

# FOOD SECURITY: MORE THAN A DETERMINANT OF HEALTH

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In Canada hunger became a subject of investigation in the 1980s, when food banks began to emerge and children's feeding programs in schools became more common. Even though nutritional adequacy can be regarded as the single most important determinant of health, Canada's response to food insecurity has remained community-based, ad hoc and largely focused on the provision of free or subsidized food. Since fluidity in the number of hungry families has coincided with employment dislocations and decreased access to social assistance and employment insurance, addressing the problem will require an increase in real incomes, whether through minimum wage or social assistance. Protecting the affordability of healthy foods, particularly food staples such as milk, and creating a hunger and food insecurity monitoring system to determine progress, deterioration or shifts among those affected would also help to improve the situation.

Au Canada, on a commencé à s'intéresser au problème de la faim et de l'insécurité alimentaire dans les années 1980, avec l'apparition des banques alimentaires et des programmes scolaires d'alimentation. Bien que l'équilibre nutritionnel puisse être considéré comme le tout premier déterminant de santé, notre pays a réagi au problème par des mesures partielles, communautaires et plus ou moins improvisées, en mettant l'accent sur la distribution d'aliments gratuits ou subventionnés. Or, la fluctuation du nombre de familles touchées suit la courbe des licenciements et des fins de droit à l'aide sociale et à l'assurance-emploi, de sorte qu'on ne pourra enrayer le phénomène sans offrir de meilleurs revenus, que ce soit par l'entremise d'une hausse du salaire minimum ou des prestations d'aide sociale. On pourrait également contribuer à redresser la situation en maintenant à prix abordable les aliments santé, notamment certains produits de base comme le lait, et en mettant sur pied un système de suivi mesurant les progrès, les difficultés et les changements relatifs au phénomène.

**F**ood used to be called a basic human need along with water, peace, shelter, education and primary health care. It has also been called a prerequisite for health. Food security is now listed among the social determinants of health. It is clearly a determinant of a lot of things— life, health, dignity, civil society, progress, justice and sustainable development.

On October 16, 2002, World Food Day, the Food and Agriculture Organization (FAO) released a report entitled *The State of Food Insecurity in the World*. The report chronicles the 840 million people who were undernourished in 1998-2000, of whom 11 million or 1.3 percent lived in industrialized countries. There is no further mention in the report of the 11 million, who they are, how they live, and how their undernourishment has come to be? These are the people I study—those who are hungry and food insecure in Canada.

It is important to have a balanced perspective with respect to hunger in developing and developed countries. Malnutrition is synonymous with hunger in developing countries. Malnutrition is defined as the failure to achieve nutrient requirements, which can impair physical and/or mental health. Also of concern are micronutrient deficiencies such as iron, iodine, and vitamin A. Developing countries measure malnutrition through anthropometric, or growth, indicators. Stunting or low height for age is arguably the best indicator of chronic malnutrition. Sometimes absolute poverty and low per capita energy consumption are cited as indirect measures of hunger in the developing world.

Food insecurity is the term best used to define hunger in developed societies. Food insecurity is defined as "the inability to acquire or consume an adequate diet quality or sufficient quantity of food in socially acceptable ways, or

the uncertainty that one will be able to do so.” We know that hunger and food insecurity is experienced differently at the household and individual levels, for example, children experience less food insecurity than do their mothers. At its most severe stage, food insecurity is experienced as absolute food deprivation (i.e., individuals not eating at all), which is equated with the classical hunger of developing countries. We can measure food insecurity directly using validated questionnaires. Indirect measures, such as food bank use, and adequacy of income, are also commonly used.

Hunger is defined as “the uneasy or painful sensation caused by a lack of food. The recurrent and involuntary lack of access to food.” This definition of hunger applies universally—and unfortunately, it is experienced universally.

