.

Recommendations of Dietitians of Canada for the future of Nutrition North Canada

1. Establish program goals and indicators upon which to evaluate NNC impact, including the prevalence and severity of household food insecurity.
2. Support healthy eating and food literacy through health promotion activities in all vulnerable communities.
3. Mandate full transparency and accountability of NNC.
4. Index the NNC subsidy to inflation and rising costs of healthy food in the north.
5. Support Indigenous Peoples' traditional food ways for long-term program sustainability.
6. Promote sustainable, local food production in the north and align food and agriculture funding within the context of a national food policy.

1. Establish program goals and indicators upon which to evaluate NNC impact.

This overarching goal for continuous evaluation against appropriate goals and measureable indicators must drive future decisions on questions about community eligibility and eligible food products. Local evaluations should seek to determine the impact of NNC subsidy funding on availability of healthy food and access to this food, especially for food insecure households. As well, the diet quality and food consumption patterns of all residents in NNC-eligible communities should be examined, collecting data the input of northerners and territorial and provincial government representatives.

At present, NNC “provides Northerners in isolated communities with improved access to perishable nutritious food”⁵, as part of the Government of Canada's Northern Strategy. NNC funds subsidize specific foods, in specific communities. It is the position of Dietitians of Canada that NNC must contribute to ongoing efforts to narrow the gap between disposable incomes and the price of healthy foods (as estimated by the costing of a Nutritious Food Basket), thereby ensuring more equitable access to healthy food for residents and households experiencing food insecurity. Further, the federal government should recognize and target the needs of vulnerable populations as it implements future program changes³. Such efforts would see NNC funds go directly toward income subsidy or to subsidy of basic foods, including staples, needed as the foundation of a healthy diet, for food insecure households. A focus on reducing food insecurity within vulnerable populations across the North, rather than on the provision of perishable foods in eligible communities, will result in more long-term benefits to health for a population currently experiencing a greater rate of chronic health conditions and the social challenges associated with poverty.

As recommended by the Nunavut Food Security Coalition¹, we support a focus on high quality, nutritious foods including foods from all four food groups of Canada's Food Guide, nutritious dried and dehydrated foods, staples such as flour and cooking oils, and essential personal and household hygiene products. The current emphasis on subsidy for "fresh" foods should be re-evaluated for its contribution to the goal of promoting access to a variety of healthy foods. Some fresh foods may be too perishable to transport successfully. An evaluation of the program may be helpful in determining the more cost-effective means for ensuring access to foods that are difficult to ship and foods that may be grown locally (such as leafy green vegetables), to inform decisions about local food production.

NNC does not address inequities in transportation costs for communities with harbours compared to those solely reliant on transportation by air or seasonal road access. For communities with access by sea, the purchase of large orders creates barriers due to the need for advance payment using cash or credit and adequate storage capacity. Often the wholesalers utilized are not NNC-registered or do not meet the program's selection criteria. We recommend that the program subsidize the transport of nutritious foods and other essential household items by both airlift and sealfit to eligible communities. A review of the current requirements for businesses to register with NNC should be undertaken, with the aim of encouraging more businesses including co-ops, institutions and communities where there is no retail grocery store, to participate in the program regardless of business model.

2. Support healthy eating and food literacy through health promotion activities in all vulnerable communities.

As dietitians, we acknowledge with appreciation the federal support for health promotion, nutrition initiatives and access to dietitians' services through Nutrition North Canada and Health Canada across the North. The Canada Prenatal Nutrition Program (CPNP) is one example of an important program that provides support to many vulnerable households. CPNP makes it possible for some families, such as single mothers of young children, to have more food on the table.

Dietitians who contributed to our discussions observed that it was not obvious which communities were receiving NNC-funding for additional education programs and suggested it does not appear the funds are equally distributed for benefit in all northern regions⁵.

We recommend there be greater transparency about the funding available and the criteria for distribution of funds. Ideally, community needs assessments should be conducted, supported with dietitian expertise, to determine health and nutrition priorities for different communities, to ensure that NNC-funded promotion activities can be of maximal benefit to all communities in need. As well, there should be coordination with all marketing by retail stores, such that health promotion objectives are supported at the community level, to avoid duplication or confusion. Marketing directed to children should be prohibited and any retail marketing should only promote healthy choices. It is counterproductive for NNC funds to support healthy food subsidy, while

allowing retailers to advertise and promote unhealthy food choices, which are not promoted by educational activities or NNC funds.

3. Mandate full transparency and accountability of NNC.

A 2014 audit by the Office of the Auditor General of Canada raised a number of concerns⁶. In particular the report identified the failure of the program to identify eligible communities on the basis of need, to make healthy foods more affordable, and to verify that northern retailers are passing on the full subsidy to consumers. We recommend that NNC be required to address the issues and recommendations of the Auditor General's report, including a review of the subsidy design and implementation to ensure that residents, especially those experiencing food insecurity, benefit directly from the NNC subsidy.

4. Index the NNC subsidy to inflation and rising costs of healthy food in the north.

As a food subsidy program, NNC should at a minimum be indexed to the rate of inflation in food prices and to changes in costs that are major contributors to the cost of food retailing in the North⁷. The Nunavut Food Security Coalition further recommended the federal government should periodically examine population growth¹. As with any subsidy, whether a direct income subsidy or a subsidy for foods, the cost of living must be factored into budget projections and commitments of the government to maintain the same level of support in coming years.

5. Support Indigenous Peoples' traditional food ways for long-term program sustainability.

Country or traditional foods merit greater consideration amongst the eligible foods within the NNC program. These foods have strong cultural significance, are part of a healthy diet, enjoy growing interest as traditional foods, and are recognized in the context of land and food sovereignty. For more perspective on policy discussion and recommendations of Dietitians of Canada on household food insecurity, please refer to Appendices A and B. The importance of country and traditional foods is also discussed in a recent report on Aboriginal food security in northern Canada⁸.

