Hard to Stomach: Food Insecurity and Inequitable Access to Nutritious Food in Vancouver

by
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Abstract

Food insecurity is a problem in Vancouver, BC. Through analysis of the systemic causes and negative correlates of food insecurity, this study examines effective ways to mitigate food insecurity in Vancouver by enabling consistent access to sufficient, nutritious food. Assessments of the economics of food insecurity and multi-level governmental positions on the issue provide a theoretical and practical basis for the research. A literature review and four in-depth stakeholder interviews identify gaps in the market-based and charity food systems. A study of initiatives undertaken in other jurisdictions contribute to the analysis by identifying potential policy options Vancouver could employ. The study proposes the adoption of a multi-program, community-based model to replace the traditional food bank structure. This option can be implemented in partnership with existing food banks or other pre-established community entities.

Keywords: Food insecurity; food literacy; food charity, nutrition density; nutrition; health; income insecurity; public good; charitable food resource; food system; diet; food bank; food policy; Vancouver; Canada.
Dedication

To my mom, Nancy Brace, for encouraging me to pursue this degree and for always believing in me.

To my brothers, Trevor and Spencer, for your encouragement.

To Curtis Foley, for always being there.

To Drew Teskey, for your support and sacrifice as I went through this process. Your patience and your impatience both show how much you care and I'm grateful for that.

To anyone and everyone who have experienced food insecurity in Canada. I have hope that your struggles will one day be a scar in our history.
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Thank you for Dr. Maureen Maloney for your excellent feedback as it made the project stronger. Your fair yet challenging questions helped me to clarify how my project fits into the bigger picture.

Thank you to my entire MPP 2012 cohort. I could not imagine this process without all of your support, and I am grateful for assistance I have received throughout the past two years.

Finally, a note of gratitude for each of the interview participants who donated their time to discuss this important topic with me. I am grateful for your willingness to share your insight into this issue as your perspective is highly beneficial to this project.
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<tr>
<td>CFC</td>
<td>Community Food Centre</td>
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<td>CFCC</td>
<td>Community Food Centres Canada</td>
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<td>CNC</td>
<td>Community Nutritionists Council</td>
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<td>CPI</td>
<td>Consumer Price Index</td>
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<td>DRI</td>
<td>Dietary Reference Intake</td>
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<td>DTES</td>
<td>Downtown Eastside</td>
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<td>EBT</td>
<td>Electronic Benefit Transfer</td>
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<td>EI</td>
<td>Employment Insurance</td>
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<td>EIU</td>
<td>Economist Intelligence Unit</td>
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<td>FEBA</td>
<td>European Federation of Food Banks</td>
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<td>FRAC</td>
<td>Food Research and Action Center</td>
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<td>GFSI</td>
<td>Global Food Security Index</td>
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<td>GVFBS</td>
<td>Greater Vancouver Food Bank Society</td>
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<td>HIP</td>
<td>Healthy Incentives Pilot</td>
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<td>HQP</td>
<td>Highly Qualified Personnel</td>
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<td>ICESCR</td>
<td>International Covenant on Economic, Social, and Cultural Rights</td>
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<td>LICO</td>
<td>Low Income Cut-off</td>
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<td>MNS</td>
<td>Monthly Nutritional Supplement</td>
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<td>NFN</td>
<td>Neighbourhood Food Networks</td>
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<td>NNFB</td>
<td>National Nutritious Food Basket</td>
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<td>OECD</td>
<td>Organisation of Economic Co-operation and Development</td>
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<td>PWD</td>
<td>Persons with Disabilities</td>
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<td>SEO</td>
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<td>Socioeconomic Status</td>
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<td>Supplemental Nutrition Assistance Program</td>
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<td>SUFA</td>
<td>Social Union Framework Agreement</td>
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<td>TFP</td>
<td>Thrifty Food Plan</td>
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<td>United States</td>
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<td>United States Department of Agriculture</td>
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<td>VCH</td>
<td>Vancouver Coastal Health</td>
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<td>WHO</td>
<td>World Health Organization</td>
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<td>WITB</td>
<td>Working Income Tax Benefit</td>
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# Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tr>
<td>Food Insecurity</td>
<td>The inability to acquire or consume an adequate or sufficient quantity of food in socially acceptable ways, or the uncertainty that one will be able to do so.</td>
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<tr>
<td>Nutrient-Dense</td>
<td>Food that is high in macronutrients or micronutrients and that is low in or free of sugar, sodium and fat.</td>
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<tr>
<td>Macronutrient</td>
<td>Any of the nutritional components of the diet that are required in large amounts: carbohydrates, protein, and fat.</td>
</tr>
<tr>
<td>Micronutrient</td>
<td>An essential trace mineral or vitamin that is required in a diet in minute amounts.</td>
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Executive Summary

