The Affordability of Healthy Eating in Alberta

2015

Alberta Health Services

Prepared by Registered Dietitians at Alberta Health Services with contributions from several Alberta Health Services departments and from stakeholders within other sectors. We wish to thank our numerous reviewers and contributors for their input and support.

How to cite this document: Alberta Health Services. (2017). *The affordability of healthy eating in Alberta 2015.* Available from http://www.albertahealthservices.ca/assets/info/nutrition/if-nfs-affordability-of-healthy-eating.pdf

This document is part of a series that consists of two reports, a backgrounder and three appendices. You can locate all of these documents at http://www.albertahealthservices.ca/services/page15189.aspx

If you have any comments or questions about the information in this document, please contact PublicHealthNutrition@ahs.ca

THE AFFORDABILITY OF HEALTHY EATING IN ALBERTA 2015

Purpose

This report aims to promote collaborative action among decision makers from sectors who can influence and reduce the health inequities faced by populations at higher risk for household food insecurity (HFI). The report is part of a series of documents that provides an analysis of the cost and affordability of healthy eating in Alberta, as well as an overview of the causes, prevalence and impacts of HFI. The target audiences include health practitioners, leaders and decision-makers in relevant government, private, health and non-profit sectors.

While the information in *The Affordability of Healthy Eating in Alberta* is of significance to all Albertans, it does not provide specific actions for individual citizens or guidance for food insecure households. Instead, the report outlines actions that various sectors could pursue to help reduce the socioeconomic barriers faced by food insecure households. These recommendations apply current evidence to illustrate ways that different stakeholders could support and interact with populations at higher risk for HFI. The report also presents hypothetical scenarios to demonstrate why HFI is a complex health equity issue that cannot be solved through food based responses.

Nearly 110,000 households in Alberta are forced to compromise food quality, eat smaller portions than they need, skip meals or go an entire day without food because they lack adequate economic resources.

Introduction

In Canada, HFI is described as "inadequate or insecure access to food because of financial constraints."[1] A growing body of research clearly demonstrates that HFI has a significant negative impact on healthcare costs and the physical and mental well-being of food insecure Canadians across all age groups.[2] *The Affordability of Healthy Eating in Alberta* illustrates how specific individuals and families at greater risk for HFI cannot afford to follow a basic, healthy diet and pay for all of their other essential living expenses.

Article 25 of the United Nations' Universal Declaration of Human Rights states that "Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food."[5] It is important to distinguish that a person's 'right to food' is not the same as a 'right to be fed' by institutions or charitable associations. Instead, all people should have reasonable physical and economic access to an adequate amount of food so they can satisfy their own health and cultural needs.[6] Nevertheless, nearly 110,000 households in Alberta are forced to compromise food quality, consume inadequate amounts, skip meals or go an entire day without eating because they lack sufficient financial resources.[7-9]

Household income is the strongest single predictor of HFI in Canada and individuals and families who live in poverty are at significantly higher risk of facing the harmful health and social consequences of a poor diet.[10,11] Moreover, by the time people begin to experience food insecurity, they also typically face significant struggles to pay for other basic needs such as housing, transportation and utilities.[1,12-14]

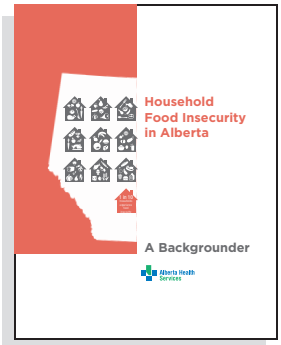
The experience of HFI is much more complex than popular media discourse which tends to oversimplify the issue as 'hunger'. Although many food insecure people in Canada can relate to the concept of hunger as "a feeling of discomfort or weakness caused by lack of food",[15] they also face a number of other adverse effects that extend well beyond unpleasant physical symptoms. In general, food insecure households encounter a wide range of mental, social and physical challenges that fall into one or more of the following areas:[16]

- psychological distress about the ability to obtain enough food on a consistent basis through dignified means
- stigma around acquiring food through charitable means, such as food banks, free meal services and community food programs
- dietary monotony and deprivation due to insufficient money to buy adequate food
- compromised food quality as a means of minimizing and controlling household costs

Compared to the rates of diet-related chronic conditions among the food secure population, adults who live in severely food insecure households appear to be:[2]

- three times more likely to suffer from multiple chronic conditions
- four times more susceptible to heart disease
- twice as likely to have diabetes if they are women and nearly four times more likely if they are men
- three times more prone to migraine headaches if they are men and five times more prone if they are women

The magnitude and impact of HFI in Alberta is outlined in more detail within *Household Food Insecurity in Alberta: A Backgrounder.* Food insecure households try to cope through strategies that manage income, yet many are also forced to survive through strategies that impact their nutritional intake.[17] In an attempt to access enough food without adequate income, individuals and households invest significant energy into a range of stressful tactics, such as:[12,18,19]



- cancelling services for household utilities
- selling personal possessions
- delaying bill payments and facing interest charges
- paying only the minimum balance on household bills to prevent termination of services
- borrowing money or food
- trying to protect young children by decreasing the food portions of older children and adults (particularly mothers)
- skipping meals
- reducing the size of meals
- eating nothing for extended periods of time
- eating excessive amounts of food when it is available
- using less expensive food items – such as flour – as "fillers"
- relying on a limited range of lower quality, lower cost foods
- buying less meats, milk, fruit and vegetables

There is strong evidence that any experience of food insecurity – be it marginal, moderate or severe – is associated with adverse health outcomes across all age groups.[1] A recent examination of the results of the Canadian Community Health Survey (CCHS) between 2003 and 2006 suggests that adults who live in food insecure households are nearly 50% more likely to become frequent users of healthcare compared to their food secure counterparts.[20] Moreover, adults who experience severe food insecurity incur as much as 121% more annual healthcare costs than food secure adults, presumably due to insufficient financial resources to meet their food and healthcare needs.[21] To improve the well-being of the entire population, key players across multiple sectors need to coordinate their efforts to identify and address the socioeconomic barriers that lead food insecure Albertans to serious and avoidable health concerns.

There is strong evidence that any experience of food insecurity – be it marginal, moderate or severe – is associated with adverse health outcomes across all age groups.[1,]

An analysis of the affordability of healthy food

The following analysis explores whether households at higher risk for HFI have enough income to follow a nutritious diet *after* they have paid for other basic household expenses. *The Selection of Household Profiles* outlines the method used to design four fictional profiles that represent generic scenarios for populations in Alberta who are statistically more vulnerable to food insecurity. There is also a fifth profile that demonstrates how current national, provincial and municipal policies have helped reduce the rate of HFI among low income seniors by protecting and improving their financial resources. All of the profiles in the analysis portray just one hypothetical scenario and are not intended to represent the experience of every household living in similar circumstances across the province.

The profiles in the analysis depict:

- fictitious scenarios based on populations in Alberta who are statistically more vulnerable to food insecurity
- a health concern that is negatively impacted by HFI
- estimated costs of basic household expenses based on Living Wage initiatives within Grande Prairie, Edmonton and Red Deer
- a conservative estimate of household food expenses based on *The Cost of Healthy Eating in Alberta*
- how vulnerable households may experience food insecurity

The analysis identifies a specific community for each of the profiles because household expenses and government benefits vary by geographical location across the province. *The Determination of Household Profile Incomes* describes the process used to estimate each profile's total monthly income, including wages, subsidies and taxable and non-taxable benefits. *The Cost of Healthy Eating in Alberta* provides a conservative estimate of household food expenses within each profile's specific community based on the cost of the Alberta Nutritious Food Basket. The 2015 Alberta Living Wage campaigns for Grande Prairie, Edmonton and Red Deer provide estimated costs for the following list of remaining household expenses:

- transportation
- rental housing
- clothing
- healthcare expenses
- emergency savings or contingency fund
- other household expenses (e.g., utilities, personal care items, bank fees, furnishings, cleaning products)
- social inclusion (e.g., Internet, cable, cellular phone plan, small gifts, reading materials, participation in a limited amount of recreation and adult education opportunities)

It is important to note that an affordability analysis cannot determine a maximum food spending threshold expressed as a percentage of household income. This is a common approach for conventional housing advice that cautions Canadians to spend no more than 30% of before-tax income on rent[22] or 32% of gross monthly income on home ownership.[23] However, the estimated cost of a basic, healthy

diet for a specified individual or household is always an *absolute* dollar amount *regardless of income.* Physiological nutrition requirements are determined by biology, not socioeconomic status. Therefore, it is inappropriate to recommend a minimum or maximum percentage of income that Canadian households should dedicate to healthy food.