While the NNC program does provide a subsidy for the transport of country foods, the subsidy is only available when foods are sold through local stores or purchased from regulated processing plants. Country food shipped from the north made up the smallest component of subsidy expenditures in 2011-2012, amounting to less than one per cent of all NNC-subsidized food¹. It has been proposed that the "Greenland model" would be more effective, enabling country foods to be accessed directly through local markets⁴.

We support community-driven initiatives for self-sufficiency, including the development of local food security strategies, which could include increased support and focus on land-based harvesting and producing of healthy foods. To date, there are several such strategies published in the territories and other northern regions – these strategies merit further consideration; NNC recommendations are included in some of these documents, all of which have been published in the past few years^{9,10,11,12}.

While subsidy is available for freight charges to transport country food to other communities, few CFIA-approved processing locations exist. We support the recommendation of the Nunavut Food Security Coalition that the barriers to access country foods be explicitly addressed by NNC. Further, it is recommended that cooperation with the Harvesters Assistance program and inspection resources be reviewed, to encourage coordination and increase access to country food, while also allowing for traditional sharing of food acquired through hunting, fishing, gathering and cultivating of these foods.

6. Promote sustainable, local food production and align food and agriculture funding within the context of a national food policy.

The NNC subsidy does not promote other potentially viable ways to support healthier food environments in remote and northern communities, such as growing and processing local food. Gardens and greenhouses can provide fresh, culturally preferred foods and may encourage more children to try these foods, yet food production and encouragement to “buy local” is not supported by the NNC program presently. Unfortunately, in some cases, northern food growers and producers have found themselves to be in competition with NNC subsidized foods. It has been suggested that territorial/provincial governments should foster local by creating an economically-viable agriculture system. Local farmers and producers should not have to compete with products imported into the region by retailers subsidized by INAC¹³. Better policy alignment and support for local agriculture needs to be facilitated through inter-departmental discussion and commitments, such as between Agriculture and Agri-Food Canada, other federal departments and INAC. This should be identified as an important issue requiring action when the mandated development of a national food policy proceeds. Additional research could help to identify foods that could be grown successfully in the north.

Dietitians of Canada is pleased to offer the above recommendations to the NNC program and to INAC, as the responsible Ministry. We know that the Minister of INAC, the Honourable Carolyn Bennett, has spoken to the prevalence of food insecurity in the north and believe that there is political will to address the complex array of contributing factors. At the convenience of the Minister, we are available to provide further input and dietitian perspective on the public health challenges due to limited access to healthy foods.

References

1. Nunavut Food Security Coalition, 2015. The Nutrition North Canada Program. Available at: http://www.nunavutfoodsecurity.ca/sites/default/files/files/Resources/TheNutritionNorthCanadaProgram_March2015_EN.pdf
2. Nutrition North Canada. Ulukhaktok/Holman, NWT community meeting on May 31, 2016. Available at: http://www.nutritionnorthcanada.gc.ca/eng/1465233643322/1465234133331#chp2_2
3. Dietitians of Canada. Addressing Household Food Insecurity in Canada: Position Statement and Recommendations. August 2016. Available at: www.dietitians.ca/foodinsecurity
4. Tarasuk V, Mitchell A, Dachner N. Household Food Insecurity in Canada, 2014. Research to identify policy options to reduce food insecurity (PROOF). Available at: <http://proof.utoronto.ca/wp-content/uploads/2016/04/Household-Food-Insecurity-in-Canada-2014.pdf>
5. Nutrition North Canada. Available at: <http://www.nutritionnorthcanada.gc.ca/eng/1415385762263/1415385790537>
6. Report of the Auditor General of Canada. Chapter 6 – Nutrition North Canada—Aboriginal Affairs and Northern Development Canada. Fall 2014. Available at: http://www.oag-bvg.gc.ca/internet/docs/par_oag_201411_06_e.pdf
7. Enrg Research Group, 2015. Northern Food Retail Data Collection & Analysis. Available at: <http://www.nutritionnorthcanada.gc.ca/eng/1424364469057/1424364505951>
8. Council of Canadian Academies. Aboriginal food security in Northern Canada: an assessment of the state of knowledge. Expert Panel on the State of Knowledge of Food Security in Northern Canada. Ottawa: 2014. Available at: http://www.scienceadvice.ca/uploads/eng/assessments%20and%20publications%20and%20news%20releases/food%20security/foodsecurity_fullreporten.pdf
9. Nunavut Food Security Strategy and Action Plan 2014-2016. Available at: http://www.nunavutfoodsecurity.ca/sites/default/files/files/Resources/Strategy/NunavutFoodSecurityStrategy_ENGLISH.pdf
10. Local Food Strategy for Yukon: Encouraging the Production and Consumption of Yukon-Grown Food 2016-2021. Available at: <http://www.emr.gov.yk.ca/agriculture/pdf/local-food-strategy-for-yukon.pdf>
11. MacKenzie J.C, 2015. Food Security in the Northwest Territories: The Role of Subsidies, Impact Benefit Agreements, and Self-governance. Available at: http://gordonfoundation.ca/sites/default/files/publications/Mackenzie_Jessie_Food_for_Thought_20150804_web.pdf
12. Canada's Public Policy Forum, 2015. Toward Food Security in Canada's North. Summary Report. Available at: https://www.ppforum.ca/sites/default/files/Food_Security_november_04_sept_2015.pdf
13. Northern News Services ONLINE, May 2014. Crops Dusted by Poor Policies. Available at: http://www.nnsl.com/frames/newspapers/2014-05/may12_14edit.html

Appendix A

Dietitians of Canada Position Statement on Household Food Insecurity in Canada (2016):

It is the position of Dietitians of Canada that household food insecurity is a serious public health issue with profound effects on physical and mental health and social well-being. All households in Canada must have sufficient income for secure access to nutritious food after paying for other basic necessities.