What then is the same and what is different about hunger and food insecurity in developing versus developed countries? It is agreed from both perspectives that in any social well-being model, nutritional adequacy would be regarded as the single most important determinant of health. Our harmonized understandings are that those with too little food have too little because they are very poor or destitute; with adequate resources they could acquire food. Hunger, regardless of place, occurs as a combination of individual through to international factors.

Hunger in developing and developed countries is starkly different in three ways. First, it is lethal in developing countries, and it is not obviously so in developed countries. Second, in developing countries, food needs are a priority—they must be for both short-term and long-term survival. In developed countries the food budget is the most elastic, i.e. the most discretionary of all essential expenditures. Shelter needs come first. Third, in developing countries we are seeing rapid increases in obesity and chronic

disease associated with dietary preference change from even modest economic development, while at the same time gross malnutrition persists. In North America, those with obesity and chronic disease are often the poor, and more often the hungry. In short, our hungry are often fat.

A very brief social history of food insecurity in Canada would read simply: Poverty increased then it deepened. Food insecurity emerged then it increased in severity. While poverty is a longstanding area of social study in Canada, food insecurity is relatively new, a child of the 1980s really. Of course, Canada had its food problems before—decades of malnutrition before World War I, drought and depression and charitable food delivery systems operating between the world wars, and a famine among the

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Inuit as late as 1950. But food insecurity was discovered in the 1980s when food banks emerged and children’s feeding programs in schools could be counted. Child poverty was on the map with the passage of the famous House of Commons resolution in 1989 that committed government to the elimination of child poverty by the year 2000.

Canada is a rich country in global terms, ranking first in the United Nations’ Human Development Index between 1997 and 2000. Nonetheless, the nineties were marked by a period of fundamental restructuring of Canadian social programs. Successive federal and provincial governments cutbacks on social program spending, especially welfare services and employment insurance, reduced corporate taxes, implemented the Goods and Services and

Harmonized Sales taxes, aggressively promoted entrepreneurship, modified labour legislation, privatized state-owned enterprises and restructured and downsized government. Despite optimism about global growth having a net positive impact on Canada, we saw the expansion of poverty throughout the country, falling real wages and a growing gap in incomes between the wealthiest and the poorest segments of Canadians. As a result, Canada witnessed increasing levels of food insecurity as one manifestation of growing poverty and inequity.

Responses to food insecurity in Canada over the past 15 to 20 years have been community-based, ad hoc and largely focused on the provision of free or subsidized food (e.g., food banks, targeted meal programs). Health promotion/community development initiatives have typically been small in scale and focused on enhancing food shopping and preparation skills (e.g., community kitchens, targeted education programs), or they have been focused on alternative methods of food acquisition (e.g., community gardens, farmers’ markets, field-to-table programs, ‘good food’ boxes).

Food security is a central issue in the call for domestic actions in Canada’s Action Plan for Food Security. Food supplement and coupon programs for poor, pregnant moms and their kids are run through federally funded national networks. Children’s feeding programs have been implemented throughout the country, representing a social movement predicated on Canadians’ belief that virtually all poor children would go to school hungry without them. A total of 1,800 new food banks opened between 1997 and 2002. These initiatives and others have failed to eliminate or even significantly reduce hunger and food insecurity despite a high level of public activity, awareness and sympathy for those who do not have enough to eat.

The 1995 US Current Population Study reported food insecurity in 17

percent of households with incomes less than 50 percent of the poverty level. Child hunger rates in the US, calculated through the Community Childhood Hunger Identification Project, revealed that 8 percent of children under the age of 12 experienced hunger. While there is a growing body of literature on household food security in the United States, social, political, cultural, economic and geographic differences between Canada and the US mean that it is simplistic to extrapolate US findings to Canadian settings. Literature on food insecurity in the United Kingdom, New Zealand, and Australia is sparse.

**S**ome insight into the scope of food insecurity in Canada is beginning to emerge from analyses of limited sets of indicator questions included in some recent population surveys. Child hunger is an extreme manifestation of household food insecurity. Further understanding of this problem has come from the 1994 and 1996 cycles of the National Longitudinal Survey of Children and Youth (NLSCY), in which 22,000 and 16,000 households, respectively, were asked "Has your child ever experienced hunger because there was no food in the house or money to buy food? If yes, how often?"