Profile 1: Family of four

- Sally, 32 years old
- Jake, 33 years old
- Carl, 9 years old
- Martha, 4 years old
- Live in Grande Prairie in a rented, three-bedroom townhouse
- Jake works 40 hours per week through part-time and seasonal positions in both construction and oilfield operations

Estimated monthly income	**$3,581.17**
Income sources*	
Wages	
Family Tax Cut	
Universal Child Care Benefit	
Canada Child Tax Benefit	
Alberta Family Employment Tax Credit	
Goods and Services Tax Credit	
Ineligible income sources*	
Alberta Child Health Benefit	
Employer Health Benefits	
Direct to Tenant Rent Supplement Program	
Estimated monthly expenses	**-$3,604.16**
Shelter	$1,304.25
Transportation	$796.83
Clothing	$156.83
Social inclusion	$582.00
Contingency fund	$231.33
Other household costs	$221.67
Healthcare costs	$311.25
Balance before food costs	**-$22.99**
Estimated food costs	**-$1084.82**
Total household deficit	**-$1,107.81**

Jake and Sally represent the nearly one in seven Albertan couples with two children whose life circumstances require them to live on one income.[24] In 2014, Alberta had the highest proportion of single-earner couples in the country, and the parent who was not active in the workforce tended to be a stay-at-home mother who had at least one child under the age of five.[25] Jake's work requires him to be out of town for unpredictable and variable periods of time, so Sally typically manages all of the family and household duties on her own. She is not currently employed outside of the home because childcare for Martha and after-school care for Carl would easily consume the modest earnings she could acquire from the low-wage job

Physiological nutrition requirements are determined by biology, not socioeconomic status. Therefore, it is inappropriate to recommend a minimum or maximum percentage of income that Canadian households should dedicate to healthy food.

Nearly eight out of 10 food insecure households across Alberta rely on employment earnings as their primary source of income, yet still cannot afford enough food for each person in the home.[1, 26]

opportunities available to her. Sally also needs to provide extra care to Carl when he needs to stay home from school due to persistent asthma.

Even with the equivalent of one full-time income and no childcare expenses, Sally and Jake do not have enough financial resources to pay for healthy food, their son's asthma medication and other basic household costs. Under these circumstances, the entire family experiences ongoing psychological stress caused by social and material deprivation and the need to reduce both the quantity and the quality of food they consume.

Profile 2: Lone mother with one child

- Lauren, 27 years old
- Jane, 4 years old
- Live in Edmonton in a rented, one-bedroom apartment
- Lauren receives Income Support, basic health coverage and a housing subsidy as a client who is available for work or training
- Lauren has celiac disease and receives Special Diets funding to help with the higher cost of gluten-free foods

Across Canada, households led by lone mothers experience severe food insecurity at nearly six times the rate of two-parent families or lone fathers.[1]

Lauren's partner died unexpectedly three years ago and she has not been able to secure work that would cover all of her household and childcare costs. She plans to re-enter the work force once her daughter begins school and requires less childcare. She has applied for Social Housing to help cover the costs of her housing and utilities so she will have enough money to buy healthy food. She is currently on the wait list for this benefit due to the limited number of units that are available

Estimated monthly income	**$1,467.25**
Income sources*	
Income Support Benefit	
Universal Child Care Benefit	
Canada Child Tax Benefit	
National Child Benefit Supplement	
Goods and Services Tax Credit	
Special Diets Funding	
Estimated monthly expenses	**-$1,579.66**
Shelter*	$447.97
Transit	$89.00
Clothing	$114.00
Social inclusion	$291.16
Contingency fund	$56.38
Other household costs	$479.15
Healthcare costs	$102.00
Balance before food costs	**-$112.41**
Estimated food costs	**-$477.16**
Total household deficit	**-$589.57**

*This household is eligible for a social housing subsidy, which limits rent to no more than 30% of total income.

for the large number of households in Alberta who require this type of support (see *The Determination of Household Profile Incomes* for more information).

Despite the many benefits Lauren can access, she still does not have enough income to pay for healthy food and all of her basic household needs. She experiences constant anxiety about her ability to provide for her daughter and she frequently restricts her food intake and skips meals when there is not enough food in the house. She cannot afford a basic, healthy diet and must often feed Jane low cost foods of poor nutrition quality.

Profile 3: Single female

- Lily, 29 years old
- Single
- Diagnosed with Type 1 diabetes at eight years old
- Lives in Edmonton in a rented, one-bedroom apartment
- Works 40 hours per week for minimum wage in the retail service industry
- Enrolled part-time in a healthcare aide training program
- Not yet approved for the Direct to Tenant Rent Supplement Program since priority is based on an applicant's capacity to care for themselves as outlined in the Alberta Housing Act (see *The Determination of Household Profile Incomes* for more information)

Estimated monthly income	**$1,596.72**
Income sources*	
Wages	
Goods and Services Tax Credit	
Alberta Adult Health Benefit	
Ineligible income sources*	
Special Diets Funding	
Employer Health Benefits	
Estimated monthly expenses	**-$1,946.59**
Shelter	$1,004.00
Transit	$89.00
Clothing	$82.02
Social inclusion	$291.16
Contingency fund	$51.22
Other household costs	$343.19
Healthcare costs	$86.00
Balance before food costs	**-$349.87**
Estimated food costs	**-$285.78**
Total household deficit	**-$534.21**

- Lily's basic healthcare plan covers $600 of her diabetes supplies each year,[28] but this is not enough to ensure she can follow her treatment plan. Her health providers suggested she use an insulin pump for

In 2012, nearly one in six unattached Canadian adults experienced food insecurity, compared to only one in approximately 18 couples.[1] The rate of poverty among single adults in Alberta was greater than one in four in 2013, whereas the same was true for just one in 16 couples.[27]

improved blood sugar control, but she declined under the false pretense that it would be "too complicated." In truth, although she is eligible for additional support through the Insulin Pump Therapy Program,[29] she worries that she would face lost wages and increased costs in order to comply with more intensive follow up with her care team.

Lily has no money for food after paying for basic household expenses. Like many food insecure adults with diabetes, she tries to lower her medical supply expenses by re-using needles for insulin injections and by monitoring her blood glucose levels less often.[30] She also restricts her intake and skips meals or snacks, even though she must then manipulate her insulin to prevent hypoglycemia. She accesses free meal services in the community once she runs out of food, but these offerings seldom meet the nutrition recommendations to manage her diabetes.

