

Individual and Household Food Insecurity in Canada:

Position of Dietitians of Canada

Position Statement

The position of Dietitians of Canada (DC) is that all Canadians must have food security. Recognizing food security as a social determinant of health, DC recommends a population health approach to food security: that is, an approach that seeks to reduce health inequities through the pursuit of social justice. A population health approach addresses the root cause of individual and household food insecurity – poverty – through improvements to the social safety net.

DC strongly encourages dietitians to educate themselves about the issues and processes to achieve food security through social change, to use empowering strategies in community-based food programming, to conduct and apply research, and to participate in coalitions that advocate to create the conditions in which all Canadians can achieve food security.

Énoncé de position

Les Diététistes du Canada (DC) soutiennent que tous les Canadiens doivent bénéficier de la sécurité alimentaire. Reconnaissant la sécurité alimentaire comme déterminant social de la santé, les DC recommandent de traiter cette question par une approche axée sur la santé de la population, c'est-à-dire ayant pour but de réduire les inégalités en matière de santé par la recherche de la justice sociale. Cette approche s'attaque à la cause première de l'insécurité individuelle et familiale – la pauvreté – en améliorant le filet de sécurité sociale.

Les DC encouragent fortement les diététistes à s'informer sur ces problèmes et sur les processus visant à assurer la sécurité alimentaire par le changement social, à utiliser des stratégies d'habilitation dans la planification des programmes communautaires portant sur l'alimentation, à mener des recherches, à appliquer les résultats de recherches et à participer à des coalitions qui préconisent la création de conditions permettant à tous les Canadiens d'atteindre la sécurité alimentaire.

1.0 INTRODUCTION

Since the 1991 publication of the official position paper on hunger and food security in Canada by the Canadian Dietetic Association (CDA) [1], the predecessor of Dietitians of Canada (DC), hundreds of dietitians, in all types of practice, have been involved in promoting food security for Canadians. A late 1994 survey revealed that 87% of CDA members had participated in some form of food security activity, including food bank drives, Meals on Wheels, community kitchens, and advocacy campaigns [2]. Approximately a decade later, at least a similar proportion likely is involved, given

1. the rise of new food security initiatives.¹
2. the expansion of food security programming within public health [3].²
3. the establishment of food security networks, electronic listservs, working groups, research groups and coalitions at local, provincial, and national levels.

4. the development of Nutrition for Health: An Agenda for Action [4] and Canada's Action Plan for Food Security [5].

However, despite the efforts of dietitians and many other Canadians, in 1998-99 approximately three million Canadians (10.2% of the population) reported food insecurity in the previous year [6,7].³ The most severe food insecurity, when someone went hungry because of lack of money, represented 4.1% of Canadian households, including 338,000 children [6]. Preliminary analysis of comparable data from the 2000-01 Canadian Community Health Survey (CCHS) shows a dramatic and disturbing increase, with 14.7% of households reporting food insecurity [8].

While the definition of food security [9-11] has many variables, this paper adopts the definition developed at the World Food Summit and endorsed by the Canadian government:

¹These include the Canada Prenatal Nutrition Program and school-based child nutrition programs.

²For example, the Ontario government mandates activities related to food security, such as "ongoing work with community groups to improve access to healthy foods." Ontario public health units participate in a wide variety of activities and programs related to food security; the vast majority are delivered by professionals with nutrition/dietetics backgrounds [3].

³The 1998-99 National Population Health Survey (NPHS) is the first national, representative survey to provide an estimate of food insecurity in Canadian households. The NPHS results are almost certainly an underestimate because the survey did not include those without telephones, people in the three territories, or Aboriginal people living on reserves. Food-insecure households were identified when a household respondent answered "yes" to one or more of the following screening questions:

In the past 12 months, did you or anyone in the household:

1. ... worry that there would not be enough to eat because of a lack of money?
2. ... not eat the quality or variety of foods that you wanted because of a lack of money?
3. ... not have enough food to eat because of a lack of money?

Food security⁴ exists when all people, at all times, have physical and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for an active and healthy life [5].

Food security is an important social determinant of health [12-14]⁵ in and of itself [15]. It also is related to one of the most important and widely recognized social determinants of health, income [13,16]. Social determinants of health are key elements of Health Canada's population health approach, which is "an approach to health that aims to improve the health of the entire population and to reduce health inequities among population groups.... An underlying assumption of a population health approach is that reductions in health inequities require reductions in material and social inequities" [16]. In other words, the population health approach seeks to reduce health inequities through social justice.

The position of DC is that all Canadians must have food security. Recognizing food security as a social determinant of health, DC recommends a population health approach to food security: that is, an approach that seeks to reduce health inequities through the pursuit of social justice. A population health approach addresses the root cause of individual and household food insecurity – poverty – through improvements to the social safety net.

DC strongly encourages dietitians to educate themselves about the issues and processes to achieve food security through social change, to use empowering strategies in community-based food programming, to conduct and apply research, and to participate in coalitions that advocate to create the conditions in which all Canadians can achieve food security.

2.0 INDIVIDUAL, HOUSEHOLD, AND COMMUNITY FOOD SECURITY

The way we understand and define a problem is critical in determining how we try to solve it [17,18].⁶ This fact is particularly important for food security: the term is understood and used in different ways [19-21], and can be considered at multiple levels, including the individual, household, community, regional, national, or world level [22]. Canada's Action Plan for Food Security [5] takes a comprehensive approach to domestic food security, and includes issues related to food access, sustainable agriculture and rural development, trade, emergency prevention and preparedness, and promoting investment in the agri-food sector. This plan does not have a conceptual framework uniting these diverse issues; indeed,

some of these issues, combined under the banner of food security, can be seen as antithetical to each other.

For conceptual and analytical clarity, this position paper will focus on food security at the individual and household levels in Canada, to promote solutions that will address low-income citizens' particular concerns. These are the citizens who suffer the greatest burden of food insecurity and health inequities. This analysis situates the problem of individual and household food insecurity within the political context of systemic socioeconomic inequities, which result from social policies affecting income distribution and have an impact on both household income levels [23] and population health. Social justice [24]⁷ is seen as the solution to individual and household food insecurity and to the improvement of population health.

Before it delves into individual and household food insecurity, this section provides a context for understanding contemporary ways of tackling food insecurity by describing an alternative approach to food security: *community food security* (CFS). Many dietitians and public health nutritionists use CFS approaches in their food-security work in Canada. Although approaches to both CFS and individual and household food security are related through a concern about food access issues, the analysis, and therefore the policy and practical implications, differ. An analysis of individual and household food insecurity leads to consideration of social policy, while the analysis of community food security leads to consideration of food policy. Both these arenas clearly have an important impact on health, albeit in different ways.

Originating in the US [25-29], CFS has emerged as an alternative "framing" [21] or understanding of food security. Community food security has borrowed elements of its approach from both the anti-hunger movement and the sustainable agriculture movement [21], adding the components of environmentally sustainable agricultural practices [3] and community self-reliance to definitions of food security [25].⁸ Concerns about food production and food consumption are united in CFS. "Practitioners and advocates of community food security (CFS) envision food systems that are decentralized, environmentally sound over a long time-frame, supportive of collective rather than only individual needs, effective in assuring equitable food access, and created by democratic decision-making" [28] (p. 141).

Community food security addresses food security with a systems approach, identifying a wide range of economic,

⁴The opposite situation, in which food security is limited or uncertain, is commonly referred to as "food insecurity" [9,10], at least in North America. Food insecurity at the individual and household level is known as "food poverty" in the United Kingdom, and in Europe more generally [11].

⁵The social determinants of health are factors arising from historical, social, cultural, economic, and political circumstances that produce inequities of health in populations. For example, it has long been recognized that those who are poor live shorter, sicker lives than those who are wealthier. Whether the main causes of disease in countries are infectious (as in developing countries, or in Western industrialized countries in the past) or chronic, the poor contract those diseases more often and die of them sooner than those who are richer. When groups of people suffer a similar fate, one must look for explanations beyond the individual. Lists of social determinants of health vary, but include income and class, gender, race, education, early childhood influences, employment and unemployment, social support, and housing. See Raphael [12], Wilkinson and Marmot [13], or Marmot and Wilkinson [14] for more information.

⁶While the definition of a problem affects the solution, Poppendieck [17] argues, convincingly, that the nature of the available solution also affects the way the problem is defined and understood. She points out that once a solution to a problem has caught public attention, other ways of understanding and solving the problem are ignored.

⁷Social justice means that each person in society is equally entitled to key ends, such as a minimum standard of income, and that the benefits and burdens of society are fairly and equitably distributed [24].

⁸The Ontario Public Health Association (OPHA) [3], for example, has defined CFS as "a strategy for ensuring secure access to adequate amounts of safe, nutritious, culturally appropriate food for everyone, *produced in an environmentally sustainable way*, and provided in a manner that promotes human dignity" (emphasis added). Hamm and Bellows [25] state that CFS exists "when all community residents obtain a safe, culturally acceptable, nutritionally adequate diet *through a sustainable food system that maximizes community self-reliance and social justice*" (emphasis added).

environmental, and social problems that arise from the dominant global food system [3,28-30]. Health professionals adopting a CFS approach particularly emphasize health, including the damaging effects of the dominant agri-food system on

1. individual health (e.g., through pesticide residues, contaminated water, antibiotic resistance, obesity).
2. community health (e.g., the loss of small farms and agricultural communities).
3. the ecosystem (e.g., the effects of fossil fuels burned during long-distance food transportation on global warming and poor air quality, soil erosion, persistent organic pollutants, and decreased biodiversity) [3,25,30-32].

From a CFS perspective, the commodification of food (such that food is predominantly available by buying it in the marketplace) and the externalization of food system costs (e.g., contaminated water, persistent organic pollutants, and decreased biodiversity) arising from the dominant global food system have created food insecurity for everyone, not just the poor (although the commodification of food presents a particular problem for the poor). Low-income consumers' inability to purchase sufficient, nutritious food provides further evidence of problems with the dominant global food system.

Part of the strength of CFS is that it brings together a wide range of disciplines, professions, and organizations, to provide an understanding of and to address problems in the food system from a variety of perspectives [28,32]. However, this diversity has also been problematic in building a unified movement, in terms of action, conceptualization, and policy analysis and development [28]. For example, a CFS action research project involving stakeholders from multiple sectors of the food system in upstate New York [33-35] revealed the complexity of interests brought together under the CFS umbrella, as well as the effects of differing degrees of power associated with these various food system interests:

1. Two of the three identified groups held different viewpoints⁹ on CFS and did not agree with the other groups' viewpoints [35].
2. By the end of the two-and-a-half day participatory CFS decision-making process, all participants considered both social justice and environmental concerns to be less salient than pragmatic concerns about the decline of local agriculture [35].
3. Low-income consumers' interests were downplayed or ignored, and much less likely to be included in final action agendas [34,36].

Some participants openly expressed negative stereotypes about people receiving welfare, which, for the most part, were left unchallenged [34,36]. Such findings might be explained by Allen's observations [29] that while CFS has

progressive elements, it has also unintentionally incorporated dominant ideas and practices (such as individualism, economic liberalism, and ideologies of entitlement and merit) that serve "to legitimize current social structures, reinscribing asymmetric relations of power and privilege in the agrifood system" (p. 117). The incorporation of dominant ideologies has facilitated the success of the CFS approach, allowing it, for example, to be integrated into dominant agri-food institutions such as the US Department of Agriculture (USDA); however, this has also circumscribed the potential of CFS to reduce social inequities and promote social justice [29].