In the 1994 survey, hunger occurred in 1.2 percent or 57,000 Canadian families with children under 11 years of age, 35.0 percent of whom reported that their children experienced hunger at least every few months. In 1996, 1.6 percent of the sample reported child hunger, representing 75,615 Canadian families with children under 13 years of age. In 1996, 37.5 percent reported frequent hunger, defined as hunger experienced at least every few months. Among the frequently hungry, hunger most often occurred regularly at the end of the month.

The 1998-99 National Population Health Survey (NPHS) included three

screening questions for food insecurity. Recent results revealed food insecurity among 10.2 percent of Canadian households, representing 3 million people. In the same NPHS analysis, the most severely food insecure, termed the 'food poor', represented 4.1 percent of households, and 4.9 percent of children, or 338,000.

In March 2002, the Canadian Association of Food Banks reported that its annual count of emergency food program users for the month was 747,665, or 2.4 percent of the total Canadian population—double the 1989 figure; 41 percent of the food bank users, or 305,000, were children

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under the age of 18. While food bank use is not a specific marker of food insufficiency (about two-thirds of the hungry in the NLSCY did not seek food bank support), it is highly sensitive to the hunger state (i.e., few people who use a food bank are not truly hungry).

**W**e recently studied the food insecurity and hunger of 141 low-income, lone mothers with children in Atlantic Canada over the past year and during the course of one month. Virtually every household experienced food insecurity over the past year (96.5 percent). This was reduced only modestly to 78 percent over the past four-week period. Maternal hunger was reported by 42 percent of mothers over the previous year and by 23 percent of mothers over the month of the study. Child hunger was very similar to maternal hunger over the study period.

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the 1998/99 NPHS—experienced at least a compromised diet; 10% of these households or 678,000 were children (see table 1).

The socio-demographic characteristics of hungry families are similar from study to study. According to the 1994 NLSCY, families headed by single mothers were eight times more likely to report their children were hungry compared with other families. Children from families receiving welfare or social assistance income were thirteen times more likely to experience hunger than those who were not welfare or social assistance income recipients. In 1996 the NLSCY reported

that families with hungry children were six times more likely to be lone-parent-led than were other families; over half of lone-parent-led families reported hunger. While 54 percent of all hungry families received their main income from employment in the 1996 survey, families whose incomes included social assistance had greater than an eight-fold risk of child hunger, and half of such families reported hunger. The only ethnic group that was significantly associated with hunger was those of Aboriginal descent, who were four times more likely to report hunger than other respondents. Note that this survey includes only off-reserve Aboriginal people.

The 1996 NLSCY identified the following predictors of hunger in addition to low household income: there was a four-fold risk of hunger when the mother reported that her health was fair or poor. When the family was led by a lone parent, the risk increased three-fold, and Aboriginal status increased the risk by 60 percent. We also found that a higher total number

of siblings in the household independently increased the risk of hunger by 40 percent.

In our regional study of low-income lone mothers conducted in Atlantic Canada, maternal hunger was predicted by the mother's age being greater than 35 years, regardless of

Tax Benefit(CTB), which has resulted in higher social assistance incomes. At the time of the study, the CTB was worth about \$120 per month per child.

The national surveys asked hungry families how they coped when they had insufficient food. Similar to the 1994 survey, among 1996 NLSCY

one-fifth sought food from charitable sources, almost half reduced the quality of their foods, and about a quarter skipped meals or ate less. For such a complex social phenomenon, the socio-demographic and behavioural results from one food insecurity study to another are remarkably similar.

Food bank use grossly underestimates the number of hungry families, and food bank visitors are distinct from other hungry families. From our analysis of the 1996 NLSCY, the independent predictors of food bank use were lone parenthood, higher number of siblings in the household and income from social assistance.