Although the probability of living in a food insecure household is higher for females than males, unattached men experience HFI at the same rate as unattached women across Canada.[31]

Profile 4: Single male

- Mike, 25 years old
- Single
- Lives in Grande Prairie in a rented bachelor suite
- Works 40 hours per week for minimum wage as a full-time security officer
- Not yet approved for the Direct to Tenant Rent Supplement Program since priority is based on an applicant's capacity to care for themselves as outlined in the Alberta Housing Act (see *The Determination of Household Profile Incomes* for more information)

Estimated monthly income	**$1,546.72**
Income sources*	
Wages	
Goods and Services Tax Credit	
Alberta Adult Health Benefit	
Ineligible income sources*	
Special Diets Funding	
Employer Health Benefits	
Estimated monthly expenses	**-$1,687.66**
Shelter	$847.25
Transit	$114.00
Clothing	$78.42
Social inclusion	$344.08
Contingency fund	$86.75
Other household costs	$109.08
Healthcare costs	$108.08
Balance before food costs	**-$140.94**
Estimated food costs	**-$378.18**
Total household deficit	**-$519.12**

Despite full-time employment, Mike does not have enough money to eat regularly, let alone follow a basic, healthy diet. He finds it challenging to prepare meals because his

kitchen is only equipped with a small fridge, a sink and a double-burner hot plate. He also has a milk allergy and struggles to find inexpensive, dairy-free products that fit within his constrained finances. He does not want to access the food bank because a former high school teacher volunteers there and most of the food donations are not dairy-free. Thus, he tends to eat the same, low cost convenience foods every day and tries to fill up on the free dessert and snack items that are sometimes offered to him at work.

Profile 5: Single senior female

- Charlotte, 68 years old
- Widowed
- Lives in Red Deer in a subsidized, one-bedroom apartment
- Retired

Charlotte and her late husband had to sell their home and deplete their RRSPs to cover uninsured medical expenses during his lengthy health treatments before he passed away. Although Charlotte must manage her finances carefully, she can currently afford a healthy diet and maintain a basic level of economic security as defined by Living Wage Canada. The current blend of federal and provincial benefits protects her from HFI, so long as she does not face significant financial shocks or emergency expenses in the future.

Estimated monthly income	**$2,219.67**
Income sources*	
Canada Pension Plan	
Old Age Security	
Survivor's Pension	
Alberta Seniors Benefit	
Dental and Optical Assistance for Seniors	
Seniors' Self-Contained Housing Program	
Estimated monthly expenses	**-$1,522.42**
Shelter*	$688.84
Transit	$125.00
Clothing	$78.58
Social inclusion	$348.67
Contingency fund	$68.08
Other household costs	$109.25
Healthcare costs	$104.00
Balance before food costs	**$697.25**
Estimated food costs	**-$240.91**
Remaining Income	**$456.34**

*This household is eligible for the provincial Seniors' Self-Contained Housing Program, which limits rent to no more than 30% of total income.

The programs and benefits that are available to eligible seniors are effective in helping reduce severe financial hardship. However, had Charlotte not been married (or common-law), her monthly income

More than half of all senior women in Alberta are widowed or unattached, and as many as 80% of them live alone.[32]

would be lower because she would not receive the survivor's pension.[33] She would also not receive the maximum CPP payment because she did not earn enough during her career in low wage jobs to reach the yearly maximum pensionable earnings.[34] Single, divorced or low income seniors are more likely to receive less financial protection than their married, common-law, widowed and higher income counterparts.

Conventional responses to household food insecurity

Many community and health agencies have established responses to HFI that encourage clients to improve their competency in areas such as nutrition knowledge, grocery budgeting, cooking skills and gardening. Many sectors also invest considerable energy, labour and money into charitable supports such as food banks, collective kitchens, free food hampers, subsidized fruit and vegetable boxes, community and school food programs and free meal services. Research suggests that collective kitchens and community gardens can help improve skill development and increase social engagement for participants from *any* socioeconomic background who actively seek these types of opportunities.[35-37] However, studies show that all of these food-centred responses have very limited impact on the rate and consequences of HFI because they:

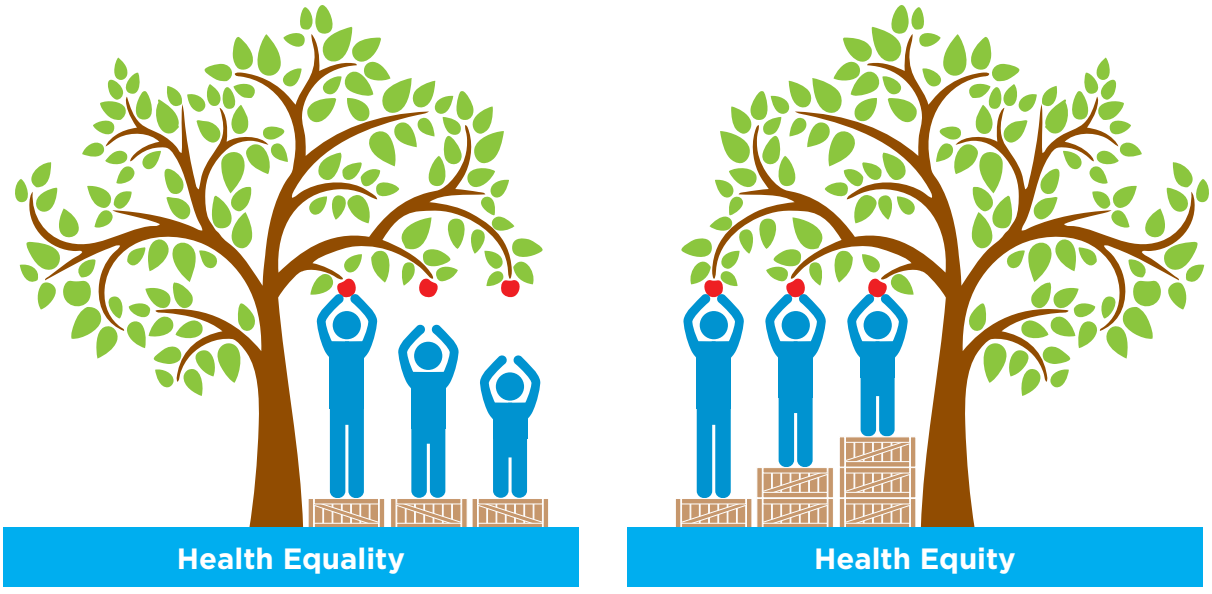
- produce minimal or no positive impact on income and the difficult experiences of HFI.[35,36,38-41]
- perpetuate health inequities by circumventing the systemic obstacles that disadvantaged groups do not have the power to change.[42,43]
- often require food insecure households to engage in a separate food system from the rest of society with little to no choice over the type and quality of food they can access.[43,44]
- generate no long-term reprieve from economic scarcity, social disadvantage and the psychological stress of HFI.[36,40,41,43]
- often do not become a viable option until a household faces the deprivation of *severe* food insecurity.[43,45-47]

This does not imply that compassionate agencies and organizations should stop dedicating resources to support food insecure populations. Instead, it is a call for all sectors to collaborate and respond more effectively through coordinated actions that directly acknowledge and address the underlying economic and social inequities which lead to HFI. While it is ideal to move action further upstream, all sectors can also create or adapt downstream approaches to better reduce vulnerability to HFI and other conditions of social disadvantage.[48]

An equitable response to household food insecurity

The terms 'health equality' and 'health equity' are often used interchangeably, yet there are important distinctions between these concepts. The degree of healthy *equality* among individuals and groups is influenced by their inherent differences in factors such as genetics, social and physical environments, community resources, geographical location and health behaviours.[49,50] Health *equity,* on the other hand, is a measure of fairness around the opportunity to achieve one's full health potential without facing unnecessary or discriminatory barriers related to race, ethnicity, religion, sex, age, social class, socioeconomic status, sexual orientation or physical ability.[51]

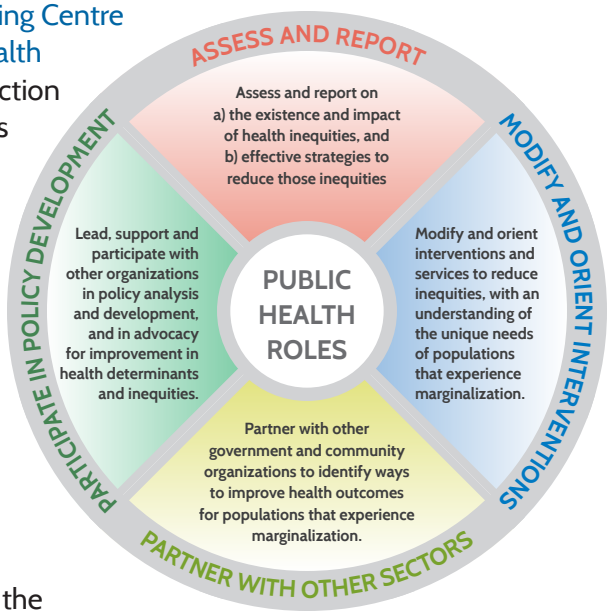
HFI is largely an issue of inequity and it is essential to level up the opportunities and supports for food insecure individuals to ensure they have equal ability to achieve and sustain optimal social and physical well-being.[51-53] Collaboration between public health, primary care, acute care, government, social services, and corporate and academic sectors could better promote health equity among Albertans at risk for HFI. A cross-sector effort could help shift or create economic, health and social policies that ensure all Albertans have enough money to meet their own nutrition needs.