Community food-security advocates view low-income consumers' food concerns in the context of a global food system that, as they understand it, is unsustainable, unjust, and undemocratic. In other words, they link low-income consumers' food concerns to broader problems with the global food system and to the ecological system. The agricultural and environmental issues raised by CFS advocates are important and require urgent attention; however, the complexity of the issues suggests that a separate position paper is required to explore them fully. For an overview of the CFS approach, see OPHA [3], McCullum et al. [30], or Allen [29]. Similarly, the issues related to international food security need to be addressed separately, as the American Dietetic Association has done [37].

3.0 THE POLITICAL CONTEXT OF FOOD INSECURITY

Because Canada has no coordinated, systematic plan for monitoring food insecurity, knowing how the food-insecure proportion of the population has changed since CDA's publication of the official position paper on hunger and food security in Canada is impossible [22]. However, significant deteriorations have occurred in the social safety net providing economic security to Canadians; logically, the deteriorations would affect the food security of at least some of those depending on this safety net. In federal and provincial government, a neo-liberal political philosophy has dominated most political parties. Neo-liberal political philosophy espouses the free market as the most efficient and effective distributor of goods and services, tax cuts, and smaller government [38-41]. As in other countries, the implementation of neo-liberalism in Canada has resulted in the privatization of public services, reduced expenditures on social services, and the downsizing and downloading of social programs [23,38-49]. The overall effect has been a gradual dismantling of the Keynesian [50,51]¹⁰ welfare state—the social policies and programs that have provided economic security and social support to Canadians.

⁹The three identified groups were

1. social justice advocates, who were concerned about the well-being of those living on low incomes.
2. pragmatists, who were alarmed at the decline of local agriculture.
3. visionaries, who were primarily interested in the environmental consequences of the mainstream US food system, but also were somewhat sympathetic to social welfare concerns.

¹⁰John Maynard Keynes was one of the 20th century's most important and influential economists. In the wake of the Great Depression and the Second World War, Western industrialized countries adopted, in varying degrees, his recommendations for state intervention to even out "boom and bust" economic cycles, as well as social programs to help alleviate the human and social costs of capitalism. In Canada, Keynesian welfare state programs included allowances for families with children, universal health care, public pensions, social housing, unemployment insurance, improved access to post-secondary education, and social assistance [50,51].

Several changes to social programs during the 1990s have affected Canadians' economic security:

1. The 1995 restructuring of unemployment insurance, now known as employment insurance, with reduced numbers of workers eligible for benefits (38% in 2001 compared with 75% in 1990), lower benefit levels, and shorter benefit periods [52-54].
2. Significant cuts in federal financial transfers to the provinces and territories for education, social services, and health care.
3. The replacement of the Canada Assistance Plan (CAP) with the Canada Health and Social Transfer (CHST) [55-58].¹¹
4. Restricted eligibility for social assistance, a decline in benefit levels in most provinces, and an overall deterioration in the welfare system's attitude toward recipients, resulting in harsh and punitive regulations [53,54,59].
5. The recovery (commonly referred to as a "claw back") of the National Child Benefit (NCB) Supplement from families receiving social assistance in some provinces.
6. Federal taxation policy changes that have disproportionately increased lower-income Canadians' tax burden [49,60].
7. The federal government's cancellation of social housing programs [61,62].

In addition, minimum wages and social assistance rates have remained well below poverty levels in all provinces [42,43,57,58,63]. The only social program to receive significant increases in benefit levels during the 1990s was the child benefits program, now known as the Canada Child Tax Benefit [54].

The early 21st century is offering some more hopeful news for Canadian social policy. The re-elected (2004) federal Liberal government is working on a national child care program and with the provinces to reinvigorate spending on social housing. In December 2002, the National Assembly unanimously adopted Bill 112 [64], a law to "combat poverty and social exclusion" in Quebec. This law specifically entrenched the right to food security as part of its plan of action [65]. While a number of provinces have recognized the role of income in determining health, Quebec is the only province addressing poverty as a health issue [66], with food security as part of the solution [65]. As some have argued, social policy needs a comprehensive overhaul to meet citizens' 21st-century needs and realities [51,54,66-73]. Perhaps the conditions are now in place in Canada to consider such an overhaul.

The need for a thorough overhaul of social policy is reflected in high poverty levels in Canada. Throughout the

1990s, poverty rates fluctuated between a low of 15.3% in 1990 and a high of 18.6% in 1996 [74]. In 2001, the latest year for which we have statistics, the overall poverty rate was 14.4%, or 4,393,000 people [75]. Poverty rates were worse among particular groups:

1. Children, of whom 15.6% were poor.
 2. Single mothers, with a poverty rate of 42.4%.
 3. Aboriginal peoples, with more than double the rates of other Canadian men, women, and children (not including those living on reserves, where most have a lower standard of well-being than do other Canadians) [75].
- As Quebec's anti-poverty law recognizes, poverty is a barrier to the protection of and respect for human dignity, and harmful to economic and social development [64]. Moreover, it is a significant public health concern. Income is one of the most important health determinants [12,14,16,76-80]; the poor live shorter, sicker lives than those who are wealthier, irrespective of lifestyle risk factors. (See Power [81] or Phipps [80] for a review of this literature.) The current situation, with such large numbers of Canadians living in poverty, is unjustifiable under Canadian commitments and obligations established by international agreements. These include the
1. International Declaration of Human Rights (1948).
 2. International Covenant on Economic, Social and Cultural Rights (1966).
 3. International Convention on the Rights of the Child (1989).

By signing these international agreements, the Canadian government guaranteed that all its citizens' basic needs would be met. These agreements have not been fulfilled [23,47,82-84].

On behalf of its citizens, the Canadian government also has committed itself to achieving the goals laid out in

1. the World Declaration on Nutrition (1992).
2. the World Summit for Social Development (1995).
3. the Declaration on World Food Security (1996).
4. Canada's Action Plan on Food Security (1998).
5. the Declaration on World Food Security—Five Years Later (2002) [83].

These goals include the full and progressive realization of the right to food, the reduction of poverty, and the development of a national monitoring system for food security. These goals have not been reached. Canadians continue to value equality, justice, compassion leading to collective responsibility, and social solidarity [85-87]. Of late, however, we have seldom had success in ensuring that our governments put these values into policy and action to improve economically marginalized citizens' lives.

¹¹Under the CAP, adopted in 1966, the federal government established national standards and paid for half the costs of provincial social assistance programs. The CAP ended in 1996, with the implementation of the CHST. Under the CHST, federal funding to the provinces for social assistance was rolled into a single block grant, along with funding for health care and post-secondary education. Provinces were free to divide up the federal funds as they wished, and to implement social assistance regulations and programs that were prohibited under CAP [55]. The new system allows provinces to

1. freeze or reduce benefit levels.
2. tighten eligibility requirements.
3. tie entitlements to financial assistance to the ability to sell one's labour power in the market place, through programs such as workfare.
4. restructure programs to reduce social assistance budgets [38,56,57].

In 2004, the CHST was replaced by the Canada Health Transfer (CHT) for health spending and the Canada Social Transfer (CST) for education and social spending. The CST does not specify how funds are to be divided between education and social spending and did not restore mandatory national standards for social assistance. Federal funding for education and social services remains far below 1992-93 levels [58].

4.0 THE EXTENT OF INDIVIDUAL AND HOUSEHOLD FOOD INSECURITY

Canada lacks a coordinated, systematic plan for monitoring food insecurity, either nationally or provincially [22].¹² Until recently, the number of Canadians using food banks was the primary marker of the existence and extent of food insecurity. In March 2004, 841,640 Canadians used food banks; almost 40% of these were children [58]. In 2004, the number of Canadians using food banks had increased 123% since 1989. We do not know whether this increase is related to a greater number of hungry or food-insecure Canadians (rather than increased availability of food banks, increased acceptability of food-bank use among the food insecure, increased desperation among those who are food insecure, or other reasons). Available evidence suggests that the majority of food-insecure households do not use charitable food sources such as food banks [6,88,89]; however, almost all of those who do use food banks have experienced food insecurity in the previous year [90,91].

The prevalence of food insecurity and hunger has been estimated using data collected from the 1998-99 National Population Health Survey (NPHS) [6,7,89]¹³ and the 2000-01 Canadian Community Health Survey (CCHS) [8]. Of the 10.2% of Canadians (approximately three million people) who reported food insecurity in 1998-99, 80% lived in households with a standardized pre-tax income¹⁴ of \$20,000 or less, and 50% in households with an income of \$11,000 or less [6]. Other Canadian data analyses also show that the risk of food insecurity or food insufficiency¹⁵ increases with declining income [7,88,89,92,93].

Income is the most important determinant of food insecurity and hunger, although the relationship between income and measures of food security is not linear [94,95]. Of Canadian households with the bottom one-third of standardized household income (less than \$18,064) in 1998-99, approximately 25% reported food insecurity [6]. These data emphasize the point that household food insecurity is a product of poverty. This point is also made by analyses of the affordability of nutritious diets for low-income households living on social assistance or minimum wage employment [96-103]. All these

analyses show that the cost of basic needs, including a healthy diet, are not affordable for these households.

Some types of households are at greater risk than others. Those most at risk are lone-parent families (especially those with one or more children under age 13), those receiving social assistance, those who rent their dwellings, and Aboriginal people living off reserves [6,7,89]. Households with seniors' benefits have a decreased risk of food insecurity [6], a fact that suggests federal social policies to reduce poverty among Canadian seniors have also had a positive impact on seniors' food-security status. Less food insecurity exists in rural areas (8.4%) than in metropolitan areas (10.2%) or urban¹⁶ areas (10.9%) [6]; however, this analysis did not differentiate between rural and rural remote areas, where access to purchased fresh foods is problematic [104]. The prevalence and risk estimates calculated from the NPHS almost certainly do not represent the true nature of food insecurity among Canadians because the survey did not include the most marginalized groups in our population, including the homeless, Aboriginal people living on reserves, and those without telephones. For example, studies of homeless youth [105-107] suggest that food insecurity is pervasive in this population, and that extreme poverty and homelessness render these young people vulnerable to a range of health problems.

5.0 THE NATURE OF INDIVIDUAL AND HOUSEHOLD FOOD INSECURITY¹⁷

Our understanding of the components and dimensions of individual and household food insecurity results from a number of research studies, most qualitative, that have focused primarily on low-income families [10,11,92,93,108-116]. Radimer and colleagues' work [111] has been particularly important in contributing to our understanding of the concept of food insecurity for domiciled families containing women and children.

Radimer et al. [111] recognized two levels of food insecurity within families—individual and household—and four main components at each level—*qualitative*, *quantitative*, *psychological*, and *social*. At the individual level, food insecurity is characterized

¹²Tarasuk [22] argues for the need to monitor food insecurity in Canada, and provides a comprehensive overview of direct and indirect indicators of food insecurity, with their strengths and limitations.

¹³Food-insecure households were identified when a household respondent answered "yes" to one or more of the following screening questions [6]:

- In the past 12 months, did you or anyone in the household
1. ... worry that there would not be enough to eat because of a lack of money?
 2. ... not eat the quality or variety of foods that you wanted because of a lack of money?
 3. ... not have enough food to eat because of a lack of money?

Food-insufficient households were identified when a household respondent replied "yes" to a question about whether their household had "ever run out of money to buy food" [89]. Respondents who replied affirmatively were asked two additional questions:

Did anyone in your household receive food from a food bank, soup kitchen, or other charitable agency?