We also examined the dynamics of hungry households. While persistent hunger is a problem, hunger transitions are also worthy of study. There were 358 families in the NLSCY cohort for both 1994 and 1996 who ever reported hunger. Only 23 percent of them reported persistent hunger, i.e., hunger in both time periods. Families with persistent hunger were remarkable for their lack of any meaningful change in circumstance. But that does not mean that these families were in some type of equilibrium. They reported the highest levels of family dysfunction.

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child age, and was three times higher for Nova Scotia residents. An older mother was also the only predictor of child hunger, which was modestly but significantly increased by 10 percent. Both household and maternal food insecurity over the past month were significantly lower among New Brunswick residents—the risk was one-third and one-fifth, respectively. The main policy difference between New Brunswick and Nova Scotia that we could identify was that New Brunswick has not clawed back the National Child

respondents, one-fifth reported that they cut down on the variety of food that the family usually ate when they had run out of food or money to buy food; one-third of hungry families reported that the parent skipped meals or ate less; and 5 percent reported that the child skipped meals or ate less. Seeking help from the food bank was reported by 35 percent, seeking help from relatives was reported by 31 percent and friends 29 percent. The NPHS analysis of all age groups found that among those reporting food insecurity,

**Table 1**  
Food Security and Insecurity in Canada,  
1998-99 (in 000s and %)

	Food secure	Food insecure			
		Total	Anxious	Compromised diet	Food poor
<b>Total Canadian population</b>	26,458 (89.8)	3,015 (10.2)	2,360 (8.0)	2,290 (7.8)	1,211 (4.1)
<b>Adults</b>	20,470 (90.7)	2,098 (9.3)	1,655 (7.3)	1,612 (7.2)	873 (3.9)
<b>Children (0-7)</b>	5,988 (86.6)	924 (13.4)	705 (10.2)	678 (9.8)	338 (4.9)

Source: Modified from Rainville & Brink's 2001 Report of the National Population Health Survey 1998-99.

state. They are categorized as another mouth to feed (one or more siblings added to the household; change in the number of parents in the household); job loss (father lost full-time work; mother's unemployment status changed); and health problems (mother's health status worsened; child's health status changed for either better or worse). Getting out of hunger depended upon one change only—mother gets a full-time job, and the family's income rises accordingly. We calculated annual income changes for

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families by hunger state. Total family income needed to increase by \$3,827 in order for a family to leave the hunger state, but a loss of only \$2,690 could tip a family into hunger, indicating that these families are fragile already. Our results underscore not only the fluidity of the circumstances of hungry families but their predictability.

**P**olicy recommendations to address food insecurity and hunger are easy to name, but they do require the political will to address them.

1. *Real incomes must rise, whether from minimum wage or social assistance.* Food insecurity results from anything that limits household resources or the proportion of those resources available for food acquisition. Hence, risk factors include factors that limit employment opportunities, wage and benefit scales and social assistance benefits, or that increase nondiscretionary, non-food expenditures such as the cost of housing and utilities, health care, taxes, child care and the likelihood of emergencies. The clear connections

between income and food insecurity and hunger raise concern about falling real wages in Canadian society, and especially about the stagnation and decline in the real minimum wage in all the provinces. Between 1976 and 1995, for example, the minimum wage fell by more than 25 percent in eight of the country's ten provinces. In our 1996 study, 63 percent of hungry households received employment income over the year, and this was the main source of income for 54 percent of hungry households.

The situation was equally bleak for recipients of social assistance or welfare; 42 percent of families who reported hunger in 1996 received social assistance or welfare as their main source of income; and among the frequently hungry, social assistance was the main source of income in 61 percent. The National Anti-Poverty Organization report entitled *Poverty and the Canadian Welfare State: A Report Card*, outlines the erosion of the Canadian welfare state between 1990 and 1996, including the tightening of eligibility requirements for social assistance and/or cuts in benefits. These years saw the highest level of income inequality in Canada in 20 years, with

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the poorest 20 percent seeing their average incomes fall by \$500 as a result of decreased government transfer payments and lower real labour-market earnings.