Reprinted with permission from the Saskatoon Health Region: http://www.communityview.ca/infographic_SHR_health_equity_2014.html

Health equity guidance

The National Collaborating Centre for Determinants of Health (NCCDH) endorses an action framework that provides guidance on how to develop approaches that create equitable health opportunities for everyone. The framework recommends aligning the following key stakeholder roles with specific categories of action:[54]



1. ***Assess and report*** on the prevalence of health inequities and on any evidence or promising practices that help address these inequities.

2. ***Modify and orient interventions*** and services to better incorporate an understanding of the unique needs and struggles of marginalized individuals and populations.

3. ***Partner with other sectors*** to minimize or remove complex barriers that have a negative effect on health.

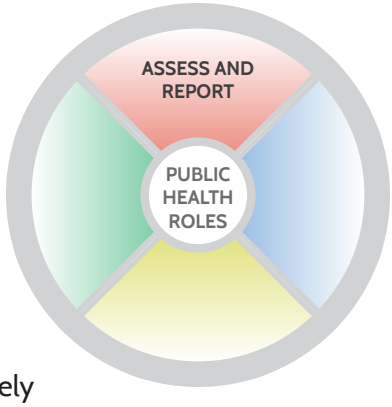
4. ***Participate in policy development*** through advocacy and sharing evidence and information.

The Public Health Agency of Canada (PHAC) designed an evidence-based practice tool to help guide the development of equity-sensitive interventions and approaches.[48] This tool illustrates the common 'stream' analogy as a way to classify cross-sector efforts that aim to impact population health. Upstream actions create shifts in social, economic, legal and political contexts, policies and norms to ensure all members of society have equitable access to health-promoting opportunities. Midstream interventions act on the environments where people live, work, learn and play to make healthy behaviours easier and more sustainable for everyone. Downstream approaches support individual behavior change and skill development or provide services and supports that minimize or prevent further harm and illness. The tool emphasizes the need to design *all* interventions – regardless of their position along the stream – in a way that promotes the fair distribution of those conditions which foster well-being among the entire population.

Actions to promote health equity

The NCCDH framework and the PHAC tool guided the development of the recommended actions outlined in this section. Although the framework and tool are intended for use within a public health context, they have been adapted to identify potential opportunities that cross many other sectors. Some of the following suggestions present broad strategies that could help promote health equity and reduce HFI across the province. Others illustrate specific approaches that may help address the socioeconomic barriers faced by individuals who experience food insecurity in Alberta. Stakeholders from all sectors can undoubtedly identify many other ways to help promote health equity for at-risk populations.

Assess population inequities and report effective strategies to promote health equity



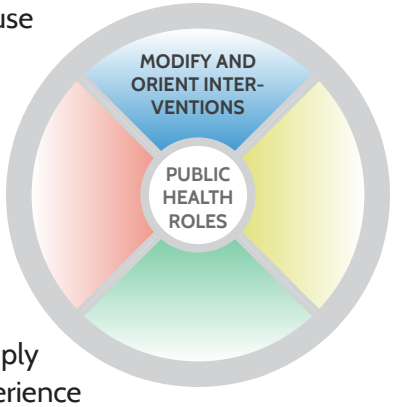
Since 2005, the provincial government has monitored the prevalence of HFI in Alberta on an annual basis through the Canadian Community Health Survey. These statistics have made it possible to examine the relationship between socioeconomic inequities and the risk for food insecurity at the household level. This data also serves as a key indicator to help evaluate whether new or revised policies and programs effectively prevent or reduce HFI.[55] Quality evidence of this nature helps guide and strengthen action on upstream policy recommendations and other approaches that aim to reduce inequities.[56] Table 1 outlines cross-sector actions that can help promote health equity for food insecure populations.

The Government of Alberta has demonstrated commitment to monitor the prevalence of HFI across the province over time by including the Household Food Security Survey Module as an optional component of the 2013 and 2014 cycles of the Canadian Community Health Survey (CCHS). This uninterrupted series of data will provide greater insight into any changes in the patterns of HFI prevalence across Alberta.[55] The CCHS also collects household sociodemographic characteristics that facilitate more effective identification of the social markers of HFI vulnerability in Alberta's changing economy, particularly income adequacy.[7,55]

Table 1: Assess and report

Equity Concern	Recommended Action	Selected Examples
Stakeholders may not know how to **assess HFI** prevalence rates and risk factors.	**Ensure decision makers, practitioners and key stakeholders are aware of current and reliable evidence on HFI.**	• Use the results of the Canadian Community Health Survey as the *only* validated indicator of HFI prevalence (through the Household Food Security Survey Module). • Access the HFI data and reports that Statistics Canada publishes. • Review the practical reports and original research that the PROOF research program publishes on HFI.
Stakeholders may misinterpret the prevalence of HFI by referencing measures of poverty and other experiences of hardship.	**Promote the use of validated measures of HFI rather than data that describes some of the experiences of food insecure populations.**	• Contact a local public health dietitian through PublicHealthNutrition@ahs.ca for support on how to best reflect the cost and affordability of food in a community assessment, local health report or living wage initiative. • Inform stakeholders that the following data sources do not represent reliable markers of HFI prevalence and severity:[46,57] » food bank usage statistics » levels of participation in charitable, food-based programming » social assistance rates » unemployment rates » the percentage of the population living below income-based poverty cut-offs » the incidence of terminations for unpaid household utilities » housing eviction and foreclosure patterns » homelessness statistics
Stakeholders may not **be certain** how to promote health equity for populations that experience HFI.	**Identify and share resources and evidence that can help all sectors develop equity-sensitive approaches and supports.**	• Access current guidance on how to promote equity: » original research » practice guidance » health equity tools » practice-based research » public health resources

Modify and reorient services to reduce the inequities of food insecure households



Service providers can unintentionally cause harm if they are not aware of the ways in which financial constraints inhibit clients' ability to follow specific recommendations. It is essential for the health and social sectors to consider how the social determinants of health can impact an individual's ability to prevent illness or adhere to treatment protocols. If clients cannot afford to comply with supportive guidance, they may experience increased feelings of helplessness, frustration and isolation. Table 2 outlines potential actions to ensure all Albertans' are able to pursue health-promoting opportunities through current and future services.