Which of the following best describes the food situation in your household? A. Always enough food to eat. B. Sometimes not enough food to eat. C. Often not enough food to eat.

¹⁴Standardized household income adjusts for the number of household members by dividing total household income by the square root of the number of people in the economic family [6].

¹⁵Food insufficiency is a narrower, simpler construct than food insecurity. Food insufficiency is measured by a single survey question about the quantity and quality of food eaten in the household, and is seen as a measure of fairly severe household food insecurity [22].

¹⁶Rainville and Brink state that "living in an urban area is defined as living... in neither a rural nor a metropolitan area" [6] (p. 20). Unfortunately, this is not very helpful in understanding the difference between metropolitan and urban areas.

¹⁷The conceptualization and organization of this section has been significantly influenced by Tarasuk [22].

by nutritional inadequacy (*qualitative component*), insufficient intake (*quantitative component*), lack of choice and feelings of deprivation (*psychological component*), and disrupted eating patterns (*social component*). Radimer et al. [111] also noted that food insecurity experiences differ for adults and children. Women suffer both qualitative and quantitative food intake changes before children's intakes are affected, a finding that has often been replicated [11,90,92,108,114-126].

At the household level, food insecurity is characterized by unsuitable food (*qualitative component*), food depletion (*quantitative component*), food anxiety (*psychological component*), and food acquisition in socially unacceptable ways (*social component*) [111]. The USDA has built on this work to develop its 18-item US Food Security Survey Module (previously known as the Food Security Core Module), used to assess household food security status in US government survey research, such as the Current Population Survey (CPS). The US Food Security Survey Module categorizes respondents' households as food secure, food insecure without hunger (reduced diet quality but no reduced food quantity), food insecure with moderate hunger (adults experiencing reduced food intake), or food insecure with severe hunger (children experiencing reduced food intake and hunger, while adults go for prolonged periods without eating).

Building on Radimer et al.'s work [111], Hamelin and colleagues [115] recently conducted a thorough study of 98 low-income Quebec households. Their characterization of household food insecurity differentiates between the "core characteristics" of food insecurity and the reactions it engenders. The core characteristics are preoccupation with access to enough food of good quality, unsuitability of food and diet (including food safety), shortage of food, and lack of control over the food situation and the need to hide it. Reactions to food insecurity fell into three major categories: socio-familial perturbations (including distorted strategies of food acquisition and management), hunger and physical impairment, and psychological suffering. A strong theme for food-insecure people was the monotony of their diets: their inability to eat a personally and culturally appropriate diet contributed "to an overall sense of impoverishment" [115] (p. 129). Many participants also spoke of their deep sense of alienation, or social exclusion, manifested in feelings of powerlessness, guilt, inequity, shame, embarrassment, and frustration. In addition, this study reveals the dynamic nature of the whole experience, as reflected in a general sequencing of events and a variability of the experience over time, as well as a strong parent-child vector.

Tarasuk [123] has summarized the four main conceptual elements characterizing individual and household food insecurity in wealthy, industrialized nations such as Canada:

1. The features of food insecurity are different at the individual and household levels. At the household level, food insecurity is related to food supply management and acquisition. At the individual level, food insecurity is experienced as inappropriate and inadequate food consumption, including the physiological sensation of hunger.
2. Different levels of food insecurity exist. The least severe is characterized by anxiety about having enough food, resulting in qualitative compromises in food selection

and consumption. As resources become more depleted, individuals cut back in food quantity, until the most severe level of food insecurity is reached: absolute food deprivation, when individuals fail to eat because of lack of food.

3. Food-insecurity experiences differ among individuals within families. In particular, mothers compromise their own food quality and quantity to protect their children from hunger (although children's food quality may suffer).
4. Food insecurity is dynamic in nature. It may be chronic or transitory; it can be characterized by frequency, duration, and periodicity.

To date, research on individual and household food insecurity in Canada has been conducted primarily in the southern part of the country, where the vast majority of people live. However, as recognized in Canada's Action Plan for Food Security [5], Aboriginal peoples in remote communities face unique food-security challenges. Market food (food purchased at stores) is expensive (despite the Food Mail program, which subsidizes the cost of food to 63 northern communities) [127], often unavailable, of poor quality, and typically of poorer nutritional value than traditional country food harvested from the local environment [128-133]. Traditional country food continues to play a significant role in the lives of individuals, families, and communities [129-134], providing economic as well as nutritional benefits, but there are barriers to its consumption. These include lack of equipment to obtain it, no one to hunt or fish for it, changing tastes due to the introduction of market foods, loss of skills, inaccessibility (including changes in animal migratory patterns), and preparation expenses [5,128,132,133]. There also are public health concerns about the contamination of traditional country food, particularly in the far north, by persistent organic pollutants, heavy metals such as mercury, and radioactivity [134]. As the Aboriginal Partners of the Northern Contaminants Program (NCP) state, contamination is not only a public health concern for Aboriginal peoples, but also threatens their cultural survival if they lose confidence in traditional country food and cease to hunt and fish [134]. Similarly, global climate change, which is producing dramatic temperature increases in the Arctic, threatens northern Aboriginal peoples' food supply and cultural survival.

6.0 FOOD-INSECURITY MANAGEMENT STRATEGIES

For food-insecure families, putting food on the table is a constant struggle, forcing anxiety about food, food deprivation, and managing household expenses to the forefront of daily living [111,114,115,117]. Food expenses are one of the more elastic components of the household budget, and can be strategically managed to accommodate other income demands. Shelter costs are the core, immutable expense [135]; other expenses, including unanticipated costs, must come out of the post-shelter income, which includes the food budget. For example, an analysis of the US Consumer Expenditure Survey [136] showed that, during unusually cold weather, household members living in poverty ate fewer calories and reduced their food expenditures by an amount that corresponded with increased home heating costs. During cold snaps, poor adults consumed 7.9% fewer calories, poor adults

with children 11.6% fewer calories, and poor children 10.9% fewer calories. A recent analysis of survey data on Toronto food-bank users [135] suggests the immense task that these food-insecure households face in juggling their budgets. In 2000, Toronto food-bank users spent an average of 63% of their monthly income on shelter costs, leaving them with a total of \$298 (an average of \$148 per person) for all other expenses for the rest of the month. This analysis fits with the results of other studies, in Ontario and elsewhere, which show the impossibility of eating a healthy, nutritious diet when one depends upon a social assistance income [96,97,100,137].

Mothers faced with food insecurity use various management strategies to avoid hunger in the household, particularly in children. Mothers may try to increase the money available to buy food by picking up odd jobs, giving up services such as the phone, selling possessions, or borrowing money from family or friends. They may juggle the budget by delaying bill payments, purchasing food on credit, borrowing food from relatives or friends, taking the family to relatives' homes to eat, sending their children to stay with friends or relatives, and obtaining food from non-conventional sources such as food banks. Other strategies revolve around the food itself: mothers will do careful comparison shopping, alter food preparation and recipes to "stretch" a meal, serve low-cost meals with minimal ingredients, serve only food that the family likes, cut the portion size of meals, and go hungry themselves so that their children can eat [90,92,108,113,115-124,126,138-142].

Analysis of the 1998-99 NPHS shows that food-insecure Canadians predominantly use strategies that stretch their incomes [6]. Fifty-seven percent of food-insecure households used coupons and/or money from returned bottles, 49% postponed bill payments, 40% borrowed money, 20% borrowed food, 14% sold possessions, and 9% bought food on credit. Almost half (46%) ate cheaper foods and 28% skipped meals or ate less. Only 22% received food from charity, but even fewer used community-development strategies such as joining a community kitchen, using a food-buying club, or gardening. The vast majority (83%) of food-insecure households used at least one strategy to augment their resources, and the number of strategies increased as the level of food insecurity deteriorated [6]. Tarasuk [123] reported similar findings in her study of women using food banks: she found a direct relationship between the number of strategies and the severity of household food insecurity.

Most research on managing food insecurity has been conducted with low-income households of domiciled families [22]. Such families have a cyclical flow of resources, acquiring food supplies at periodic intervals and depleting them gradually and systematically. Individuals and families in different situations, such as the homeless or those whose income flow is more unpredictable, may have different processes for managing food insecurity [22]. Research among street youth has demonstrated that their access to food is extraordinarily precarious and insecure, and that the progressive order of the food-insecurity experience in domiciled families (food anxiety, progressing to qualitative compromises in food intakes, and finally to quantitative compromises) often is not the same [105-107].

7.0 HEALTH CONSEQUENCES

Several studies have demonstrated that individuals in food-insecure households have significantly worse dietary intakes than those in food-secure households [95,143-146]. In Canada, two studies of dietary intakes in high-risk household members [90,91,147] showed a high estimated prevalence of inadequacy for a number of nutrients, including folate, iron, zinc, and vitamin A. Both studies focused on mothers as the most sensitive indicators of nutritional risk, because, as described above, they are the first to carry the burdens and consequences of food insecurity. Tarasuk and Beaton [91] found that the dietary intakes of women in their study decreased systematically as their household food insecurity worsened. McIntyre and colleagues [147] found that mothers' dietary intakes and intake adequacy were consistently and significantly worse than their children's. Dietary intake assessments of Montreal food-bank users [148,149] and low-income, breastfeeding women in Ontario [150] indicated that nutrient intakes were suboptimal in these groups. Two US studies have shown associations between food insufficiency and biochemical measures [146,151]. This evidence suggests that food insecurity increases nutritional risk and has negative repercussions for nutritional well-being.

Food insecurity has also been associated with poor health. However, as Tarasuk [22] notes, disentangling the specific effects of food insecurity on health is difficult because food insecurity necessarily occurs within the context of poverty, which has well-documented, independent adverse effects on health. (See Power [81] or Phipps [80] for a review of the impact of poverty on health.) Because of the dietary compromises associated with food insecurity, those who are food insecure can be expected to have difficulty managing chronic medical conditions requiring dietary intervention [22]. This has been documented in one study of adult diabetic patients in a US hospital, where an association was found between hypoglycemia and hunger and food insecurity [152]. Individuals living in food-insufficient households in Canada are more likely than those living in food-sufficient households to report heart disease, diabetes, high blood pressure, and food allergies [89]; their food insecurity likely severely constrains their ability to manage the dietary aspects of controlling these conditions, with consequent negative repercussions on morbidity and mortality.

There are other reports of adult and childhood health problems associated with food insecurity or food insufficiency [88,92,115,123,125,143,151,153], but it is not possible to differentiate the specific effects of food insecurity on health from the more general effects of poverty, or to draw causal inferences. Vozoris and Tarasuk's [89] analysis of the 1996-97 NPHS provides the strongest Canadian data on the association between food insufficiency and poor health. Individuals in food-insufficient households had significantly higher odds of reporting poor or fair self-rated health, poor functional health, restricted activity, multiple chronic conditions, major depression, mental distress, and poor social support, as well as the chronic conditions listed above. The authors conclude that "food insufficiency is one dimension of a more pervasive vulnerability to a range of physical, mental and social health problems among households struggling with economic constraints" [89].