Food insecurity is a growing problem in Canada. A rising number of households are unable to participate in the market system to purchase sufficient, nutritious food to meet the guidelines of Canada’s Food Guide leading many to rely on the charitable food system to fill the gap. This study utilizes a policy analysis approach to explore options for improving reliable access to nutritious food for people experiencing food insecurity in the City of Vancouver. The problem is framed within the context of the

- History of the charitable food system;
- Government position on food insecurity;
- Economics of food insecurity.

I utilize three data sources for the analysis: a literature review, three case studies, and four stakeholder interviews.

The literature review explores the causes of food insecurity, the health implications of inadequate nutrition, and several proposed solutions for food insecurity. The key findings are:

- Low income or income insecurity is the cause of food insecurity in all cases;
- Food bank usage rates are connected to unemployment rates;
- Income assistance rates do not cover the market cost of sufficient, nutritious food;
- Food insecure people have an increased risk of diet-related disease, obesity and negative mental health impacts;
- Poverty reduction is the most frequent recommendation to alleviate food insecurity.

The three cases studies assessed the direct nutritional assistance program in the United States; the Nordic Welfare State model in Denmark and Norway; and the Community Food Centre model in Toronto, Ontario. The key findings are:

- Wide participation in federal food assistance programs has not eradicated the problem of food insecurity in the US;
• The Nordic Welfare State model demonstrates the potential for national policies to mitigate food insecurity by reducing social inequality;
• Offering non-emergency food programs in conjunction with an emergency food bank in the Community Food Centre model leads to better health outcomes.

The four stakeholder interviews included administrators within the charitable food system and the public sector/government. The key findings from the interviews are:

• Charity alone is not the answer to ameliorating food insecurity;
• Accountability is inconclusive in terms of the authority responsible for food insecurity;
• Systemic solutions to address the underlying causes of food insecurity are preferred.

I identify three policy options from the key findings of the analysis and assess these options to determine what impact they may have on improving reliable access to nutritious food and improving health outcomes in food insecure groups. The options are:

• Pilot a Community Food Centre location in Vancouver as an alternative approach to the traditional food bank model. This model emphasizes non-emergency food programs, maintains high nutritional standards and avoid reliance on donations.
• Launch a food literacy education program to teach cooking skills and nutritional knowledge to low income groups to nudge food preferences toward nutritious food.
• Implement a direct financial nutritional supplement program to close the gap between the cost of a nutritious food basket and low income budgets.

This study recommends piloting a Community Food Centre location as an alternative approach to the traditional food bank model. The Community Food Centre model will be effective because there is likelihood that an increased number of food insecure people will access the resource due to the positive environment and reduced stigma. The model also improves food literacy levels and health of its members. Upon the success of the pilot location, I recommend all food bank depots to adopt the Community Food Centre model through a partnership between the Greater Vancouver Food Bank Society and Community Food Centres Canada. This option addresses the problem of inequitable access to nutrition in the short to medium term. In the long run, a national food strategy on a national level is needed to fully eradicate food insecurity.
1. Introduction: Defining the Problem

A nutritious diet is a vital component of overall health. Most have a general understanding of what it means to eat healthfully: by consuming nutrient-dense\(^1\) foods like fruits and vegetables; however, factors influence people’s food choices beyond health. Income is the primary factor for food choice, for low income is a barrier to one’s ability to access sources of nutrition on a consistent basis. People who are financially restricted from reliably accessing nutritous food are experiencing food insecurity. 2.2 million Canadians experienced moderate or severe food insecurity between 2011 and 2012 - eight percent of the population (Statistics Canada, 2013). The rate of household food insecurity in Canada has increased by 15 percent within the past four years (Statistics Canada, 2013). Thus, a significant and increasing proportion of Canada’s population does not have equitable access to nutrition which leads to the policy problem: households experiencing food insecurity in Vancouver cannot reliably access sufficient quality food - through financial means or the charitable food system - to meet the recommended nutrition intake for good health established in Canada’s Food Guide.