A universal health program or service needs to offer targeted support to food insecure clients by incorporating strategies that address the financial inequities they face when trying to participate in health-promoting opportunities.[58]

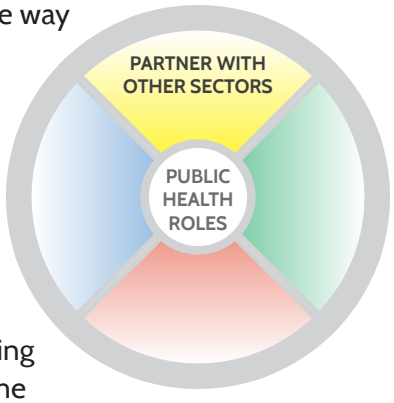
Table 2: Modify and reorient

Equity Concern	Recommended Action	Selected Examples
HFI is largely an issue of socioeconomic inequity, yet most sectors respond through food programs and charitable services.	**Establish downstream approaches that promote equitable opportunities[48] and act as a proxy for additional income.**	• Highlight how unconditional income supplements are associated with reduced HFI[59] and better health outcomes[60] for certain low income populations. • Offer food insecure clients grocery store gift cards rather than charitable food services. The gift cards empower recipients with personal choice and equal opportunity to participate in the regular food system.
Food insecure clients often face socioeconomic barriers that force them to choose between medication or food when trying to treat or prevent chronic health conditions.[61,62]	**Integrate an assessment of socioeconomic risk factors into client service pathways.**	• Assess how a client's financial and social circumstances shape their ability, willingness and motivation to change specific health and eating behaviours.[63] • Find ways to reduce healthcare costs, such as: » prescribing equally effective, yet less expensive medications[64] » minimizing the need to spend money on multiple return visits[65] » offering appointment times that do not require clients to miss work or lose wages[66] » providing free parking, transit passes and childcare during appointments[65]
Food insecure clients may not be able to prioritize nutrition because they feel overpowered by the physical and mental struggle to survive on insufficient income.[42,67]	**Assess the ways in which socioeconomic factors impact clients' nutrition and health behaviours.**	• Offer more than education to help food insecure clients prevent or manage acute or chronic health conditions.[30] • Recognize that HFI is not *caused* by a lack of nutrition knowledge or cooking, shopping and budgeting skills,[68,69] and that only those people whose life circumstances enable them to participate in these types of supports will benefit.[35-37] • Collaborate with clients to identify realistic health goals based on their personal priorities, capacity and economic resources.[66]

Table 2: Modify and reorient

Equity Concern	Recommended Action	Selected Examples
Food insecure individuals may not be able to expand the variety or improve the quality of their diet because their budgets are much too constrained.[1,70]	**Ensure client resources and recommendations focus on the benefits of basic, health eating patterns rather than promote more expensive options that appeal to nutrition ideals or trends.**	• Consider how a lack of income prevents food insecure clients from pursuing common nutrition recommendations, such as:[18,68,71] » saving time by using pre-cut vegetables and fruits or packaged salads » buying foods in bulk » eating a wide variety of food items » exploring new foods (that their household might not enjoy) » making recipes that require unique appliances (e.g. blenders, slow cookers) • Convey health messages that are easier for people of *all* socioeconomic backgrounds to practice. For example, highlight how *all* unprocessed, fresh and frozen vegetables and fruits are healthy choices rather than promote trendy and more costly items. • When providing food as part of services or programming, make it easy for clients to access healthier items rather than offering common, low cost foods, such as chocolate, juice, cookies and processed snack or meat items. Choose foods that low income clients often struggle to afford, including fresh vegetables and fruit, whole grain products, fish, dairy products, poultry and lean meats.[18,68,72]
Food insecure clients may not know when they are eligible for benefits that support people who live in situations of financial and social risk.	**Maintain a current understanding of the national, provincial and municipal entitlements and programs that offer additional support to at-risk populations.**	• Develop or use screening tools that enable health and social service providers to better support low income clients. » There is a clinical tool for primary care providers in Alberta to help identify and assist clients who live in poverty. » There is a benefits screening tool project that has shown positive results in helping low income clients access more income. • Encourage and support eligible clients to access benefits such as: » Special Diets for Albertans who live on Assured Income for the Severely Handicapped or Income Support. » Canada Prenatal Nutrition Program for pregnant women who face challenging life circumstances in Alberta. » Housing subsidies, childcare supports or reduced transit fees.[65,66]

Partner with other sectors



Intersectoral collaboration is an effective way to align efforts, expertise and resources during the design of policies, programs or initiatives that aim to generate systemic change.[53] Without this collaboration, there is greater risk that new or proposed responses will merely continue to temporarily alleviate some of the negative *consequences* of HFI without actually addressing the underlying *causes*. Partnerships that aim to tackle the complex issues of poverty and food insecurity can involve diverse stakeholders, including but not limited to:

- people with lived experience of HFI or poverty
- healthcare, education, corporate and human services sectors
- municipal, provincial and national governments
- academics and researchers
- policy makers
- public health organizations and practitioners
- organizations that promote health equity

Without collaboration, there is greater risk that new or proposed responses will merely continue to temporarily alleviate some of the negative *consequences* of HFI without actually addressing the underlying *causes.*

Table 3: Partner with other sectors

Equity Concern	Recommended Action	Selected Examples
Popular media typically call for altruistic responses to prevent 'hunger' instead of presenting a deeper analysis of the root causes of HFI.[44]	**Develop relationships with media partners to establish and promote accurate messages about HFI.**	• Collaborate with a variety of media outlets to ensure evidence-based responses become more visible and relevant to all Albertans.[73] • Incorporate the learnings, successes and barriers from media interventions that have advocated for a better understanding of health inequities and/or HFI.[74] • Work with media to accurately portray how charitable responses provide important but episodic support to food insecure clients, while the best solution is to change the socioeconomic inequities that lead to HFI. • Provide the media with messages that help the public understand why alleviating 'hunger' is not the same as addressing HFI. Hunger can result from voluntary or circumstantial reasons that are unrelated to HFI. Although hunger can be one of the more stressful experiences of severe food insecurity, providing food to temporarily prevent or relieve a physical symptom does not resolve HFI.

Table 3: Partner with other sectors

Equity Concern	Recommended Action	Selected Examples
Stakeholders and practitioners may lack experience or training related to the social determinants of health and health inequities.	Collaborate with educational programs and institutions to enhance the health equity competence of staff, students, trainees and volunteers.	• Offer experiential learning opportunities to help shift assumptions, generalizations and misconceptions about food insecure populations. • Provide training and education on evidence-based approaches to support clients who experience HFI.

Voice equal concern for everyone who experiences HFI when developing policy and program responses.

Participate in policy development that supports health equity

Food insecurity is a significant reality for many low income households in Alberta. Accordingly, social policy and poverty reduction strategies need to include nutritious food as a key component of any rights-based approach. Table 4 outlines potential approaches to incorporate HFI into policy responses.

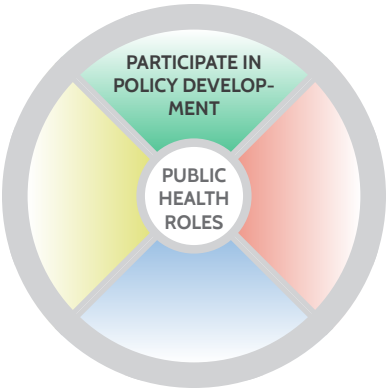


Table 4: Participate in policy development

Equity Concern	Recommended Action	Selected Examples
Policy approaches to HFI reproduce inequities if they only focus on specific populations that society considers more deserving of compassion, such as children and seniors.	Voice equal concern for *everyone* who experiences HFI when developing policy and program responses.	• Reinforce how the most equitable policy responses support *all* of the populations at highest risk for HFI.[44] • Recognize that children who can access charitable food programs still face ongoing anxiety about how the other people in their households are going to get enough to eat.[75] • Ensure policy approaches support single adults who live in poverty, as this group represents one of the populations at greatest risk for HFI.[1] • Assess whether proposed policies offer equitable support to people who face discrimination based on gender, ethnicity, culture, physical ability or sexual orientation.