Given the alarming prevalence, severity and impact of household food insecurity in Canada, Dietitians of Canada calls for a pan-Canadian, government-led strategy to specifically reduce food insecurity at the household level, including policies that address the unique challenges of household food insecurity among Indigenous Peoples. Regular monitoring of the prevalence and severity of household food insecurity across all of Canada is required. Research must continue to address gaps in knowledge about household vulnerability to food insecurity and to evaluate the impact of policies developed to eliminate household food insecurity in Canada.

RECOMMENDATION #1: Development and implementation of a pan-Canadian government-led strategy that includes coordinated policies and programs, to ensure all households have consistent and sufficient income to be able to pay for basic needs, including food. The strategy should consider:

- sufficient income protection for low income households relying on precarious employment and low wages
- improved benefits for households with children under 18 years, especially households led by a lone parent
- improved benefits for low income, unattached individuals
- increased social assistance and disability pension rates to ensure individuals and their households have enough income to pay for basic needs, including food
- investigation of the feasibility of a guaranteed annual income that ensures all vulnerable households can have access to sufficient income assistance to meet basic needs
- more investment in subsidized, affordable and stable housing options, including the provision of housing for individuals/households who are homeless
- financial assistance that equitably addresses the higher cost of food in remote and northern regions of Canada, whether through Nutrition North Canada or other programs.

RECOMMENDATION #2: Implementation of a federally-supported strategy to comprehensively address the additional and unique challenges related to household food insecurity among Indigenous Peoples, including:

- commitment to reconciliation (as recommended by the Truth and Reconciliation Commission and the United Nations Declaration on the Rights of Indigenous Peoples), including assurance of household food security and food sovereignty
- fair resolution of disputes over access to lands and resources recognized by Indigenous and Treaty rights, to ensure food sovereignty and access to traditional/country foods by Indigenous Peoples
- sufficient supports to remove barriers for Indigenous Peoples who are hunting, fishing or gathering/cultivating traditional/country foods

- improved access to and ability to afford healthy store-bought or market foods in all First Nation reserves and northern and remote communities where food prices are substantially higher than elsewhere in Canada, with equitable community eligibility for Nutrition North Canada subsidies and/or other programs to address household food insecurity among Indigenous Peoples
- sufficient supports to improve opportunities in education and employment, for equitable income adequacy and security among Indigenous Peoples compared to other groups within Canada.

RECOMMENDATION #3: Commitment to mandatory, annual monitoring and reporting of the prevalence and severity of household food insecurity in each province and territory across Canada, including among vulnerable populations. Measurement of household food insecurity must be included in impact/outcome evaluation of strategies to reduce poverty and household food insecurity. Features of data collection and reporting should include:

- mandatory annual data collection using a standardized tool such as the HFSSM, with sufficient sampling to measure the prevalence and severity of household food insecurity in vulnerable populations across all regions of Canada; some longitudinal studies would provide valuable information, in addition to cross-sectional surveillance
- regular analysis and public reporting of household food insecurity in Canada, with comprehensive detail by geographic regions and vulnerable populations, using a framework for household food insecurity categories that includes marginal food insecurity as part of the total of food insecurity and identifies severity of household food insecurity at the levels of marginal, moderate and severe food insecurity. Data analysis and reporting should be coordinated to maximize capacity to compare data from all studies.
- regular evaluation of the impact of poverty reduction and other strategies to reduce household food insecurity (measured by the HFSSM) and improve selected population health indicators, with adjustments in policy to maximize reach and impact. For example, the effectiveness of government subsidy of food prices in Nutrition North Canada communities should be monitored and adjusted to ensure reduction of the alarmingly high rates of household food insecurity in these regions.

RECOMMENDATION #4: Support for continued research to address gaps in knowledge about populations experiencing greater prevalence and severity of household food insecurity and to inform the implementation and evaluation of strategies and policies that will eliminate household food insecurity in Canada. Research is needed on topics such as:

- factors contributing to increased vulnerability amongst populations experiencing disproportionately more food insecurity within their households
- the costs and benefits of different policy responses such as basic income guarantee and other income-based strategies, including social, political and healthcare costs
- outcome evaluation following implementation of public policy and poverty reduction strategies in Canada, especially the measured impacts on household food insecurity and health of individuals within the population.
- ensure that unhealthy foods are not subsidized due to public pressure that are not based on nutritional value of foods

Find these recommendations in the **Position and Recommendations on Household Food Insecurity (2016) paper and the Executive Summary at www.dietitians.ca/foodinsecurity**

Appendix B

Background and Policy Discussion on Household Food Insecurity

BACKGROUND: Prevalence of household food insecurity in regions served by Nutrition North Canada

General population

In 2012¹, the overall prevalence of household food insecurity in Canada was 12.6%, including 4.1% marginal, 6.0% moderate, and 2.6% severe food insecurity (6)². Among the provinces and territories, the overall rate of food insecurity was highest in Nunavut, at a staggering 45.2%, affecting a total of 3200 households, in 2012, and even higher (46.8%, affecting 4300 households) in 2014 (8). The prevalence of food insecurity in the Northwest Territories and Yukon Territory in 2012 was 20.4% (24.1% in 2014) and 17.1% (no data for 2014) respectively, affecting a total of 5600 households (6). Not only was the prevalence of food insecurity in Nunavut in 2014 overwhelmingly high, but also the degree or depth of food insecurity: 19.3% severe food insecurity, 23.5% moderate food insecurity, with 6.1% marginal food insecurity – this means nine out of ten food insecure households in Nunavut experienced moderate or severe food insecurity (8). In Nunavut and the Northwest Territories, 60% and 29% of children, respectively, are living in food insecure households (8).