8.0 RESPONSES TO FOOD INSECURITY

8.1 Charitable food distribution

“Emergency” food programs, in the form of food banks, were the first and arguably are still the most pervasive response to the contemporary crisis of hunger in Canada and the US [17,44,83,154]. Riches [155] has called food banks “symptoms and symbols of the welfare state in crisis.” Canada’s first food bank was established in Edmonton in 1981, during a deep recession when existing social programs were inadequate to meet the needs of the swollen numbers of unemployed people [156,157]. Food banks were established as an emergency measure: the assumption was that once the recession was over and unemployment rates receded, then food banks could—and would—close their doors [17,154,156,158]. Up until the late 1980s, food banks still debated how and when they would close. Instead, the number of food banks and volume of food distributed rose in response to escalating demand. There are now 550 food banks in Canada, in every province and territory, with the number of Canadians using food banks more than double that of 1989 [58].

As early as 1990, Tarasuk and Maclean [159] argued that food banks had become institutionalized in Canada, as an integral although vastly inferior component of Canada’s social safety net. Three processes have cemented the institutionalization of food banks in Canada:

1. The establishment of a national network of food banks, The Canadian Association of Food Banks (CAFB), in 1988.
2. The linkage of food banks and the food industry, formalized in 1995 in The Fair Share System, whereby CAFB became the sole national distributor of food donations from major food companies and some marketing boards.
3. Governments’ reliance on food banks to fill the gaps in the deteriorating social safety net [83].

Riches [83] argues that the institutionalization of Canadian food banks has not been as thorough as in the US, where large numbers of people are employed and a model of large industry is followed. From the beginning, the US food-bank system has been chiefly concerned with alleviating hunger by distributing food that would otherwise go to waste [83]. (This was also the philosophy underlying the US food stamp program [160,161].) Unlike their US counterparts, Canadian food banks, particularly Daily Bread in Toronto and the national association, CAFB, have remained politicized; they are tireless advocates for eliminating hunger through improved social security programs [83]. This is the means that Canadians, as a nation, chose to manage poverty and hunger in the wake of the Great Depression of the 1930s [44,50]. A recent CAFB-commissioned opinion poll suggests that Canadian food banks’ position on hunger and its elimination is shared by the majority of Canadians: over 60% believe that the government has primary responsibility for solving the problem of hunger in Canada, and over 80% believe that the prime reasons people need food banks are government cutbacks and inadequate social programs [162].

In one month of 2003, Canadian food banks distributed 7.03 million pounds of food; however, 40% of food banks reported difficulty in meeting demand. In 2004, the percentage of food banks reporting difficulties in meeting demand

rose to 48% [58]. Even if one disregards the fact that food banks do not address the root causes of food insecurity, these figures point to problems of a charitable model for responding to widespread food insecurity. Food banks (like other food-distribution charities, such as soup kitchens) depend on volunteer labour and donations of food and goodwill, which almost always are inadequate to meet demand [154,163,164]. Moreover, food banks are geographically fragmented, such that they are not necessarily located where the demand is highest [163]. The food packages that banks are able to distribute to clients often

1. are of poor quality and questionable safety.
2. contain limited selection and quantities.
3. fail to meet client needs for nutritional adequacy, health concerns, or ethnic preferences.
4. do not meet dietary guidelines, because the banks can provide only what the public and food producers, processors, and retailers have donated [149,154,163-169].

Usually there are restrictions on how often clients can obtain food (generally once a month), and banks can provide food for only a limited number of days. Despite their best efforts, food banks do not eliminate food insecurity or ensure that clients’ nutritional requirements are met [91,123,124,164].

As charitable organizations, food banks are under no obligation to serve clients: unlike social assistance, clients do not have legally enforceable rights or entitlements to food-bank assistance [163]. Food banks make invisible clients’ unmet food needs, and normalize charity as the dominant response to hunger, undermining public support for the welfare state, diverting attention and energy from alternative ways of addressing the issue, and giving politicians an “out” for their failure to address the underlying causes [17,23,47,82,83,154,156,163,164,170-174]. Unlike universal social programs, whose guiding philosophy is that we all need one another [50], food banks divide society into “haves” and “have nots,” undermining the dignity of those who are hungry. The stigma and humiliation of using food banks are persistent themes in studies of those who are poor or food insecure [92,96,114,115,117,121,173,175,176]. Food banks were never intended as a permanent response to the contemporary problem of food insecurity in Canada, and clearly they have remained an inadequate “Band-Aid” solution: an ad hoc food response to a systemic problem of poverty.

8.2 Community-based responses

Community-based responses to food insecurity include

1. community kitchens.
2. food skills workshops on making food from scratch.
3. self-provisioning activities such as community gardens.
4. alternative food-distribution systems such as the “Good Food Box,” food-buying co-ops, farmers’ markets, field gleaning, and community-supported agriculture.
5. food-based community economic development projects [177].

Community-based responses to food insecurity have been formulated as an alternative to the charitable model, providing healthier, better-quality food and preserving participants’ dignity by requiring their participation, time, and often some

investment of financial resources. Their goal is to make available more permanent solutions to food insecurity. They also are strategies that the community food-security movement uses to promote local control over the food system and environmental sustainability, while also providing healthy food to low-income consumers [25].

Community-based responses to food insecurity have become popular strategies for public health and community health centre dietitians working with low-income populations. In these settings, community-based food-security programs operate as health-promotion activities, fostering self-help, mutual support, and community development [168,177]. In Kamloops, BC, which has had an intensive program of community-based food-security activities since the early 1990s, the local food-bank director credits these programs with a 32% drop in demand for food from the bank between 1999 and 2003 [101]. This finding suggests that community-based food programs do provide an attractive alternative to food banks for at least some food-insecure people.

Little research has been published on community-based responses to food insecurity; published research tends to emphasize the social, psychological, and community benefits of such programs. For example, community garden coordinators in upstate New York reported that community gardens facilitated social networks and organizational capacity in their neighbourhoods, increased neighbourhood pride and aesthetic maintenance, and led to further neighbourhood organizing [178]. In another US study, social support was an important reason for participating in field gleaning, as was enabling increased consumption of fresh produce and helping to provide food to community members [179]. Blair and colleagues also found that gardening was positively associated with community involvement and life satisfaction [180].

In focus-group research in three low-income Ontario communities, parents, teachers, project staff, and children involved in various community-based food programs reported numerous benefits [181]. Adult participants identified hunger alleviation for children in school-based programs and opportunities for social contact as the primary benefits of the programs. Participants suggested that other benefits included

1. the development of neighbourhood support networks.
2. nutrition education.
3. opportunities to learn about new foods, share information about culturally specific foods, and practice English language skills.

Canadian studies of community kitchens [182-185] have shown that social support and interaction were key benefits. Some kitchens in Tarasuk and Reynolds' study [183] were deliberately structured to offer social and personal support to women whose lives were marked by extreme and chronic poverty, isolation, and difficult personal circumstances.

Improving social and personal support for marginalized, isolated, and impoverished people is clearly important, and, as an end in itself, is consistent with health-promotion goals. A recent study [186] revealed that household and community social capital—"a measure of trust, reciprocity and social networks" (p. 2645)—is significantly associated with decreased odds of household hunger. However, because the data are

cross-sectional, one cannot say whether households are food secure because they have social capital or whether they have social capital because they are food secure (or because of some other factor).

Despite the important social, psychological, and community benefits of community-based food programming, to date its effectiveness in reducing individual and household food insecurity remains to be demonstrated. Tarasuk and Reynolds [183] suggest that the ability of community kitchens to enhance household food resources, and thereby ameliorate food insecurity, depends in large part on the cost of participation. In kitchens where food costs were subsidized, the receipt of free or low-cost food offset other household food costs and effectively provided an income transfer. The significance of this income transfer to a household's overall budget depends on the amount of free or low-cost food received.

Ironically, community-based responses to food insecurity share some of the same problems as food banks, in that they are small-scale, geographically fragmented, and ad hoc [44,168]. Unless they are specifically designed with marginalized and impoverished people's interests and requirements in mind, they exclude those most in need, for example by charging fees [168,183]. They also tend to retain a focus on food, often sidestepping the underlying issue of poverty, even if there is potential for community organizing and advocacy on other issues [20]. Such programs likely would meet some other health-promotion goals (e.g., community capacity building) more effectively if participants already had other basic resources, such as a decent income, good-quality housing, and child care, which would provide security and stability in their lives and facilitate their participation in community-based food programming.

8.3 School- and community-based feeding programs

School- and community-based feeding programs, also known as child nutrition programs, school-based feeding programs, school-based nutrition programs, school meal programs, school nourishment programs, and student nutrition programs, emerged in Canada in the late 1980s as an ad hoc response to perceived poverty-related hunger and inadequate nutrition in children [187-194]. The programs provide breakfast, lunch, or snacks to children at schools and community sites [187,189,193], and are mainly targeted at elementary school-aged children [187,188]. Many provincial governments provide some level of funding for school- and community-based feeding programs [189,192], but they are not fully funded government programs and can be characterized as an example of what Battle and Torjman have called a "post-welfare state" program, involving partnerships of the public, private, and voluntary sectors [195]. Programs rely heavily on volunteer leadership and labour, and receive funding and food from a variety of sources, including boards of education, service clubs, municipal governments, the Canadian Living Foundation Breakfast for Learning program, corporate sponsors such as Kellogg Canada, food banks, unions, and private donations [58,189,193,194].

School- and community-based feeding programs aim to alleviate hunger; however, they do not assume that poverty is the only reason that children come to school hungry. These programs cite other factors: long bus rides, lack of time in the

mornings, harried parents, timing of sports events, and lack of interest in eating immediately after arising [191,193,196-198]. Moreover, program goals have expanded to include nutrition and health education, positive socialization, promoting school attendance, exploring cultural diversity, providing a caring and nurturing environment for students, and community mobilization and capacity building [187,193,199-203]. The basis of school- and community-based feeding programs is the conviction that properly nourished children behave and learn better than those who are hungry [193,201,204]; however, there is still controversy in the scientific literature about the short- and long-term cognitive effects of hunger in children in industrialized countries, particularly in relation to breakfast skipping [187,189]. Parents, educators, and others involved with these programs do not need the weight of scientific evidence or formal evaluations to support them [187,189,191,205,206], given the perceived multiple benefits and the strong emotional satisfaction of feeding hungry children.

Most operators of school- and community-based feeding programs consider their programs successful, but formal evaluations are rare [187-189,191,193]. The results of a critical ethnography of school- and community-based feeding programs in three Atlantic provinces in the mid-1990s suggested that programs

1. failed to meet their goal of feeding hungry children because only a minority of the target population was reached.
2. reproduced rather than reduced inequities.
3. created unintended consequences, such as stigmatization, exclusion, and dependency [194,196,205-207].

These authors and others, such as Hay [188], have suggested that school- and community-based feeding programs could be one strategy of many in a comprehensive social justice program to address child hunger. At the same time, they raise questions about the appropriateness and effectiveness of such programs as they are currently structured.

To date, there has been only one study of the potential contribution of school- and community-based feeding programs to household food security. Vozoris and Tarasuk [192] used a “best case” scenario and estimates of household incomes for families receiving social assistance, household expenses, food needs, food costs, and nutrition standards for the Toronto lunch and snack programs to calculate the potential contributions of these programs to household food security for Toronto families in 1999. Depending on whether children participated in a breakfast or snack program, or a lunch program, the financial contribution of the program represented 4.9% or 6.5% of monthly household food costs each school month for a single-parent household with one school-aged child and one preschooler, and 6.9% or 9.3% for a two-parent family with two school-aged children. The authors conclude that the potential impact of these programs on household food-security status and individual nutritional health must be limited, given their small financial impact on household budgetary shortfalls.