Table 4: Participate in policy development

Equity Concern	Recommended Action	Selected Examples
Many current policies and programs create significant inequities by requiring food insecure households to obtain food through a totally separate system than the rest of society.[42]	**Adopt a human rights approach in the design of policy and program responses to HFI.**	• Develop equity-sensitive policies and interventions that empower clients with adequate economic access and personal choice to meet their own basic human needs, including food. • Refer to effective examples when developing new policies, such as: » Low income families who receive the federal Universal Child Care Benefit are less likely to report food insecurity.[59] » Very low income pregnant women who received an unconditional income supplement experienced better health outcomes than those who did not apply for the additional funds.[60]
Many of the key areas of policy development that can promote health equity fall outside the jurisdiction of the healthcare system, including housing, education and income.	**Use *health equity impact assessments* in the design or revision of any policy or service that aims to improve the living or working conditions of Albertans.**	• Establish policies that improve equity and reduce poverty to address the root causes of HFI.[76] • Create and sustain policies that reduce the costs of basic living expenses to help free up more money to spend on healthy food.[77] In Alberta, Social Housing and Affordable Housing Programs can help prevent or reduce HFI among low income households. Establish healthy eating environments that offer *affordable* and healthy food options to promote social inclusion. • Several sectors have already reduced costs for basic services, such as municipal transit[78] and entrance fees to recreation,[79] arts and cultural events.[80] • Other sectors are actively working to address additional expenses, such as banking charges [81] and payday loan interest rates. [82]
Sustainable food systems are undoubtedly important to community and global **well-being**; however, policies that promote local agriculture do not make it easier for low income populations to afford a healthy diet. Albertans who lack adequate income cannot purchase enough nutritious food regardless of where it originates.	**Clarify the important differences between policies and initiatives that promote 'community food security' and efforts that aim to reduce 'household food insecurity'.**	• Community food security addresses important issues around agriculture, fishing, hunting, gathering and food production, processing, manufacturing, distributing and marketing.[83] HFI is primarily a result of a deficit in income that renders healthy food unaffordable for vulnerable groups.[1] • Ensure that policies and initiatives which promote community food security do not inadvertently increase inequities by: » creating the false impression that they are a solution for HFI.[44] » requiring food insecure people to participate in programs and activities that do not meet their personal needs.[38-41] » expecting local farmers to produce high quality food and then sell it at low cost. » assuming low income households can afford to engage in alternative food systems, such as farmers' markets.[42] • Acknowledge the limited ability of food-based approaches to reduce HFI. For example, while an initiative such as a community garden can promote skill development and social connection for interested people from any socioeconomic background, it also requires significant economic, human and environmental resources that most low income individuals and families cannot access, afford or sustain.[40,84]

Conclusion

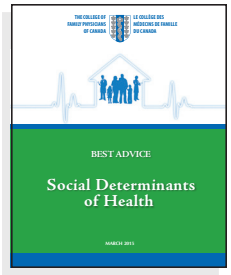
The analysis and recommendations in this report aim to inspire deeper discussion about HFI based on a large body of evidence and statistical data. Stakeholders and decision-makers from all sectors can use this information to support change that promotes equity among populations who experience social and health disparities. An increased effort to advance health and social equity represents a key strategy to improve life conditions for all Albertans. Food-centred solutions will have little to no impact on an income-based problem and may even increase inequities for those households that experience food insecurity. Current and future responses to HFI need to be designed with an evidence-based approach that supports food insecure populations in dignified ways.

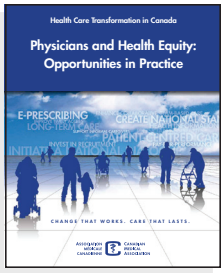
For more information on health equity

The Public Health Agency of Canada has authored A Tool for Developing Equity-Sensitive Public Health Interventions.

The National Collaborating Centre for Determinants of Health has a large library of resources that address health equity and the social determinants of health.

Physicians who are interested in learning more about health equity could explore Best Advice: The Social Determinants of Health from the College of Family Physicians of Canada or Physicians and Health Equity: Opportunities in Practice and the health equity advocacy documents from the Canadian Medical Association.





The Canadian Nurses Association has a position statement and a backgrounder on the social determinants of health and nursing.

The Ontario Ministry of Health and Long-Term Care has developed a Health Equity Impact Assessment tool. The Centre for Addiction and Mental Health in Ontario offers several archived webinars and slide presentations on health equity impact assessment. Health Nexus provides health equity impact assessment tools.

Nutrition Services at Alberta Health Services has developed guidance for health professionals titled Nutrition Guideline: Household Food Insecurity.

References

1. Tarasuk, V., Mitchell, A., & Dachner, N. (2014). *Household food insecurity in Canada, 2012.* Retrieved from http://nutritionalsciences.lamp.utoronto.ca/wp-content/uploads/2014/05/Household_Food_Insecurity_in_Canada-2012_ENG.pdf.

2. Tarasuk, V., Mitchell, A., McLaren, L., & McIntyre, L. (2013). Chronic physical and mental health conditions among adults may increase vulnerability to household food insecurity. *The Journal of Nutrition, 113.* Retrieved from http://jn.nutrition.org/content/early/2013/08/26/jn.113.178483.full.pdf+html.

3. Cook, J. T., Frank, D. A., Berkowitz, C., Black, M. M., Casey, P. H., Cutts, D. B., Meyers, A. F., Zaldivar, N., Skalicky, A., Levenson, S., Heeren, T., & Nord, M. (2004). Food insecurity is associated with adverse health outcomes among human infants and toddlers. *Journal of Nutrition, 134*(6), 1432–1438.

4. Kirkpatrick, S. I., McIntyre, L., & Potestio, M. L. (2010). Child hunger and long-term adverse consequences for health. *Archives of Pediatric & Adolescent Medicine, 164*(8), 754–762.

5. United Nations General Assembly. (1948). *The universal declaration of human rights.* Retrieved from: http://www.un.org/en/universal-declaration-human-rights/index.html

6. United Nations Economic and Social Council. (1999). Substantive issues arising in the implementation of the international covenant on economic, social and cultural rights: General comment 12, The right to adequate food. Retrieved from http://www.fao.org/fileadmin/templates/righttofood/documents/RTF_publications/EN/General_Comment_12_EN.pdf.

7. Tarasuk, V., Mitchell, A., & Dachner, N. (2015). *Household food insecurity in Canada, 2013.* Retrieved from http://nutritionalsciences.lamp.utoronto.ca/wp-content/uploads/2015/10/foodinsecurity2013.pdf.

8. Statistics Canada. (2015). Health at a glance: Household food insecurity. Last modified: 2015-03-25. Retrieved from http://www.statcan.gc.ca/pub/82-624-x/2015001/article/14138-eng.htm#a2.

9. Statistics Canada. (2013). *Private households by structural type of dwelling, by province and territory (2011 census) (Manitoba, Saskatchewan, Alberta, British Columbia).* Last modified: 2013-02-13. Retrieved from http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/famil55c-eng.htm.

10. Tarasuk, V. (2001). *Discussion paper on household and individual food insecurity.* Retrieved from http://www.hc-sc.gc.ca/fn-an/alt_formats/hpfb-dgpsa/pdf/nutrition/food_sec_entire-sec_aliments_entier-eng.pdf.

11. Roshanafshar, S., & Hawkins, E. (2015). *Food insecurity in Canada.* Retrieved from http://www.statcan.gc.ca/pub/82-624-x/2015001/article/14138-eng.pdf.

12. Kirkpatrick, S. I., & Tarasuk, V. (2007). Adequacy of food spending is related to housing expenditures among lower-income Canadian households. *Public Health Nutrition, 10*(12), 1464–1473.

13. Kirkpatrick, S. I., & Tarasuk, V. (2011). Housing circumstances are associated with household food access among low-income urban families. *Journal of Urban Health: Bulletin of the New York Academy of Medicine, 88*(2), 284–296.