Indigenous Populations

As measured in CCHS, the rate of household food insecurity³ among Indigenous Peoples in Canada was reported to be more than double that of the general population (28.2%, excluding First Nations Peoples living on reserve, versus 12.6% in the general population) in 2012. This higher prevalence among Indigenous Peoples was consistent at all levels of food insecurity: marginal - 5.1% versus 4.1%; moderate - 14.8% versus 6.0%; and severe - 8.3% versus 2.6% (more than triple by comparison) (6).

Household food insecurity among First Nations peoples living *on* reserve has been measured for the first time between 2008 and 2013, by the First Nations Food, Nutrition and Environment Study (FNFNES). The prevalence of household food insecurity (including only moderate + severe food insecurity)⁴ among First Nation households living on reserve has been reported for four provinces:

- 41% in British Columbia (2008-2009) (56)
- 38% in Manitoba (2010) (57)
- 29% in Ontario (2011-2012) (58)
- 47% in Alberta (2013) (58a).

Household food insecurity in First Nation reserves/communities varies geographically, with remote communities experiencing a higher prevalence (57, 58). For example, reports from surveys of two remote First Nation reserve communities, Fort Severn and Mushkegowuk Territory in Ontario, indicated very high rates of food insecurity, with up to 70% of households categorized as food insecure (moderate + severe) (59, 60).

Food insecurity among Canada's Inuit population was assessed in the 2012 Indigenous Peoples Survey (61), with a population sample of Inuit, 15 years and older, living both outside and within the Inuit Nunangat (Inuit homeland

¹ While there is more recent data, 2012 is the last year for which there was household food insecurity for all provinces and territories in Canada, collected through the Canadian Community Health Survey (CCHS), using the 18-item Household Food Security Surveillance Module (HFSSM).

² REFERENCES are cited with these reference numbers, in Background paper at www.dietitians.ca/foodinsecurity.

³ At present, only the PROOF reports, analyzing national CCHS data, report marginal food insecurity as part of total food insecurity. Typically, reports of food insecurity amongst Indigenous peoples, including FNFNES, RHS and IHS, follow the Statistics Canada reporting framework for CCHS data – wherein “food secure” = food secure + marginally food insecure; “food insecure” = only moderately + severely food insecure. Unless otherwise stated, the studies used the full 18-item HFSSM to assess the prevalence and severity of household food insecurity.

⁴ Data from CCHS 2012 indicate that inclusion of marginal food insecurity can add approximately 5% to the prevalence of total food insecurity.

and its four component regions). The highest rates of household food insecurity were in Nunavut (56%) and Nunavik (55%) (61). Results from the 2007/2008 Inuit Health Survey (IHS) indicated the following rates of household food insecurity among Inuit: in Nunavut – 69%, Nunatsiavut – 46%, the Inuvialuit Settlement Region – 43% (62). A recent study amongst Inuit children in Nunavik also reported high rates of child-specific food insecurity (50%). (64)

Household food insecurity is related to poorer physical and mental health

A growing body of evidence suggests that the inability to afford a healthy, nutritious diet has a negative impact on the physical and mental well-being of individuals of all ages (7). Adults and children in food insecure households have poorer physical and mental health (41). The presence of household food insecurity is associated with more illness including; poor self-rated mental/physical/dental health, physical limitations, diabetes mellitus, heart disease and other chronic conditions. Low income and household food insecurity also interferes with the management of chronic conditions (15, 17, 41, 45, 83-88).

There are multiple ways in which food insecurity could contribute to depression, including through nutritional deficiencies and/or the body's physiological response to the tremendous stress of worry, anxiety, frustration and despair from not having enough money to feed oneself and/or one's family or being forced to consume food in socially unacceptable ways (98-101). Depression could also lead to food insecurity within a household, especially families with young children, through the known symptoms of the illness including lack of energy, fatigue, loss of interest in usual activities, or impairment in thought processes, concentration and decision-making (102). Without intervention, depression and food insecurity can become interlocked in a downward spiral.

The prevalence of mental health concerns and depression among food insecure adults is higher than compared to the general population (103, 104). Using data from British Columbia, Davison and Kaplan (104) found the prevalence of food insecurity to be significantly higher among adults with mood disorders compared to the general population (36.1% vs 7.3%). A significant relationship between the experience of food insecurity and suicidal ideation among adults has been reported through another Canadian study (105), wherein suicidal ideation was significantly associated with food insecurity at both the moderate level (adjusted odds ratio = 1.32) and severe level (adjusted odds ratio = 1.77) of food insecurity (105). The Mental Health Commission of Canada has acknowledged that up to 70 per cent of mental health problems and illnesses begin in childhood or adolescence (109). Individuals with serious mental illness are frequently unable to access community services and supports due to stigma, gaps in service and/or challenges in system navigation. Lack of sufficient primary health care and community mental health services, shortages of affordable housing, and inadequate income support further alienate them from life in the community. Exclusion from these social and economic supports results in social isolation, significantly increasing their risk of chronic poverty and food insecurity (110).