8.4 Federal policy responses

In the 1990s, the primary federal government initiative to address child poverty was the 1997 introduction of the National

Child Benefit Supplement (NCBS). The NCBS is a tax credit program for some low-income families; it was added to the existing Child Tax Benefit and incorporated into a new program, the National Child Benefit (NCB). This was the first new major federal social program in many years, and was received with enthusiasm by advocates for the poor [59,208,209]. However, the program has been criticized for allowing the provinces and territories to reduce household welfare payments by the amount of the supplement. In 2000-01, the supplement amounted to \$977 per annum for one child and \$1,748 per annum for two children [209]. Given the average incomes of people receiving social assistance, these are significant sums, and could make important contributions to a family’s food-security status. In an analysis of two cycles of the National Longitudinal Survey of Children and Youth, McIntyre and colleagues found that families who reported hunger in 1996 but not 1994 lost an annual household income of \$2,690 [210]. Currently, the provincial governments of Nova Scotia, Ontario, Alberta, Prince Edward Island, and the Territories continue to claw back the NCB Supplement from families receiving social assistance [58]. The claw back has been criticized for penalizing the poorest families in Canada, and for its bias against families with single parents, most of whom are women [209,211].

The federal government initiated the Canada Prenatal Nutrition Program (CPNP) in 1994 to develop or enhance programs for low-income pregnant women who are considered vulnerable. The program provides funding for community-based programs to reduce the incidence of low birth weights, improve maternal and infant health, and encourage breastfeeding [212]. This is attempted through the provision of food and food vouchers, health education, social support, and assistance with access to health and social services [192]. In 2002-03, the budget for the non-reserve portion of the program was \$30.8 million for 350 projects serving over 2,000 communities [212]. In 2002-03, 44,650 women participated in non-reserve programs, and an additional 6,000 women were served in Inuit and on-reserve First Nations communities [212].

Using a methodology similar to that described above for school- and community-based feeding programs, Vozoris and Tarasuk [192] calculated that for Toronto pregnant women living alone on social assistance, the CPNP food vouchers in amounts of either \$5 or \$10 a week, plus snacks, provided 21.2% or 37.6% (respectively) of estimated total monthly food costs. For a woman in a two-parent household who had a young child and was receiving social assistance, the snacks and food vouchers represented 8.3% or 14.9% of the monthly household food costs. The financial benefits of the CPNP were inadequate to compensate for the estimated budgetary deficits of \$255.46 a month (\$3,065.52 per annum) for the one-parent household and \$233.79 a month (\$2,805.48 per annum) for the two-parent household. These budgetary deficits are in roughly the same range as McIntyre et al.’s calculation of household income loss leading to food insecurity [210], noted above. The restoration of the NCBS claw back to affected households would make a more significant contribution to remedying these household budgetary deficits than the CPNP is able to do. Undoubtedly, the CPNP is providing much-needed social support to marginalized groups of women, and

is showing success in health indicators such as high rates of breastfeeding initiation [212]; however, it cannot, on its own, solve income-related food insecurity.

9.0 DIETITIANS' ROLE

To improve the food security of individuals and households and overall population health in Canada, poverty levels must be reduced [80,213-217]. This is certainly a daunting task. Health professionals (and many others) feel ill-prepared for this task, or believe they are unable to incorporate it into their jobs [218-221]. However, there are many steps toward realizing a big goal involving social change [222,223], and dietitians can be involved and contribute in many ways, both professionally and as private citizens. In the previously mentioned survey of CDA members [2], almost all agreed that six key strategies (working with others, advocacy, raising public awareness, educating professionals, working at the grassroots level, and monitoring) were appropriate, and had the potential to promote food security effectively. Advocacy, working with others, and raising public awareness were rated as the top priority strategies. By keeping an eye on the ultimate goal of reducing poverty and creating a just society, dietitians can assess whether the initiatives in which they are involved are leading in the right direction.

Reducing poverty and food insecurity may seem more relevant to and appropriate for those practicing in public health or community nutrition settings; however, food insecurity has important implications for dietitians working in other areas of practice, from the types of health problems food-insecure patients/clients are likely to have [89,224], to the recommendations one can reasonably expect patients/clients to follow [225], to the sustainability of the health care system [226]. Moreover, as health care workers with professional status, who have benefited from Canada's social security programs with good education and often publicly funded, relatively well-paid jobs, we have a responsibility to ensure that social policies and conditions promote the health and well-being of all [24,227].

The following are recommended actions for DC members:

1. Work in coalitions with others, including community-based organizations and antipoverty advocates, to advocate for policies to reduce poverty. This is a key strategy to improve food insecurity, social justice, and population health. As has been indicated in this document and supported by numerous organizations (see, for example, references [58,102,213,214,228,229]), such policies include improving social assistance and minimum wage rates, establishing affordable housing policies, eliminating the NCB claw back for families receiving social assistance, improving employment insurance coverage and benefits, and providing accessible and affordable child care. These policies would strengthen the Canadian social safety net, and thus address social determinants of health and promote population health.
2. Conduct and publicize research supporting such policies to strengthen the social safety net. This research might include comparisons of healthy diet costs, housing, and

other living expenses with social assistance rates and minimum wage rates. (See, for example, DC Canada, BC Region, and the Community Nutritionists Council of BC [102]; the Nova Scotia Nutrition Council and the Atlantic Health Promotion Research Centre [96]; Vozoris, Davis, and Tarasuk [97]). Use this research in advocacy campaigns. For example, Montreal Public Health Unit research on social inequalities in health contributed to the advocacy campaign leading to the adoption of Quebec's anti-poverty bill [230].

3. Vote, and vote wisely. Political parties espousing policies to cut taxes and privatization of services invariably cut the social programs on which food-insecure people depend. Evidence from Europe indicates that political parties committed to policies of income redistribution and full employment successfully improve the health of populations [231-236]. Ask electoral candidates in your riding where they stand on key issues.
4. Use empowering strategies in community-based food programming (such as community kitchens and community gardens), and structure these programs to include the most marginalized (e.g., subsidize program costs, transportation, and child care) [168,237]. Listen to and respect the diverse knowledge and experiences that clients bring to programs. Expect the most important benefits to be social and psychological, especially for the most marginalized participants, and structure programs to maximize opportunities to achieve these important outcomes. Create and take advantage of opportunities to address larger structural issues related to poverty, and thus population health [116,238-240].
5. Be reflexive¹⁸ in your professional practice. Understand how your social position (a product of income, education, gender, profession, etc.) and the power and privilege that accompany being a health professional affect your opinions, everyday practices, and perspective on the world. Recognize, too, how your clients' social positions affect theirs, and the reasons that your perspective and theirs may differ [81,116]. Essentially, reflexivity involves being able to understand another's point of view and "walking in his or her shoes." It is key to successful coalition building [241].
6. Educate yourself and others on the issues and processes to achieve food security through social change.
7. Look for ways that DC can promote food security for all Canadians. Work with DC to make these initiatives successful.

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¹⁸Reflexivity is a social science term. It involves self-reflection about one's social position, assumptions, and preoccupations, and about how these influence what the practitioner expects and is able to see, and, thus, to understand.

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References

- Canadian Dietetic Association. The official position paper of the Canadian Dietetic Association on hunger and food security in Canada. *J Can Diet Assoc* 1991;53:139.
- Power E, Sheeshka J, Heron AL. Food security: CDA members identify strategies for change. *J Can Diet Assoc* 1996;57(4):162-7.
- A systematic approach to community food security: a role for public health. Toronto: Ontario Public Health Association; 2002.
- Joint Steering Committee, Responsible for Development of a National Nutrition Plan for Canada. Nutrition for health: an agenda for action Ottawa: Office of Nutrition Policy and Promotion at Health Canada; 1996. Available from: http://www.hc-sc.gc.ca/hpfb-dgpsa/onpp-bppn/nutrition_health_agenda_e.html
- Canada's Action Plan for Food Security: a response to the World Food Summit. Ottawa: Agriculture and Agri-Food Canada; 1998.
- Rainville B, Brink S. Food insecurity in Canada, 1998-1999. Ottawa: Human Resources Development Canada, Applied Research Branch of Strategic Policy; 2001.
- Che J, Chen J. Food insecurity in Canadian households. *Health Rep* 2001;12(4): 11-22.
- Kirkpatrick S. Analysis of the 2000-01 CCHS Food Security Indicator questions [unpublished]. Toronto: Department of Nutritional Sciences, University of Toronto.
- Davis B, Tarasuk V. Hunger in Canada. *Agric Hum Values* 1994;11(4): 50-7.
- Campbell C. Food insecurity: a nutritional outcome or a predictor variable. *J Nutr* 1991;121:408-15.
- Dowler E, Turner S, Dobson B. Poverty bites: food, health and poor families. London, UK: CPAG; 2001.
- Raphael D. Social determinants of health: Canadian perspectives. Toronto: Canadian Scholars' Press Inc; 2004.
- Wilkinson R, Marmot M, eds. The social determinants of health: the solid facts. 2nd ed. Copenhagen: World Health Organization; 2003.
- Marmot M, Wilkinson R, eds. Social determinants of health. Oxford: Oxford University Press; 1999.
- McIntyre L. Food insecurity. In: Raphael D, ed. Social determinants of health. Toronto: Canadian Scholars' Press; 2004. p. 173-85.
- Health Canada. Population health website. Available from: <http://www.hc-sc.gc.ca/hppb/phdd/approach/index.html>. Accessed 2004.
- Poppendieck J. Hunger in America: typification and responses. In: Maurer D, Sobal J, eds. Eating agendas: food and nutrition as social problems. Hawthorne, NY: Aldine de Gruyter; 1995. p. 11-34.
- Tesh SN. Hidden arguments: political ideology and disease prevention policy. New Brunswick, NJ: Rutgers University Press; 1988.
- Power E, Sheeshka J, Heron AL. Canadian dietitians' understanding of food security. *J Nutr Educ* 1998;30:45-9.
- Power E. Combining social justice and sustainability for food security. In: Koc M, MacRae R, Mougeot L, Welsh J, eds. For hunger-proof cities: sustainable urban food systems. Ottawa: International Development Research Centre; 1999. p. 30-7.
- Lezberg S. Finding common ground between food security and sustainable food systems. Presented at: Crossing Borders: Food and Agriculture in the Americas Conference, Toronto, 5 Jun 1999.
- Tarasuk V. Discussion paper on household and individual food insecurity. Ottawa: Health Canada Office of Nutrition Policy and Promotion; 2001.
- Riches G. Hunger, food security and welfare policies: issues and debates in First World societies. *Proc Nutr Soc* 1997;56:63-74.
- Beauchamp DE. Public health as social justice. *Inquiry* 1976;XIII:3-14.
- Hamm MW, Bellows AC. Community food security and nutrition educators. *J Nutr Educ Behav* 2003;35(1):37-43.
- Bellows AC, Hamm MW. International effects on and inspiration for community food security policies and practices in the USA. *Crit Public Health* 2003;13(2):107-23.
- Fisher A, Gottlieb R. Community food security: policies for a more sustainable food system in the context of the 1995 Farm Bill and beyond. Los Angeles: The Lewis Center for Regional Policy Studies, University of California; 1995.
- Anderson M, Cook J. Community food security: practice in need of theory? *Agric Hum Values* 1999;16(2):141-50.
- Allen P. Together at the table: sustainability and sustenance in the American agrifood system. University Park, PA: The Pennsylvania State University Press; 2004.
- McCullum C, Desjardins E, Kraak VI, Ladipo P, Costello H. Evidence-based strategies to build community food security in the context of population health. *J Am Diet Assoc* 2005;105(2):278-83.
- Making the connection—food security and public health. Vancouver: The Community Nutritionists Council of BC; 2004.
- Welsh J, MacRae R. Food citizenship and community food security: lessons from Toronto, Canada. *Can J Dev Studies* 1998;XIX:237-55.
- McCullum C, Pelletier D, Barr D, Wilkins J. Use of a participatory planning process as a way to build community food security. *J Am Diet Assoc* 2002;102(7):962-7.
- McCullum C, Pelletier D, Barr D, Wilkins J, Habicht J-P. Mechanisms of power within a community-based food security planning process. *Health Educ Behav* 2004;31(2):206-22.
- Pelletier D, McCullum C, Kraak V, Asher K. Participation, power, and beliefs shape local food and nutrition policy. *J Nutrition* 2003;133:301S-4S.
- McCullum C, Pelletier D, Barr D, Wilkins J. Agenda setting within a community-based food security planning process: the influence of power. *J Nutr Educ Behav* 2003;35:189-99.
- American Dietetic Association. Position of the American Dietetic Association: Addressing world hunger, malnutrition, and food insecurity. *J Am Diet Assoc* 2003;103:1046-57.
- Mulvale JP. Reimagining social welfare: beyond the Keynesian welfare state. Aurora, ON: Garamond Press; 2001.
- Bourdieu P. The essence of neoliberalism. In: *Le Monde Diplomatique*. 1998. Available from: <http://www.mondediplo.com/1998/12/08bourdieu>
- O'Brien M, Penna S. Theorising welfare: enlightenment and modern society. London, UK: SAGE Publications; 1998.
- Giroux HA. The terror of neoliberalism: authoritarianism and the eclipse of democracy. Aurora, ON: Garamond Press; 2004.
- Jackson A. Paul Martin's economic record: living standards of working families and prospects for future prosperity. In: *Alternative federal budget 2004*. Ottawa: Canadian Centre for Policy Alternatives; 2003.