14. Emery, J., Bartoo, A., Matheson, J., Ferrer, A., Kirkpatrick, S., Tarasuk, V., & McIntyre, L. (2012). Evidence of the association between household food insecurity and heating cost inflation in Canada, 1998–2001. *Canadian Public Policy, 38*(2), 181–215.

15. Oxford Dictionaries. (2016). Definition of *hunger* in English. Retrieved from: http://www.oxforddictionaries.com/us/definition/american_english/hunger

16. Hamelin, A. M., Beaudry, M., & Habicht, J. P. (2002). Characterization of household food insecurity in Quebec: Food and feelings. *Social Science and Medicine, 54,* 119–132.

17. Rainville, B., & Brink, S. (2001). *Food Insecurity in Canada, 1998-1999.* Research paper R-01-2E. Ottawa: Applied Research Branch. Human Resources Development Canada.

18. Loopstra, R., & Tarasuk, V. (2013). What does increasing severity of food insecurity indicate for food insecure families? Relationships between severity of food insecurity and indicators of material hardship and constrained food purchasing. *Journal of Hunger & Environmental Nutrition, 8*(3), 337–349.

19. Dietitians of Canada. (2016). *Prevalence, severity and impact of household food insecurity: a serious public health issue. Background paper.* Retrieved from: http://www.dietitians.ca/Dietitians-Views/Food-Security/Household-Food-Insecurity.aspx

20. Fitzpatrick, T., Rosella, L. C., Calzavara, A., Petch, J., Pinto, A. D., Manson, H., Goel, V., & Wodchis, W. P. (2015). Looking beyond income and education: Socioeconomic status gradients among future high-cost users of health care. *American Journal of Preventive Medicine, 49*(2), 161–171.

21. Tarasuk, V., Cheng, J., de Oliveira, C., Dachner, N., Gundersen, C., & Kurdyak, P. (2015). Association between household food insecurity and annual health care costs. *Canadian Medical Association Journal.* Retrieved from http://www.cmaj.ca/content/early/2015/08/10/cmaj.150234.full.pdf+html.

22. Canadian Mortgage and Housing Corporation. (2015). *Renting a home: Identify your needs.* Retrieved from https://www.cmhc-schl.gc.ca/en/co/reho/yogureho/fore/gest/gest_001.cfm.

23. Canadian Mortgage and Housing Corporation. (2015). *Home buying step-by-step: Are you financially ready?* Retrieved from https://www.cmhc-schl.gc.ca/en/co/buho/hoststst/hoststst_002.cfm.

24. Statistics Canada. (2011). *Family characteristics, single earner and dual-earner families, by number of children.* Last modified: 2013-10-02. Retrieved from http://www5.statcan.gc.ca/cansim/a26?id=1110020&retrLang=eng&lang=eng.

25. Uppal, S. (2015). *Employment patterns of families with children.* Retrieved from http://www.statcan.gc.ca/pub/75-006-x/2015001/article/14202-eng.pdf.

26. McIntyre, L., Bartoo, A. C., & Emery, J. C. H. (2012). When working is not enough: Food insecurity in the Canadian labour force. *Public Health Nutrition, 17*(1), 49–57.

27. Alberta Human Services. (2013). *An analysis of poverty in Alberta final report.* Retrieved from http://povertyreduction.alberta.ca/files/documents/povertymatrixreport_final_report_may_2013.pdf.

28. Alberta Health. (2015). *Diabetic supply coverage.* Retrieved from http://www.health.alberta.ca/services/diabetic-supplies.html

29. Alberta Health. (2013). Insulin pump therapy program: eligibility criteria. Retrieved from http://www.health.alberta.ca/documents/Insulin-Pump-Therapy-Program-Eligibility.pdf

30. Gucciardi, E., Vahabi, M., Norris, N., Del Monte, J. P., and Farnum, C. (2014). The intersection between food insecurity and diabetes: A review. *Current Nutrition Reports, 3,* 324–332.

31. Statistics Canada. (2011). *Women in Canada: A gender-based statistical report.* Last modified: 2013-05-13. Retrieved from http://www.statcan.gc.ca/pub/89-503-x/89-503-x2010001-eng.pdf.

32. Government of Alberta. (2010). *A profile of Alberta seniors.* Retrieved from http://www.health.alberta.ca/documents/Seniors-Profile-2010.pdf.

33. Government of Canada. (n.d.). *Survivor's pension.* Retrieved from http://www.esdc.gc.ca/en/cpp/survivor_pension.page.

34. Government of Canada. (n.d.). *Contributions to the Canada Pension Plan.* Retrieved from http://www.esdc.gc.ca/en/cpp/contributions.page.

35. Engler-Stringer, R., & Berenbaum, S. (2005). Collective kitchens in Canada: A review of the literature. *Canadian Journal of Dietetic Practice and Research, 66*(4), 246–251.

36. Lacovou, M., Pattieson, D. C., Truby, H., & Palermo, C. (2012). Social health and nutrition impacts of community kitchens: A systematic review. *Public Health Nutrition, 16*(3), 535–543.

37. Practice-based Evidence in Nutrition. (2012). Food Security: Key Practice Points. *What impact do community gardens, community-supported agriculture and farmers markets have on food security?* Last modified: 2012-02-19. Retrieved from www.pennutrition.com

38. Tarasuk, V. (2001). A critical examination of community-based responses to household food insecurity in Canada. *Health, Education & Behavior, 28*(4), 487–499.

39. Kirkpatrick, S. I., & Tarasuk, V. (2009). Food insecurity and participation in community food programs among low-income Toronto families. *The Canadian Journal of Public Health, 100*(2), 135–139.

40. Loopstra, R., & Tarasuk, V. (2013). Perspectives on community gardens, community kitchens and the good food box program in a community-based sample of low-income families. *Canadian Journal of Public Health, 104*(1), e55–e59.

41. Collins, P. A., Power, E. M., & Little, M. H. (2014). Municipal-level responses to household food insecurity in Canada: A call for critical, evaluative research. *The Canadian Journal of Public Health, 105*(2), e138–e141.

42. Caraher, M., & Dowler, E. (2014). Food for poorer people: Conventional and "alternative" transgressions. In M. Goodman & C. Sage (Eds.), *Food transgressions: Making sense of contemporary food politics* (pp. 227–246)

43. Power, E. (2011). Canadian food banks: Obscuring the reality of hunger and poverty. *Food Ethics, 6*, 18–20.

44. Riches, G. (2011). Thinking and acting outside the charitable food box: Hunger and the right to food in rich societies. *Development in Practice, 21*(4–5), 768–774.

45. Loopstra, R., & Tarasuk, V. (2012). The relationship between food banks and household food insecurity among low-income Toronto families. *Canadian Public Policy, 38*(4), 497–514.

46. Loopstra, R., & Tarasuk, V. (2015). Food bank usage is a poor indicator of food insecurity: Insights from Canada. *Social Policy and Society, 14,* 443–455.

47. Tarasuk, V., Dachner, M., & Loopstra, R. (2014). Food banks, welfare, and food insecurity in Canada. *British Food Journal, 116*(9), 1405–1417.

48. Public Health Agency of Canada. (2016). *Toward health equity: A tool for developing equity-sensitive public health interventions.* Retrieved from: http://publications.gc.ca/collections/collection_2015/aspc-phac/HP35-64-2-2015-eng.pdf

49. Daghofer, D., & Edwards, P. (2009). *Toward health equity: A comparative analysis and framework for action.* Retrieved from http://opha.on.ca/getmedia/c4536b04-2ce1-44e8-8b40-81bfe75be8f9/HealthEquityComparativeAnalysis-FinalReport-Mar2009.pdf.aspx?ext=.pdf.

50. Public Health Agency of Canada. (2010). *Glossary of terms.* Last modified: 2010-07-21. Retrieved from http://www.phac-aspc.gc.ca/php-psp/ccph-cesp/glos-eng.php.