Children who have experienced hunger (which is a physical symptom associated with the most severe level of food insecurity) are more likely to have poorer physical and mental health in adolescence and early adulthood and are at greater risk for developing chronic conditions (6). Logistic regression analysis of data from the first five cycles (about ten years) of the Canadian National Longitudinal Survey of Children and Youth showed that negative impacts on health related to childhood hunger persisted even after taking into account other household socio-demographic factors such as income and education (19). Comparing health impacts for children who had 'ever' versus 'never' experienced hunger over the ten year period, there was a consistently greater likelihood of being in poor health (32.9% versus 12.8%), having a diagnosed chronic condition (36.9% versus 32.6%) and/or having asthma (24.8% versus 18.0%). Furthermore, the odds ratios, adjusted for other variables, consistently showed greater likelihood (about two to four times greater) of poor health/ diagnosed chronic condition or asthma when a child had 2 or more episodes of hunger reported versus one episode during the survey period, leading the authors to conclude that "repeated exposure to food insecurity appears to be particularly toxic" (19).

In general, while the pattern of relationships among household food insecurity, income and health of Indigenous households is similar to that in Canada's general population, the prevalence and depth of household food insecurity among Indigenous households is greater – an indication of greater inequities. Using data collected in

the ten provinces by CCHS Cycle 2.2, Nutrition (2004), Health Canada compared the prevalence of household food insecurity in different subpopulations, including off reserve Indigenous people (14). Among Canadians with less than secondary school graduation, 44.3% of Indigenous households were food insecure, compared to 13.8% of total households (with similar trends for differences between households who did not own a dwelling - 49.5% Indigenous versus 20.5% total population experiencing food insecurity). Using the same data set from CCHS Nutrition 2004, another report concluded Indigenous adults living in food insecure households were statistically more likely to report poor general and mental health, life dissatisfaction, a very weak sense of community belonging, high stress and cigarette smoking, compared to the general population (81, 86).

The Mental Health Commission of Canada recognized that some of the most challenging and complex mental health and social issues occur in the northern and remote regions of Canada (109). Many First Nations communities experience high rates of poverty, shortages of adequate housing, unsafe drinking water, and a lack of educational, employment and economic opportunities, all of which undermine health and well-being". The Commission made several recommendations for strategic direction, including "[w]ork with First Nations, Inuit, and Métis to address their mental health needs, acknowledging their distinct circumstances, rights and cultures" and "[r]educe disparities in risk factors and access to mental health services, and strengthen the response to the needs of diverse communities and Northerners" (109). An analysis of data from Inuit people collected through the 2012 Indigenous Peoples Survey (61) showed similar associations between household food insecurity, compromised housing and health: in Nunavut – 34% were living in homes with more than one person per room, 35% in homes needing major repairs; in Nunavik – these rates were 43% and 39%, respectively. The high prevalence of household food insecurity and compromised housing was also reflected in a lower prevalence of excellent or very good self-reported health (61).

In a 2007 report to Health Canada, Power (190) demonstrated poverty rates among Indigenous people were at least double that of the Canadian average, while unemployment rates (especially on reserves) were consistently about two-and-a-half times the general population rate. A greater proportion of the Indigenous population in Canada lives in remote reserves/communities, especially in the Territories and northern regions of several provinces, where access to education, social services and jobs are often more limited (12). Over 60,000 residents across Canada's three Territories and in Nunavik (Quebec) and Nunatsiavut (Newfoundland and Labrador) identified as Indigenous (over half the total population), based on results from the National Household Survey (NHS) in 2011 (193,194). People living in the north generally experience higher rates of unemployment, lower indicators of health and education status, and stronger dependence on public housing (195), and the effects of low income may be compounded by a lack of education about nutritious market food choices, by addiction, or by social exclusion (12).

A federal government report acknowledged that Indigenous People still faced a considerable income gap relative to their non-Indigenous counterparts even when education levels were similar (196). Although average and median incomes tended to be higher in the Territories than at the national level, the gap between the incomes of Indigenous and non-Indigenous people was more pronounced in the North. Median incomes of non-Indigenous people in the Yukon and Northwest Territories were about double and in Nunavut, about four times compared to the median income of Indigenous Peoples. The wage gap between non-Indigenous and Indigenous people in Canada overall was smaller than in the Territories – wages of non-Indigenous people were about 1.5 times more than for Indigenous People (196, 197).

Household food insecurity is costly to society

In a recent study, the factors *most* strongly associated with becoming a future high-cost user of health care were identified to be household food insecurity, personal income and non-homeownership. The odds of becoming a high-cost user of the health system within the next 5 years were 46% greater for those living with household food insecurity compared to individuals in food secure households. In a similar study between 2005 to 2010, with working age Ontario adults (18-64 years), household food insecurity, independent of other social determinants of health, was shown to be "a robust predictor of health care utilization and costs incurred by working-age adults" (92). Compared to annual health care costs of adults from food secure households, the total health care costs

(OHIP + ODBP) were much higher for adults from food insecure households, and increased in proportion to the severity of household food insecurity experienced –23%, 49% and 121% higher for individuals with marginal, moderate and severe household food insecurity, respectively (92). In another Canadian study using similar data, the proportion of adults reporting multiple (3 or more) chronic conditions rose with worsening household food insecurity – from 9% of adults in food secure households to almost four times as many (34%) adults in severely food insecure households (41). Strong associations have been reported between household food insecurity and the likelihood of becoming a high cost user of the health care system (91, 92, 131). Compared to individuals from food secure households, the odds of adults becoming a high cost user within the next 5 years were 46% greater for those living with food insecurity, using data from CCHS and the Ontario Health Insurance Plan (OHIP) (91). A reduction in rates of household food insecurity could reduce considerable public expenditures in health care (91, 92).