Welfare rates do recognize the presence of children within households, although the overall rates are insufficient and fall well below the poverty line. In contrast, wages in Canada do not recognize family size

and the number of children. The National Child Benefit program has been critical in reducing poverty among working poor families in support of their children. Increases to these funds are applauded. It is critical that these funds also be transferred directly to social assistance families who have lost ground in most provinces because of clawback, hold-back and integrated child benefit schemes that have then resulted in real income declines and increased poverty among recipients.

The fluidity of the number of hungry families is consistent with recent policy trends in Canadian society that have created dislocations in work and have increased restrictions on access to social assistance and employment insurance, making it harder for families to get by during times of difficulty or when the family is stressed with a new addition to the household. Our finding regarding the relationship between hunger and precipitous income decline is alarming given the direction of public policy and economic trends over the last two decades, directions likely to encourage sharp losses in income. It is significant that seasonal employment and the tendency towards a casual labour force—part-time and temporary

employment—continue throughout Canada, especially in the Maritimes. The consequences of such declines can be buffered by more responsive income assistance and employment market policies.

2. *We must protect the affordability of healthy foods, particularly food staples such as milk.* Food banks were initially established as an emergency response to a perceived hunger crisis. Food

banks are now accepted as part of an institutionalized, albeit voluntary, network of food distribution. It is important to emphasize that food banks have not been incorporated into public policy and are not a policy solution. The inadequacy of food banks as a source of quality food assistance has been repeatedly shown. Community-based food assistance programs have similarly failed to demonstrate that they support healthy diets among recipients. They represent a poor policy alternative to the family purchase of healthy foods.

Many developing countries monitor and support the price of food staples, e.g., tortilla flour in Mexico. Canada's marketing board policies protect the supply of staples and the incomes of producers, but not the affordability of food staples for consumers. Fluid milk is one example. Despite its superior nutritional value, inadequate consumption of milk products is consistently observed in low-income populations. In milk-friendly low-income families, it is clear that programs or policies must be made affordable and accessible in order to reduce environmental barriers to milk consumption. It may

be time for Canada to adopt a food staples policy that supports opportunities for healthy eating among its most vulnerable citizens.

3. *Because food needs give way to shelter needs in the poorest households, affordable housing is urgently required.*

4. *In families with children, lack of affordable, high-quality day care is often a significant barrier to employment.*

5. *In self-sufficiency demonstration projects, work-related supports, the provision of health and recreation services, and*

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*other forms of transitional assistance have shown promise. These types of employment support programs should be widely disseminated.*

This grouping of recommendations speaks to the determinants of food insecurity and, together, they are the subjects of wide policy debate. There is strong evidence supporting their contributions individually and collectively to poverty reduction and improved life quality.

6. *Lastly, we need a hunger and food insecurity monitoring system—not to survey misery but to determine progress, deterioration or shifts among those affected.* In turn, a food security policy lens must be applied to social policies to ensure that they reduce genuine hunger rather than exacerbate it.

The data presented for this paper have been assembled by individual effort and through the retrieval of disparate sources. Canada's Nutrition Plan of Action and other documents and lobbying efforts by non-governmental bodies such as the National Institute of Nutrition have repeatedly called for a systematic monitoring of food insecurity with an eye to rapid policy translation.

Food security is perhaps the most precious of all determinants of health. If we make the necessary investments, we can reap a food security dividend that enriches all of society with payoffs in health, social capital, sustainability of our physical and social environments, justice, and cost savings and wealth creation.

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COMING SOON/DISPONIBLE BIENTÔT

money, politics and health care

Reconstructing the Federal-Provincial Partnership

This collection of essays, based on work prepared for the Romanow Commission, analyzes key issues in federal-provincial health-care relations, especially the fiscal component. It begins with an essay on why there is a federal role in health care.