43. Jackson A, Robinson D. *Falling behind: the state of working Canada*, 2000. Ottawa: Canadian Centre for Policy Alternatives; 2000.
44. Tarasuk V, Davis B. Responses to food insecurity in the changing Canadian welfare state. *J Nutr Educ* 1996;28:71-5.
45. Lightman E, Riches G. From modest rights to commodification in Canada's welfare state. *Eur J Soc Work* 2000;3(2):179-90.
46. Pulkingham J, Ternowetsky G, eds. *Remaking Canadian social policy: social security in the late 1990s*. Halifax, NS: Fernwood Publishing; 1996.
47. Riches G. Advancing the human right to food in Canada: social policy and the politics of hunger, welfare and food security. *Agric Hum Values* 1999;16(2):203-11.
48. Bauman Z. *Work, consumerism, and the new poor*. In: May T, ed. *Issues in society*. Buckingham, UK: Open University Press; 1998.
49. Stanford J. The economics of debt and the remaking of Canada. *Stud Political Econ* 1995;48:113-35.
50. Guest D. *The emergence of social security in Canada*. 3rd ed. Vancouver: University of British Columbia Press; 1997.
51. Lerner S, Clark CMA, Needham WR. *Basic income: economic security for all Canadians*. Toronto: Between the Lines; 1999.
52. Canadian Labour Congress. *Falling unemployment insurance protection for Canada's unemployed*. 2003. Available from: <http://www.unemployed.ca>
53. Boychuk G. Adrift between islands: employment insurance, social assistance and the politics of income support in Canada. *Can Rev Soc Policy* 2001;47:5-23.
54. Battle K. *Relentless incrementalism: deconstructing and reconstructing Canadian income security policy*. Ottawa: Caledon Institute of Social Policy; 2001.
55. Battle K. *Transformation: Canadian social policy since 1985*. Presented at the 92nd Annual Meeting of the American Sociological Association, Toronto, 18 Aug 1997.
56. National Council of Welfare. *Another look at welfare reform*. Ottawa: Ministry of Supply and Services; 1997.
57. National Council of Welfare. *Welfare incomes 1999*. Ottawa: Minister of Public Works and Government Services Canada; 2000.
58. *Hunger Count 2004*. Poverty in a land of plenty: towards a hunger-free Canada. Toronto: Canadian Association of Food Banks; 2004.
59. National Council of Welfare. *Child benefits: kids are still hungry*. Ottawa: Ministry of Supply and Services; 1997.
60. Battle K, Torjman S. *How finance re-formed social policy*. Ottawa: Caledon Institute of Social Policy; 1995.
61. Shapcott M. *Housing*. In: Raphael D, ed. *Social determinants of health: Canadian perspectives*. Toronto: Canadian Scholars' Press Inc; 2004. p. 201-15.
62. Hulchanski JD. *Housing policy for tomorrow's cities*. Discussion paper F/27. Ottawa: Family Network, Canadian Policy Research Networks; 2002.
63. Schenk C. *From poverty wages to a living wage*. Toronto: The CSJ Foundation for Research and Education and the Ontario Federation of Labour; 2001.
64. Noël A. *A law against poverty: Quebec's new approach to combating poverty and social exclusion*. Ottawa: Canadian Policy Research Networks; 2002.
65. Hamelin A-M, Bolduc N. *La sécurité alimentaire à l'agenda politique québécois*. *Service Soc* 2003;50(1):57-80.
66. Ross DP. *Policy approaches to address the impact of poverty on health: a scan of policy literature*. In: *Poverty and health—CPhi collected papers*. Ottawa: Canadian Institute for Health Information; 2003.
67. Maxwell J. *Beyond EI: Presentation to the House of Commons Human Resources Committee 11 May 2004*. Available from: <http://www.cprn.com>. Accessed 2004.
68. Harris P. *Public welfare and liberal governance*. In: Petersen A, Barns I, Dudley J, Harris P, eds. *Poststructuralism, citizenship, and social policy*. London, UK: Routledge; 1999. p. 25-64.
69. Fraser N. *Justice interruptus: critical reflections on the "post socialist" condition*. New York: Routledge; 1997.
70. Van Parijs P, ed. *Arguing for basic income: ethical foundations for a radical reform*. London, UK: Verso; 1992.
71. Folbre N. *The invisible heart: economics and family values*. New York: The New Press; 2001.
72. Jenson J. *Catching up to reality: building the case for a new social model*. In: *CPRN Social Architecture Papers*. Ottawa: Canadian Policy Research Networks; 2004.
73. Esping-Andersen G, ed. *Why we need a new welfare state*. Oxford, UK: Oxford University Press; 2002.
74. National Council of Welfare. *Poverty profile, 1999*. Ottawa: Minister of Public Works and Government Services; 2002.
75. National Council of Welfare. *Poverty profile, 2001*. Ottawa: Minister of Public Works and Government Services; 2004.
76. Wolfson MC, Rowe G, Gentleman JF, Tomiak M. *Career earnings and death: a longitudinal analysis of older Canadian men*. *J Gerontol* 1993;48:S167-79.
77. Lynch JW, Davey Smith G, Kaplan GA, House JS. *Income inequality and mortality: importance to health of individual income, psychosocial environment, or material conditions*. *Br Med J* 2000;320:1200-4.
78. Ecob R, Davey Smith G. *Income and health: what is the nature of the relationship?* *Soc Sci Med* 1999;48:693-705.
79. Geyer S, Peter R. *Income, occupational position, qualification and health inequalities—competing risks? (Comparing indicators of social status)*. *J Epidemiol Community Health* 2000;54:299-305.
80. Phipps S. *The impact of poverty on health: a scan of the research literature*. Ottawa: Canadian Institute for Health Information; 2003.
81. Power EM. *The determinants of healthy eating among low-income Canadians*. Scoping paper. Ottawa: Office of Nutrition Policy and Promotion, Health Canada; 2004.
82. Riches G. *Hunger in Canada: abandoning the right to food*. In: Riches G, ed. *First World hunger: food security and welfare politics*. London, UK: MacMillan Press Ltd/St Martin's Press, Inc; 1997. p. 46-77.
83. Riches G. *Food banks and food security: welfare reform, human rights and social policy*. *Lessons from Canada?* *Soc Policy Admin* 2002; 36(6):648-63.
84. Porter B. *The right to adequate housing in Canada*. In: Hulchanski D, Shapcott M, eds. *Finding room: policy options for a Canadian rental housing strategy*. Toronto: Centre for Urban and Community Studies; 2004. p. 69-79.
85. MacKinnon MP. *Citizens' values and the Canadian social architecture: evidence from the Citizens' Dialogue on Canada's Future*. Ottawa: Canadian Policy Research Networks; 2004.
86. Adams M. *Fire and ice: the United States, Canada and the myth of converging values*. Toronto: Penguin Canada; 2003.
87. Peters S. *Exploring Canadian values: foundations for well-being*. Ottawa: Canadian Policy Research Networks; 1995.
88. McIntyre L, Connor SK, Warren J. *Child hunger in Canada: results of the 1994 National Longitudinal Survey of Children and Youth*. *CMAJ* 2000;163(8):961-5.
89. Vozoris N, Tarasuk V. *Household food insufficiency is associated with poorer health*. *J Nutr* 2003;133(1):120-6.