POLICY DISCUSSION: Public Policy Responses to Household Food Insecurity

The prevalence of food insecurity at the household level is disturbingly high in some regions of Canada and among some population groups. It is widely acknowledged that income-based responses, at a systemic level, are needed to solve the problems of household food insecurity due to financial constraints. Nevertheless, societal approaches to address household food insecurity in Canada continue to focus primarily on providing food rather than addressing the financial constraints.

Solutions for household food insecurity must be equitable and available to all population groups at risk for experiencing food insecurity, as there are many different reasons for intermittent or chronic financial constraints. The experience of food insecurity, including marginal food insecurity, is a very sensitive indicator of financial constraints and risk for developing chronic health conditions (41-48)⁵ and should therefore be used to measure the success and impact of initiatives to reduce poverty. Solutions must be sufficiently comprehensive to address the needs of vulnerable populations, within a context of health equity.

Income-based responses to household food insecurity are designed to provide a solution to address the root cause of household food insecurity, which is lack of money for basic needs within a household. Typically, these solutions require government policies that promote income security through employment policies and income transfers, pensions, tax exemptions/credits and social assistance at a systemic level (42). These solutions are discussed in more detail in the full DC report on Addressing Household Food Insecurity in Canada, providing the main underpinning for income-based solutions to household food insecurity.

Since household food insecurity is influenced by changes in income levels and household expenses (54, 62-64), a comprehensive multi-pronged approach in Canada should include different income-based strategies, building on current and potential social protection programs, such as improved benefits for low income households, increased social assistance and disability pension rates and more investment in subsidized, affordable and stable housing options.

Below, we describe in more detail some aspects of household food insecurity as these relate more specifically to regions eligible for NNC subsidy and to the needs of Indigenous Peoples, who comprise a substantial proportion of the population in regions eligible for NNC subsidy.

Actions to address the high cost of food in Canada's northern and remote regions

⁵ REFERENCES from this point on, in Appendix A, are as cited in Position and Recommendations paper at www.dietitians.ca/foodinsecurity.

While there are still many households in southern, more populous regions of Canada who do not have enough money to pay for food after paying for basic needs, the situation is even more challenging for households in remote communities (e.g., many First Nation reserves), the northern regions of many provinces and in most of the Territories, where food prices are at least double that of prices in the south and in cities (115). The impact of rising food prices is most likely to be felt by households who have limited or no financial resources to pay for food. Recent trends indicate that food prices are rising at a rate significantly above inflation – trends that could drive some increase in the proportion of income spent on food (113). However, while food prices have increased in Canada, the *proportion* of household income spent on food has, on average, fallen. In 2009, the average Canadian household spent 10.2% of income on food, compared to 18.7% in 1969 (114), indicating that food, for many households in Canada, is very affordable – shopping for food does not require a large proportion of their income.

Some households in the north are supported by very adequate incomes and eligible for other federal/territorial benefits (e.g., Federal Northern Residents Deduction (116), employer travel allowances, lower income tax rates, and (for federal employees) additional allowances through the Isolated Posts and Government Housing Directive (116), but many other households have much lower incomes and do not have access to additional benefits. While average and median incomes have tended to be higher in the Territories than at the national level, the gap between the incomes of Indigenous and non-Indigenous people is pronounced in the North, with median incomes of non-Indigenous people in the Yukon and Northwest Territories about double, and in Nunavut, about four times, the median income of Indigenous Peoples (117).

The high costs of transportation, warehousing, and distribution of food in northern Canada are important factors affecting food security at various levels, particularly the access to, and availability of, imported market food. Long distances, lack of roads, small populations, and very cold weather conditions all make northern Canada and remote communities difficult places in which to conduct trade (115, 118, 119). At a community level, there is greater risk for food insecurity when infrastructure for food production and processing and/or safe drinking water, as well as federal wharfs (especially when there are no year-round roads) (118).

In Canada's northern Territories, comprehensive food security strategies have been designed to address some of the unique aspects of food insecurity in the North. The Nunavut Food Security Strategy and Action Plan (120) is an example of a comprehensive policy that addresses elements of income-related household food insecurity and respect for Aboriginal Title for access to land, as well as community-level food security, because of unique challenges for food access in this Territory. One of the six key themes in the Plan is "policy and legislation" to improve the financial capacities of households in Nunavut. The Plan also proposes strategies to support all members of communities, regardless of income, to improve their access to country food *and* store-bought food, as well as other supports such as local food production, community- and school-based programs for life skills and support of food security at the community level. In the Yukon and Northwest Territories, federal funding to promote healthier weights has been used in making improvements to food access and availability (120-123).

Since 2011, the retail-based subsidy program, Nutrition North Canada (NNC), has operated "to help improve access to a broad range of perishable healthy foods, including country foods, in isolated northern communities in Nunavut, the Northwest Territories, Yukon, Labrador, Quebec, Ontario, Manitoba and Saskatchewan" (124). The UN Special Rapporteur on the Right to Food described and called for improvements in NNC in 2012 (9) and a performance audit of NNC by the Auditor General of Canada in 2014 noted several serious problems with the program, including "inconsistent eligibility of communities and degree of subsidy as well as insufficient information to verify that the full subsidy was being passed on to consumers" (125). In April 2016, the Auditor General indicated to the Standing Committee on Indigenous and Northern Affairs there had not been subsequent auditing of NNC through his office (126). The NNC program is effectively a form of indirect income support at the broader community level, subsidizing the price of food for all residents, and not targeted as an initiative to reduce household food insecurity.