51. Whitehead, M., & Dahlgren, G. (2006). World Health Organization Regional Office for Europe. *Concepts and principles for tackling social inequities in health: Levelling up part 1.* Retrieved from http://www.euro.who.int/__data/assets/pdf_file/0010/74737/E89383.pdf.

52. National Collaborating Centre for Determinants of Health. (2013). *Leadership for health equity: Alberta Health Services–Establishing a province-wide social determinants of health and health equity approach.* Retrieved from http://nccdh.ca/images/uploads/Alberta_Health_Services_Case_Study_Final_En.pdf.

53. National Collaborating Centre for Determinants of Health. (2013). *Let's talk: Health equity.* Retrieved from http://nccdh.ca/images/uploads/Lets_Talk_Health_Equity_English.pdf.

54. National Collaborating Centre for Determinants of Health. (2013). *Let's talk: Public health roles for improving health equity.* Retrieved from http://nccdh.ca/images/uploads/PHR_EN_Final.pdf.

55. Statistics Canada. (2012). *Monitoring household food insecurity over time.* Last modified: 2012-07-25. Retrieved from http://www.hc-sc.gc.ca/fn-an/surveill/nutrition/commun/insecurit/time-temps-eng.php.

56. Farrer, L, Marinetti, C, Cavaco, YK, & Costongs, C. (2015). Advocacy for health equity: A synthesis review. *The Milbank Quarterly, 93*(2), 392–437.

57. Health Canada. (2001). *Discussion paper on household and individual food insecurity.* Last modified: 2005-08-17. Retrieved from http://www.hc-sc.gc.ca/fn-an/nutrition/pol/food_sec_entire-sec_aliments_entier-eng.php#a38.

58. National Collaborating Centre for Determinants of Health. (2013). *Let's talk: Universal and targeted approaches to health equity.* Retrieved from http://nccdh.ca/images/uploads/Approaches_EN_Final.pdf.

59. Ionescu-Ittu, R, Glymour, MM & Kaufman, JS. (2015). A difference-in-differences approach to estimate the effect of income-supplementation on food insecurity. *Preventive Medicine, 70*: 108-116.

60. Brownell, MD, Chartier, MJ, Nickel, NC, Chateau, D, Martens, PJ, Sarkar, J, Burland, E, Jutte, DP, Taylor, C, Santos, RG & Katz, A. (2016). Unconditional prenatal income supplement and birth outcomes. *Pediatrics,* e20152992.

61. Berkowitz, S. A., Seligman, H. K., & Choudhry, N. K. (2014). Treat or eat: Food insecurity, cost-related medication underuse and unmet needs. *The American Journal of Medicine, 127*(4), 303–310.

62. Statistics Canada. (2014). Self-reported financial barriers to care among patients with cardiovascular-related chronic conditions. Catalogue no. 82-003-X. *Health Reports, 25*(5), 3–12. Retrieved from http://www.statcan.gc.ca/pub/82-003-x/2014005/article/14005-eng.pdf.

63. Royal, D., Brauer, P., Bjorklund, L. O'Young, O., Tremblay, A., & Jeejeeboy, K. (2014). Development of a dietary management care map for metabolic syndrome. *Canadian Journal of Dietetic Practice and Research, 75*(3), 132–139.

64. Alberta College of Family Physicians. (2016). *Price comparison of commonly prescribed pharmaceuticals in Alberta, 2014.* Retrieved from https://www.acfp.ca/wp-content/uploads/2016/03/ACFPPricingDoc2016.pdf

65. Raza, D., Bloch, G., and Ter Kulie, S. (2013). Office interventions for poverty: Part 2. *Ontario Medical Review.* Retrieved from https://www.oma.org/Resources/Documents/Oct13_OMR_Poverty_feature2.pdf.

66. The College of Family Physicians of Canada. (2015). *Best advice: Social determinants of health.* Retrieved from http://patientsmedicalhome.ca/files/uploads/BA_SocialD_ENG_WEB.pdf.

67. Dowler, E., & Lambie-Mumford, L. (2015). How can households eat in austerity? Challenges for social policy in the UK. *Social Policy and Society, 14*(3), 417–428.

68. Dachner, N., Ricciuto, L., Kirkpatrick, S. I., & Tarasuk V. (2010). Food purchasing and food insecurity among low-income families in Toronto. *Canadian Journal of Dietetic Practice and Research, 71*(3), e50–e56.

69. Government of Canada. (2010). *Improving cooking and food preparation skills: A synthesis of the evidence to inform program and policy development.* Retrieved from http://www.hc-sc.gc.ca/fn-an/alt_formats/pdf/nutrition/child-enfant/cfps-acc-synthes-eng.pdf

70. Dowler, E. (1998). Budgeting for food on a low income in the UK: The case of lone-parent families. *Food Policy, 22*(5), 405–417.

71. Attree, P. (2006). A critical analysis of UK public health policies in relation to diet and nutrition in low income households. *Maternal and Child Nutrition, 2,* 67–78.

72. Kirkpatrick, S., & Tarasuk, V. (2008). Food insecurity is associated with nutrient inadequacies among Canadian adults and adolescents. *Journal of Nutrition, 138*(3), 604–612. Retrieved from http://jn.nutrition.org/content/138/3/604.full.pdf+html.

73. National Collaborating Centre for Determinants of Health. (2015). *Let's talk: Advocacy and health equity.* Retrieved from: http://nccdh.ca/images/uploads/comments/Advocacy_EN.pdf.

74. Rock, MJ, McIntyre, L, Persaud, SA and Thomas, KL. (2011). A media advocacy intervention linking health disparities and food insecurity. *Health education research, 26*(6), 948-960.

75. Fram, M. S., Frongillo, E. A., Jones, S. J., Williams, R. C., Burke, M. P., DeLoach, K. P., & Blake, C. E. (2011). Children are aware of food insecurity and take responsibility for managing food resources. *The Journal of Nutrition, 141,* 1114–1119.

76. Ontario Society of Nutrition Professionals in Public Health Food Security Working Group. (2015). Income-related policy recommendations to address food insecurity. Retrieved from: https://www.osnpph.on.ca/membership/documents

77. Tarasuk, V. (2005). Household food insecurity in Canada. *Topics in Clinical Nutrition, 20*(4), 299–312. Retrieved from http://www.foodsecurityalberta.org/sites/default/files/old-backup/Food%20Insecurity%20in%20Canada.pdf.

78. Alberta Human Services. (2016). *Forms, links and resources: Transportation.* Last modified: 2016-05-03. Retrieved from http://www.humanservices.alberta.ca/family-community/15622.html#transportation

79. Alberta Human Services. (2016). *Forms, links and resources: Recreation and wellness.* Last modified: 2016-05-03. Retrieved from http://www.humanservices.alberta.ca/family-community/15622.html#recreation

80. Calgary Public Library. (2016). *Sun Life Financial Arts + Culture Pass.* Retrieved from http://calgarylibrary.ca/arts-and-culture-pass/

81. Canadian Bankers Association. (2015). *Banking service fees.* Retrieved from: http://www.cba.ca/en/media-room/50-backgrounders-on-banking-issues/82-banking-service-fees

82. Government of Alberta. (2016). *Government introduces legislation to end predatory lending.* Retrieved from: http://www.alberta.ca/release.cfm?xID=4174784OF017D-BA4D-A7OA-741F47E398B7F6C4

83. Dietitians of Canada. (2007). *Community food security: Position of Dietitians of Canada.* Retrieved from https://www.dietitians.ca/Downloads/Public/cfs-position-paper.aspx

84. McIntyre, L & Rondeau, K. (2011). Individual consumer food localism: A review anchored in Canadian farmwomen's reflections. *Journal of Rural Studies, 27*(2): 116-124. Retrieved from http://www.ucalgary.ca/lmcintyre/files/lmcintyre/Farmwomen's%20reflections.pdf