90. McIntyre L, Glanville NT, Officer S, Anderson B, Raine KD, Dayle JB. Food insecurity of low-income lone mothers and their children in Atlantic Canada. *Can J Public Health* 2002;93(6):411-5.
91. Tarasuk V, Beaton G. Women's dietary intakes in the context of household food insecurity. *J Nutr* 1999;129:672-9.
92. Hamelin A-M, Habicht J-P, Beaudry M. Food insecurity: consequences for the household and broader social implications. *J Nutr* 1999;129:525S-8S.
93. Hamelin A-M, Beaudry M, Habicht J-P. La vulnérabilité des ménages à l'insécurité alimentaire. *Rev Can d'Études Développement* 1998;14:277-306.
94. Nord M, Brent CP. Food insecurity in higher income households. Washington, DC: USDA Economic Research Service; 2002.
95. Rose D. Economic determinants and dietary consequences of food insecurity in the United States. *J Nutr* 1999;129:517S-20S.
96. Participatory Food Security Projects, Phases I and II. Building food security in Nova Scotia: using a participatory process to collect the evidence and enhance the capacity of community groups to influence policy. Halifax, NS: Nova Scotia Nutrition Council and Atlantic Health Promotion Research Centre; 2004.
97. Vozoris N, Davis B, Tarasuk V. The affordability of a nutritious diet for households on welfare in Toronto. *Can J Public Health* 2002;93(1):36-40.
98. The cost of eating in BC. Vancouver: Canadian Association of Food Banks, Community Nutritionists Council of BC, and Dietitians of Canada; 2001.
99. The cost of eating in BC. Vancouver: Canadian Association of Food Banks, BB, Community Nutritionists Council of BC, and Dietitians of Canada; 2000.
100. The cost of eating in BC: the challenge of feeding a family on a low-income. Vancouver: Dietitians of Canada BC Region and Community Nutritionists Council of BC; 2002.
101. The cost of eating in BC: low-income families are more desperate than ever. Vancouver: Dietitians of Canada BC Region and Community Nutritionists Council of BC; 2003.
102. The cost of eating in BC—impact of a low-income on food security and health. Vancouver: Dietitians of Canada BC Region and Community Nutritionists Council of BC; 2004.
103. Travers KD, Cogdon A, McDonald W, Wright C, Anderson B, MacLean DR. Availability and cost of heart healthy dietary changes in Nova Scotia. *J Can Diet Assoc* 1997;58(4):176-83.
104. Indian and Northern Affairs Canada. Northern food basket. 2003. Available from: http://www.ainc-inac.gc.ca/ps/nap/air/Fruijui/NFB/nfb_e.html. Accessed 12 Apr 2004.
105. Dachner N, Tarasuk V. Homeless "squeegee kids": food insecurity and daily survival. *Soc Sci Med* 2002;54:1039-49.
106. Antoniadis M, Tarasuk V. A survey of food problems experienced by Toronto street youth. *Can J Public Health* 1998;89(6):371-5.
107. Hamelin A-M, Mercier C. Sécurité alimentaire et autonomie sociale des jeunes de la rue. *Cahier nutr publique* 2003;3.
108. Dobson B, Beardsworth A, Keil T, Walker R. Diet, choice and poverty: social, cultural and nutritional aspects of food consumption among low-income families. London, UK: Family Policy Studies Centre and the Joseph Rowntree Foundation; 1994.
109. Kendall A, Olson CM, Frongillo E Jr. Validation of the Radimer/Cornell measures of hunger and food insecurity. *J Nutr* 1995;125:2793-801.
110. Radimer KL, Olson CM, Campbell CC. Development of indicators to assess hunger. *J Nutrition* 1990;120:1544-8.
111. Radimer KL, Olson CM, Greene JC, Campbell CC, Habicht J-P. Understanding hunger and developing indicators to assess it in women and children. *J Nutr Educ* 1992;24:36S-45S.
112. Campbell C, Desjardins E. Managing limited food resources: strategies used by families with limited resources. Toronto: Department of Nutritional Sciences, University of Toronto; 1987.
113. Campbell C, Desjardins E. A model and research approach for studying the management of limited food resources by low-income families. *J Nutr Educ* 1989;21(4):162-71.
114. Tarasuk V, Maclean H. The food problems of low-income single mothers: an ethnographic study. *Can Home Econ J* 1990;40(2):76-82.
115. Hamelin AM, Beaudry M, Habicht JP. Characterization of household food insecurity in Quebec: food and feelings. *Soc Sci Med* 2002;54(1):119-32.
116. Travers KD. The social organization of nutritional inequities. *Soc Sci Med* 1996; 43(4):543-53.
117. Ahluwalia I, Dodds J, Baligh M. Social support and coping behaviors of low-income families experiencing food insufficiency in North Carolina. *Health Educ Behav* 1998;25(5):599-612.
118. Badun C, Evers S, Hooper M. Food security and nutritional concerns of parents in an economically disadvantaged community. *J Can Diet Assoc* 1995;56(2):75-80.
119. Dowler E, Calvert C. Nutrition and diet in lone-parent families in London. London, UK: Family Policy Studies Centre; 1995.
120. Durand-Gasselín S, Luquet F-M. La vie quotidienne autour de l'alimentation: les modes de vie, les représentations socio-culturelles et les comportements alimentaires de 55 familles à faibles revenus en banlieue parisienne. *Méd Nutr* 2000;1:40-52.
121. Fitchen J. Hunger, malnutrition, and poverty in the contemporary United States: some observations on their social and cultural context. In: Counihan C, van Esterik P, eds. *Food and culture: a reader*. New York: Routledge; 1997. p. 384-401.
122. Hitchman C, Christie I, Harrison M, Lang T. Inconvenience food: the struggle to eat well on a low income. London, UK: Demos; 2002.
123. Tarasuk V. Household food insecurity with hunger is associated with women's food intakes, health and household circumstances. *J Nutr* 2001;131(10):2670-6.
124. Tarasuk V, Beaton G. Household food insecurity and hunger among families using food banks. *Can J Public Health* 1999;90:109-13.
125. Wehler CA, Scott RI, Anderson JJ. The Community Childhood Hunger Identification Project: a model of domestic hunger-demonstration project in Seattle, Washington. *J Nutr Educ* 1992;24(1):29S-35S.
126. Quandt SA, Argury TA, Early J, Tapia J, Davis JD. Household food security among migrant and seasonal Latino farm workers in North Carolina. *Public Health Rep* 2004;119:568-76.
127. Indian and Northern Affairs Canada. Background: Food Mail program. Available from: http://www.ainc-inac.gc.ca/nr/pr/s-s-d2003/02409bk_e.html. Accessed 22 Aug 2004.
128. Simoneau N, Receveur O. Attributes of vitamin A- and calcium-rich food items consumed in K'asho Got'ine, Northwest Territories, Canada. *J Nutr Educ* 2000;32:84-93.
129. Receveur O, Kassi N, Chan HM, Berti PR, Kuhnlein HV. Yukon First Nations assessment of dietary benefit: risk. Montreal: Centre for Indigenous Peoples' Nutrition and Environment; 1998.
130. Wein EW. The traditional food supply of Native Canadians. *Can Home Econ J* 1994;44(2):74-7.

131. Kuhnlein HV, Moody SA. Evaluation of the Nuxalk food and nutrition program: traditional food use by a native Indian group in Canada. *J Nutr Educ* 1989;21:127-32.
132. Kuhnlein HV, Soueida R, Receveur O. Baffin Inuit food use by age, gender and season. *J Can Diet Assoc* 1995;56(4):175-83.
133. Kuhnlein HV, Soueida R, Receveur O. Dietary nutrient profiles of Canadian Baffin Island Inuit differ by food source, season and age. *J Am Diet Assoc* 1996;96:155-62.
134. Indian and Northern Affairs Canada. Canadian Arctic contaminants assessment report II. Ottawa: Minister of Public Works and Government Services Canada; 2003.
135. Michalski JH. Housing affordability, social policy and economic conditions: food bank users in the greater Toronto Area, 1990-2000. *Can Rev Sociol Anthropol* 2003;40(1):65-92.
136. Bhattacharya J, DeLeire T, Haider S, Currie J. Heat or eat? Cold-weather shocks and nutrition in poor American families. *Am J Public Health* 2003;93(7):1149-54.
137. Magnuson-Ford J, Bailey Harris E. ALL 2003: acceptable living level, Manitoba. Winnipeg: Winnipeg Harvest & the Social Planning Council of Winnipeg; 2003.
138. MacGregor S. Feeding families in Harris' Ontario: women, the Tsubouchi diet, and the politics of restructuring. *Atlantis* 1997;21(2):93-110.
139. Charles N, Kerr M. Women, food and families. Manchester: Manchester University Press; 1988.
140. DeVault M. Feeding the family: the social organization of caring as gendered work. In: Stimpson C, ed. *Women in culture and society*. Chicago: University of Chicago Press; 1991.
141. Edin K, Lein L. Making ends meet: how single mothers survive welfare and low-wage work. New York: Russell Sage Foundation; 1997.
142. Graham H. Being poor: perceptions and coping strategies of lone mothers. In: Brannen J, Wilson G, eds. *Give and take in families: studies in resource distribution*. London, UK: Allen & Unwin; 1987. p. 56-74.
143. Cristofar SP, Basiotis PP. Dietary intakes and selected characteristics of women ages 19-50 years and their children ages 1-5 years by reported perception of food sufficiency. *J Nutr Educ* 1992;24(1):53-8.
144. Kendall A, Olson C, Frongillo E. Relationship of hunger and food insecurity to food availability and consumption. *J Am Diet Assoc* 1996;96:1019-24.
145. Rose D, Oliveira V. Nutrient intakes of individuals from food-insufficient households in the United States. *Am J Public Health* 1997;87(12):1956-61.
146. Dixon LB, Winkleby M, Radimer K. Dietary intakes and serum nutrients differ between adults from food-insufficient and food-sufficient families: Third National Health and Nutrition Examination Survey, 1988-1994. *J Nutr* 2001;131:1232-46.
147. McIntyre L, Glanville NT, Raine KD, Dayle JB, Anderson B, Battaglia N. Do low-income lone mothers compromise their nutrition to feed their children? *CMAJ* 2003;168(3):686-91.
148. Jacobs Starkey L, Gray-Donald K, Kuhnlein H. Nutrient intake of food bank users is related to frequency of food bank use, household size, smoking, education, and country of birth. *J Nutr* 1999;129:883-9.
149. Jacobs Starkey L, Kuhnlein H. Montreal food bank users' intakes compared with recommendations of Canada's Food Guide to Healthy Living. *Can J Diet Prac Res* 2000;61(2):73-5.
150. Doran L, Evers S. Energy and nutrient inadequacies in the diets of low-income women who breast-feed. *J Am Diet Assoc* 1997;97:1283-7.
151. Klesges LM, Pahor M, Shorr RI, Wan JY. Financial difficulty in acquiring food among elderly disabled women: results from the Women's Health and Aging Study. *Am J Public Health* 2001;91(1):68-75.
152. Nelson K, Brown M, Lurie N. Hunger in an adult patient population. *JAMA* 1998; 279(15):1211-4.
153. Sun Lee J, Frongillo EA Jr. Nutritional and health consequences are associated with food insecurity among US elderly persons. *J Nutr* 2001;131:1503-9.
154. Poppendieck J. *Sweet charity? Emergency food and the end of entitlement*. New York: Viking; 1998.
155. Riches G. Food poverty and food justice: challenges and possibilities for social policy in the rich world. In: *Poverty, Food and Health in Welfare*, International Conference, Lisbon, Portugal, 2003.
156. Riches G. *Food banks and the welfare crisis*. Ottawa: Canadian Council on Social Development; 1986.
157. Oderkirk J. Food banks. *Can Soc Trends* 1992 Spring:6-14.
158. Wilson B, Tsoa E. *Hunger count 2001: food bank lines in insecure times*. Toronto: Canadian Association of Food Banks; 2001.
159. Tarasuk V, Maclean H. The institutionalization of food banks in Canada: a public health concern. *Can J Public Health* 1990;81 (Jul/Aug):331-2.
160. Poppendieck J. *Breadlines knee deep in wheat: food assistance in the Great Depression*. New Brunswick, NJ: Rutgers University Press; 1986.
161. DeVault M, Pitts J. Surplus and scarcity: hunger and the origins of the food stamp program. *Soc Problems* 1984;31(5):545-57.
162. Heimann C. *Perceptions of a problem. Report on hunger: trending update*. Toronto: Totum Research Inc; 2003.
163. Poppendieck J. Dilemmas of emergency food: a guide for the perplexed. *Agric Hum Values* 1994;11(4):69-76.
164. Tarasuk V, Eakin J. Charitable food assistance as symbolic gesture: an ethnographic study of food banks in Ontario. *Soc Sci Med* 2003; 56(7):1505-15.
165. Jacobs Starkey L. An evaluation of emergency food bags. *J Can Diet Assoc* 1994;4:175-8.
166. Teron A, Tarasuk V. Charitable food assistance: what are food bank users receiving? *Can J Public Health* 1999;90(6):382-4.
167. Kennedy A, Sheeshka J, Smedmor L. Enhancing food security: a demonstration support program for emergency food centre providers. *J Can Diet Assoc* 1992;53(4):284-7.
168. Tarasuk V. A critical examination of community-based responses to household food insecurity in Canada. *Health Educ Behav* 2001; 28(4):487-99.
169. Verpy H, Smith C, Reicks M. Attitudes and behaviors of food donors and perceived needs and wants of food shelf clients. *J Nutr Educ Behav* 2003;3:6-15.
170. Riches G. Responding to hunger in a wealthy society: Issues and options. *J Can Diet Assoc* 1989;50(3):150-4.
171. DeLind L. Celebrating hunger in Michigan: a critique of an emergency food program and an alternative for the future. *Agric Hum Values* 1994;11(4):58-68.
172. Poppendieck J. *Want amid plenty: from hunger to inequality*. *Monthly Rev* 1998; 50(3):125-36.
173. Curtis K. Urban poverty and the social consequences of privatized food assistance. *J Urban Affairs* 1997;10:207-26.
174. Kerr G. What's going on with food banks? *Perception* 1993;17(2):17-8.
175. Hobbs K, MacEachern W, McIvor A, Turner S. Waste of a nation: poor people speak out about charity. *Can Rev Soc Policy* 1993;31:94-107.
176. Tarasuk V, Beaton GH, Geduld J, Hilditch S. *Nutritional vulnerability and food insecurity among women in families using food banks*. Toronto, ON: Department of Nutritional Sciences, University of Toronto; 1998.