The lack of availability of NNC subsidy in many communities has raised concerns that the NNC program is not meeting its goals to improve access to and affordability of healthy food in the north (115, 127, 128). Furthermore, and perhaps even more importantly, the NNC subsidy provides no additional benefit to vulnerable households

experiencing food insecurity within the eligible communities – the subsidy dollars are applied to food prices in retail stores, not directly available as income subsidy for low income households or households within the community who are experiencing food insecurity. The 2016 Federal budget included more funding for the NNC program (\$64.5 million over five years, starting in 2016–2017, and \$13.8 million per year ongoing to expand the program to all northern isolated communities), as well as some other actions designed to further benefit households in Canada’s North, such as an increase to the Northern Residents Tax Deduction, extended EI benefits, and more money for affordable housing (72).

Additional strategies to address the unique food security challenges of Indigenous Peoples in Canada⁶

Key factors contributing to household food security amongst Indigenous Peoples in Canada⁷ include:

- poverty/low income and unemployment
- lack of access to the land (including, but not limited to, Treaty or titled land) and financial costs for acquiring traditional/country foods; environmental changes affecting traditional/country food harvesting and consumption
- geographic isolation and the unreliable supply, quality, and high prices of market food in remote and isolated communities (115, 120).

Household food insecurity is a serious public health issue, contributing to increased risk for poor physical and mental health. The Truth and Reconciliation Commission called upon governments at all levels to acknowledge “that the current state of Indigenous health in Canada is a direct result of previous Canadian government policies, including residential schools, and to recognize and implement the health-care rights of Aboriginal people” (137). The Commission concurred with the view of S. James Anaya, UN Special Rapporteur on the Rights of Indigenous Peoples, who called on Canadian governments to fully adopt and implement the United Nations Declaration on the Rights of Indigenous Peoples (138) as the framework to achieve goals of the Declaration, which included the Right to Food. In 2016, the Standing Senate Committee on Aboriginal Peoples announced commencement of two studies: one on best practices and on-going challenges relating to housing in First Nation and Inuit communities in Nunavut, Nunavik, Nunatsiavut and the Northwest Territories, and the other on the federal government’s constitutional, treaty, political and legal responsibilities to First Nations, Inuit and Metis peoples (139) – recommendations and implementation are pending at this time.

a. Policies to improve economic and social conditions for Indigenous Peoples

As described above, on average, Indigenous households experience a greater prevalence of food insecurity (depending on geographic region and living circumstances), and more severe food insecurity than compared to non-Indigenous households. In their report on *Aboriginal food security in northern Canada*, the expert panel acknowledged “[o]ne of the outcomes of colonialism is material poverty in many Indigenous communities across Canada, which negatively and seriously affects peoples’ ability to obtain adequate nutrition. Addressing poverty and unemployment in northern Indigenous communities so that individuals and communities can achieve sustainable livelihoods is a key step in mitigating food insecurity” (115). As pointed out in the Alberta First Nations Food Security Strategy, “income is only one part of the puzzle. Education and economic development policies also impact food security, affecting high school completion rates, access to job markets and access to job

⁶ This discussion focuses on unique challenges and factors contributing to food insecurity experienced by many Indigenous People living in Canada. Dietitians of Canada recognizes the diversity and complexity of differing life situations among Indigenous Peoples in Canada (129, 130). As well, we recognize the factors discussed below do not apply equally to circumstances in all households of Indigenous identity.

⁷ The complexity of these factors and interactions among them and their impacts on food insecurity and health are represented in a conceptual model developed in 2008, by the Food Security Reference Group, in which the Assembly of First Nations (AFN) and Inuit Tapiriit Kanatami (ITK) were equal members and full participants along with the First Nations and Inuit Health Branch of Health Canada (136); as well, the CCA Panel developed a conceptual framework “as a tool for analyzing and understanding food security and food sovereignty in northern Canada” (115).

training” (140). Other variables associated with low income and household food insecurity include living in crowded household or in public housing or having a home in need of major repairs (141). Power (120) pointed out that the authority to ameliorate poverty among First Nations and Inuit people was the primary responsibility of the federal government. In 2011, the Auditor General of Canada identified structural impediments that explained the lack of progress on living conditions in First Nation reserves, including problems related to closing the education gap, action on drinking water quality, housing initiatives, child and family services and land claim agreements (142).

Income support programs contribute to financial resources that can in turn reduce individual and household-level food insecurity. The expert panel studying *Aboriginal food security in northern Canada* acknowledged examples such as Employment Insurance, Old Age Security and the Guaranteed Income Supplement, the Canada child tax benefit, northern tax benefits, the Income Support Program (for Indigenous People living on-reserve), and money to support housing programs (115), programs similar to the primary ways through which the federal government delivers financial assistance to all households in Canada. In the general population, the proportion of the population relying on income assistance is about 5%; in contrast, the rate of reliance was 34% among First Nations people living on reserve in Canada in 2010–2011 (143).

b. Policies to support food security and food sovereignty, including access to traditional/country food

For Indigenous peoples, any discussion of food insecurity, whether at the household or community levels, must also address the unique challenges of accessing food through two parallel food ‘systems’: traditional/country foods⁸ and the market (store-bought) food system. Traditional/country foods are vitally important to diets for many Indigenous households, providing high quality, nutrient-dense foods, as well as being an integral part of Indigenous culture. Culturally acceptable, traditional/country foods may provide about one-quarter to over half of energy intakes in some Indigenous households (120, 141, 144). Reports from the FNFNES indicated most First Nations adults living on reserve wanted more traditional food in their diets than they were able to access (131-133). While lack of financial resources reduces access to or the ability to purchase market foods for all Canadians, limited income also affects the ability of Indigenous People to access traditional/country foods, due to the expense of purchasing and maintaining equipment and supplies (115,120,145). The expert panel on *Aboriginal food security in northern Canada* acknowledged that the high cost of gas and hunting and fishing supplies (which necessitates wage-earning employment) is a barrier to food security and food sovereignty (115). In the Inuit Health Survey, country food consumption and a lower risk of food insecurity was directly influenced by whether there was a hunter in the household as well as having the time and resources to afford to hunt and harvest traditional foods (141). First Nations adults have identified multiple barriers that influence and restrict the amount of traditional food available to households such as time, transportation and financial constraints, absence of a hunter, government regulations and restrictions, commercial harvesting, development/industrial activities and local contaminant concerns (131-133).

The high price of market/store-bought foods in Canada’s north is particularly challenging for households with limited financial resources, as is the case for many Indigenous households in the Territories and northern/remote areas of the provinces. A report by Burnett et al describes household food insecurity in some remote communities in the northern region of provinces to be “equally alarming” compared to arctic regions. For example, in northern Ontario, only eight of 32 fly-in communities had been deemed eligible for the full NNC subsidy (128). The expert panel on *Aboriginal food security in northern Canada* (115) acknowledged gaps in the NNC program, including a map of “Nutrition North-Funded Communities (2011–2012)” which shows locations of remote/northern communities and the degree of funding they receive from NNC. The panel also emphasized the need to recognize rights contained in land claims agreements (e.g., harvesting rights) that should be considered in the development of any new subsidy program (115). To address the unique challenges of food insecurity, sustainable policies and actions are needed, developed and initiated cooperatively between government and Indigenous Peoples, respecting traditional knowledge and culture.

⁸ Traditional food is the preferred term for First Nations and Métis, and country food is the preferred term for Inuit. Use of the term “traditional/country food” is considered to be inclusive of all Indigenous cultures in Canada (115).

Monitoring and reporting household food insecurity

Measures of household food insecurity, including the severity of food insecurity, may provide a more sensitive predictor and current indicator of negative outcomes related to health and wellbeing compared to poverty measures. Poverty is usually defined by total annual income whereas food insecurity is measured as a recall of experience at any time in the past twelve months (1, 68, 86, 102, 146). The degree of household food insecurity has been used as a “consumption-based indicator of both poverty and lack of insurance against income shocks” (86,102). Household food insecurity is a unique indicator of household stress, based on reports of any episodes of insecurity experience in the past year – it captures a dimension of material deprivation not captured by low income, generally a reflection of the average financial stress over a year (57).

It is crucial to monitor the prevalence of household food insecurity in all parts of Canada on a regular basis including impacts on health and health system costs. Lack of detailed information on the economic circumstances of households and inconsistent or voluntary measuring of household food insecurity, especially within the CCHS, prevents clear analysis and understanding of household-level food insecurity in Canada. To better inform the development and evaluation of policies to address food insecurity among Canadian households, more effective monitoring is needed - consistently administering a validated measure of food security to measure the impacts of poverty reduction strategies on households. Provincial and municipal level data, including remote and Northern communities, should be collected, since situations vary and policies need to be tailored to address inadequate income. Ideally, the data should include sampling of a longitudinal nature, to more accurately understand impacts of policy change on household food insecurity over a longer period of time.

The expert panel report on *Aboriginal food insecurity in northern Canada* acknowledged the need to “adapt data collection tools and standards to the varied realities of Aboriginal peoples in [northern] Canada” and emphasized that a “consistent and relevant understanding of the situation across different communities of Aboriginal peoples...is important in the delivery of evidence-based public policy” (115). Some elements of the food system may also contribute to food insecurity experienced by households and individuals and may be more difficult to quantify. Qualitative methodologies have been developed including an interview methodology for community-based research on Indigenous food sovereignty (147).

The recent series of annual reports on Household Food Insecurity in Canada (1-3) have been extremely valuable for their regular, comprehensive reporting of the prevalence and severity of food insecurity at the national, provincial/territorial and even census metropolitan areas. Government funding and resources must be committed to support this degree of reporting, since the PROOF project was funded by the Canadian Institutes of Health Research for only five years. Indeed, other countries have already mandated such reporting – in the United States, for example, detailed household food insecurity reports are published annually (148). The separate identification of marginal food insecurity, employed consistently throughout Canada, including by Statistics Canada, would allow for better and more accurate comparison of household food insecurity rates within and among population groups.

Monitoring and reporting national prevalence and severity of household food insecurity is essential to:

- understand the prevalence and distribution of household food insecurity
- make policy recommendations for interventions that aim to prevent or reduce household food insecurity
- guide effective public health policy and community initiatives
- assess the impact of policies and programs designed to prevent or reduce household food insecurity (9, 149, 150).

Finally, since health professionals recognize the links among social determinants of health, they understand that individual clients living with poverty and/or physical and mental health conditions are at greater risk of household food insecurity. In addition to advocacy for public policies to address household food insecurity, individual practitioners and their workplaces (e.g., hospitals, primary care clinics, homecare programs) must continue to consider practical ways in which they can help individuals and households, beginning with screening for the presence of food insecurity, financial instability and possible malnutrition, and providing direction/assistance for

clients to access services they need and for which they qualify (10-13,16). Institutions can add protocols for screening, checking for factors related to food insecurity and malnutrition. As discussed earlier, households experiencing food insecurity often experience many barriers and social determinants contributing to a demise in health. For these individuals and households, the facilitation of access to income, perhaps through referrals to social workers, information about local services and even assistance with completion of forms, are very important and appropriate ways to provide care that contributes to better health outcomes.

This excerpt is from the Dietitians of Canada documents on Household Food Insecurity. Reference numbers in double brackets refer to the references in the papers at www.dietitians.ca/foodinsecurity.

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About Dietitians of Canada

Dietitians of Canada is the national professional association for dietitians, representing close to 6,000 members at the local, provincial and national level. As the voice of the profession, Dietitians of Canada strives for excellence in advancing health through food and nutrition.