177. Kalina L. Building food security in Canada: from hunger to sustainable food systems: a community guide. 2nd ed. Kamloops, BC: Kamloops FoodShare; 2001.
178. Armstrong D. A survey of community gardens in upstate New York: implications for health promotion and community development. *Health Place* 2000;6:319-27.
179. Hoisington A, Butkus S, Garrett S, Beerman K. Field gleaning as a tool for addressing food security at the local level: case study. *J Nutr Educ* 2001;33:43-8.
180. Blair D, Giesecke C, Sherman S. A dietary, social and economic evaluation of the Philadelphia Urban Gardening Project. *J Nutr Educ* 1991;23(4):161-7.
181. Edward HG, Evers S. Benefits and barriers associated with participation in food programs in three low-income Ontario communities. *Can J Diet Prac Res* 2001; 62(2):76-81.
182. Crawford S, Kalina L. Building food security through health promotion. *J Can Diet Assoc* 1997;58(4):197-201.
183. Tarasuk V, Reynolds R. A qualitative study of community kitchens as a response to income-related food insecurity. *Can J Diet Prac Res* 1999;60(1):11-6.
184. Fano TJ, Tyminski S, Flynn MAT. Evaluation of a collective kitchen program: using the population health promotion model. *Can J Diet Prac Res* 2004;65(2):72-80.
185. Racine S, St-Onge M. Les cuisines collectives: une voie vers la promotion de la santé mentale. *Rev Can Santé Mentale Communautaire* 2000; 19(1):37-62.
186. Martin KS, Rogers BL, Cook JT, Joseph HM. Social capital is associated with decreased risk of hunger. *Soc Sci Med* 2004;58:2645-54.
187. Papamandjaris A. Breakfast and learning in children: a review of the effects of breakfast on scholastic performance. North York, ON: Breakfast for Learning, Canadian Living Foundation; 2000.
188. Hay D. School-based feeding programs: a good choice for children? Victoria, BC: Information Partnership; 2000.
189. Hyndman B. Feeding the body, feeding the mind: an overview of school-based nutrition programs in Canada. North York, ON: Breakfast for Learning, Canadian Living Foundation; 2000.
190. McIntyre L, Raine K, Dayle J. The institutionalization of children's feeding programs in Atlantic Canada. *Can J Diet Prac Res* 2001; 62(2):53-7.
191. McIntyre L, Dayle JB. Exploratory analysis of children's nutrition programs in Canada. *Soc Sci Med* 1992;35(9):1123-9.
192. Vozoris N, Tarasuk V. Prenatal and child nutrition programs in relation to food insecurity. *Can Rev Soc Policy* 2003;51:67-86.
193. Monahan H. A national scan relating to school-based feeding programs. Halifax, NS: Nova Scotia Office of Health Promotion; 2004.
194. Raine K, McIntyre L, Dayle J. The failure of charitable school- and community-based nutrition programs to feed hungry children. *Crit Public Health* 2003;13(2):155-69.
195. Battle K, Torjman S. The post-welfare state in Canada: income-testing and inclusion. Ottawa: Caledon Institute of Social Policy; 2001.
196. Dayle JB, McIntyre L, Raine-Travers KD. The dragnet of children's feeding programs in Atlantic Canada. *Soc Sci Med* 2000;51(12):1783-93.
197. Kids Eat Smart Foundation. N.L. Available from: http://www.kidseatsmart.ca/why_your_school.html. Accessed 24 Oct 2004.
198. Peterborough County-City Health Unit. Peterborough county and city schools alive with healthy eating activities. Available from: <http://www.pcchu.peterborough.on.ca/goodfood.thm#why%20local>. Accessed 24 Oct 2004.
199. Hay D. School food programs: a good choice for children? *Perception* 2000; 24(4):3-6.
200. Hyman I, Guruge S, Makarchuk M-J, Cameron J, Micevski V. Promotion of healthy eating among new immigrant women in Ontario. *Can J Diet Prac Res* 2002;63(3):125-9.
201. Hungry children in the classroom. In: *Healthy bites*. Ottawa: National Institute of Nutrition; 1993.
202. Pollack B. A crucial link: without healthy nutrition, student learning goes hungry. *OPHEA J* 1998 Spring:4-7.
203. Yaffe B, Timmings C. 2004 budget briefing note. Consolidated grants—enhanced funding for student nutrition programs. Toronto: Toronto Public Health; 2004. Available from: http://www.city.toronto.on.ca/budget2004/budgetbriefingnotes_04.htm
204. Breakfast for Learning. Available from: <http://www.breakfastforlearning.ca/english/index.html>. Accessed 24 Oct 2004.
205. McIntyre L, Travers K, Dayle J. Children's feeding programs in Atlantic Canada: reducing or reproducing inequities. *Can J Public Health* 1999;90(3):196-200.
206. Williams PL, McIntyre L, Dayle JB, Raine K. The "wonderfulness" of children's feeding programs. *Health Promot Int* 2003;18(2):163-70.
207. Dayle J, McIntyre L. Children's feeding programs in Atlantic Canada: Foucauldian theoretical concepts in action. *Soc Sci Med* 2003;57:313-25.
208. National Council of Welfare. Child benefits: a small step forward. Ottawa: Minister of Supply and Services Canada; 1997.
209. National Council of Welfare. Child poverty profile. Ottawa: Ministry of Public Works and Government Services Canada; 2001.
210. McIntyre L, Walsh G, Connor S. A follow-up study of child hunger in Canada. Ottawa: Human Resources Development Canada, Applied Research Branch Strategic Policy; 2001.
211. Callaghan M, Farha L, Porter B. Women and housing in Canada: barriers to equality. Toronto: Centre for Equality Rights in Accommodation; 2002. Available from: <http://www.equalityrights.org/cera/docs/barrchp4.htm>
212. Health Canada. Canada Prenatal Nutrition Program (CPNP). 2002. Available from: http://www.hc-sc.gc.ca/dca-dea/programs-mes/cpnp_goals_e.html. Accessed 26 Oct 2004.
213. Health impacts of social and economic conditions: implications for public policy. Ottawa: Canadian Public Health Association; 1997.
214. National Forum on Health Care. Canada health action: building on the legacy. Ottawa: Minister of Public Works and Government Services; 1997.
215. Government of Ontario. Wealth and health, health and wealth. Toronto: Queen's Printer for Ontario; 1994.
216. Federal Provincial and Territorial Advisory Committee on Population Health. Toward a healthy future: second report on the health of Canadians. Ottawa: Minister of Public Works and Government Services Canada; 1999.
217. Sidel VW. Annotation: the public health impact of hunger. *Am J Public Health* 1997;87(12):1921-2.
218. Carlisle S. Health promotion, advocacy and health inequalities: a conceptual framework. *Health Promot Int* 2000;15(4):369-76.
219. Williamson DL. The role of the health sector in addressing poverty. *Can J Public Health* 2001;92(3):178-83.
220. Raphael D. Barriers to addressing the determinants of health: public health units and poverty in Ontario, Canada. *Health Promot Int* 2003;18:415-23.
221. Labonte R. Health promotion and empowerment: reflections on professional practice. *Health Educ Q* 1994;21(2):253-68.

222. Avery B, Bashir S. The road to advocacy—searching for the rainbow. *Am J Public Health* 2003;93(8):1207-10.
223. Christoffel KK. Public health advocacy: process and product. *Am J Public Health* 2000;90(5):722-6.
224. Cook JT. Clinical implications of household food security: definitions, monitoring, and policy. *Nutr Clin Care* 2002;5(4):152-67.
225. Aldrich R, Kemp L, Williams JS, et al. Using socioeconomic evidence in clinical practice guidelines. *Br Med J* 2003;327:1283-5.
226. Raphael D. When social policy is health policy: why increasing poverty and low income threatens Canadians' health and health care system. *Can Rev Soc Policy* 2003;51:9-28.
227. Tarasuk V. Advocacy: our professional responsibility. *ONE Bull* 1995;14(3):7.
228. Interfaith Social Assistance Reform Coalition. *Lives in the balance: Ontario's social audit*. Kitchener, ON: Pandora Press; 2004.
229. Campaign 2000: end child poverty in Canada. Available from: <http://www.campaign2000.ca>
230. Auger N, Raynault M-F, Lessard R, Choinière R. Income and health in Canada. In: Raphael D, ed. *Social determinants of health: Canadian perspectives*. Toronto: Canadian Scholars' Press Inc; 2004. p. 39-52.
231. Burström B, Diderichsen F, Shouls S, Whitehead M. Lone mothers in Sweden: trends in health and socio-economic circumstances 1979-1995. *J Epidemiol Community Health* 1999;53:750-6.
232. Whitehead M, Burström B, Diderichsen F. Social policies and the pathways to inequalities in health: a comparative analysis of lone mothers in Britain and Sweden. *Soc Sci Med* 2000;50(2):225-70.
233. Whitehead M, Diderichsen F, Burström B. Researching the impact of public policy on inequalities in health. In: Graham H, ed. *Understanding health inequalities*. Buckingham, UK: Open University Press; 2001. p. 203-18.
234. Navarro V, Shi L. The political context of social inequalities and health. *Int J Health Serv* 2001;31(1):1-21.
235. Navarro V, Borrell C, Benach J, et al. The importance of the political and the social in explaining mortality differentials among the countries of the OECD, 1950-1998. *Int J Health Serv* 2003;33(3):419-94.
236. Doran T, Whitehead M. Do social policies and political context matter for health in the United Kingdom? *Int J Health Serv* 2003;33(3):495-522.
237. Hubay S, Powell J. Community mobilization to address food security issues. Presented at: *Crossing Borders: Food and Agriculture in the Americas Conference*, Toronto, 4 Jun 1997.
238. Travers KD. "Do you teach them how to budget?" Professional discourse in the construction of nutritional inequities. In: Maurer D, Sobal J, eds. *Eating agendas: food and nutrition as social problems*. Hawthorne, NY: Aldine de Gruyter; 1995. p. 213-40.
239. Travers KD. Reducing inequities through participatory research and community empowerment. *Health Educ Behav* 1997;24(3):344-56.
240. Travers KR. Nutrition education for social change: critical perspective. *J Nutr Educ* 1997;29(2):57-62.
241. Fay J. You can't check your power and privilege at the door: some lessons in post-modern social justice coalition-building. *Can Rev Soc Policy* 2003;52:139-43.

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