The goal of this project is to analyze the charitable food model in the context of a sustainable long-term solution to ongoing food insecurity in Canada. To ensure a manageable scope, the geographical area is narrowed down to the City of Vancouver, British Columbia (BC). The rate of food insecurity in Vancouver is slightly below the national average at seven percent, yet Vancouver sees a higher rate of severe food insecurity at three percent (Statistics Canada, 2013). The map in figure 1 shows average

\(^1\) Nutrient-dense or nutrient density refers to foods that are high in macronutrients or micronutrients.
annual household food expenditure in the City of Vancouver in 2013. The lightly shaded areas are at most risk for food insecurity. This research seeks to understand the major factors which contribute to food insecurity, the impact of its prevalence, and how the problem can be ameliorated through policy on a local – and potentially national – scale.

![Vancouver Food Expenditure Map](Image)

**Figure 1. Vancouver Food Expenditure Map**

Note. Generated using SimplyMap (Geographic Research, 2013).

Health Canada defines food insecurity as “the inability to acquire or consume an adequate or sufficient quantity of food in socially acceptable ways, or the uncertainty that one will be able to do so” (2012). Further, “moderate” food insecurity indicates that the quantity or quality of food intake has been comprised, while “severe” food insecurity indicates reduced food intake and disrupted eating patterns (Statistics Canada, 2013). The severity of food insecurity can fluctuate and may be difficult to determine, therefore this research will not differentiate between moderate and severe food insecurity.
Food security, conversely, is defined by Health Canada as “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” (2012). While food insecurity and food security are seemingly antonyms, the concept of food security involves the wider food system whereas food insecurity refers to the individual or household level. This research focuses on food insecurity with the understanding that the food system will have an impact on the individuals and households.

The food system includes the market food system and the charitable food system in the context of this research. Participation in the market food system is the norm; however, the fact that 40 percent of food insecure households accessed a food bank in 2012 indicates a large subset of people must supplement the market with the charitable food system (Food Banks Canada, 2012). Moreover, the rise in household food insecurity is reflected in an increase in food bank use, as food banks across Canada have seen an average annual increase of two percent trending over the past ten years (Food Banks Canada, 2012). The parallel rise in food insecurity and food charity reliance indicates that little to no policy efforts have been put in place to prevent the increase of, or to reduce, household food insecurity, and that the charity system is absorbing the impact of inaction. Moreover, I argue that the current charitable food system dominated by food banks is ineffective in ameliorating the multifaceted problem of food insecurity.

The function of food banks is centred on the distribution of donated food to those in need. I argue that the charitable food system is not a solution for all facets of food insecurity because the concept of hunger predominates the motivation behind its operations. It is important to make the distinction between hunger and food insecurity. Hunger is characterized by a lack of food for an extended period of time. Food insecurity considers the adequacy of the food along with the quantity. Thus, it is possible for one to be food insecure without experiencing hunger. This research focuses on food insecurity
as opposed to hunger, noting that food insecure people may experience hunger on occasion. Despite hunger being one aspect of the larger problem of food insecurity, it seemingly dominates the priorities of the charitable food system.

The charitable food system\(^2\) is problematic due to the inconsistent provision of nutritious food, therefore the daily recommendations in Canada’s Food Guide cannot be consistently and reliably met (a copy of Canada’s Food Guide is available in appendix A of this report). The quality of food and experience in accessing a Vancouver charitable food resources is explained in the survey findings of downtown eastside (DTES) resident study (DTES Kitchen Tables Project, 2010). 70 percent of respondents report being dissatisfied with the nutritional quality of food accessed within the charitable food system and 90 percent report that their health would improve either somewhat or a lot with improved access to better quality food (2010, 172-178). Additional survey findings show that while the majority of respondents report lining up for food resources, the line up contributes to a negative experience with the current system (168-169). Further problems are linked to the quantity of food provided and frequency of accessibility, a factor that is exacerbated for the 35 percent of respondents who must eat prior to taking medication (171). The lack of accessible protein is highlighted with close to half of respondents reporting poor access to quality meat or protein sources (185). Overall, the overwhelming majority of respondents report not having enough to eat either some of the time or on a regular basis (186). These findings, while specific to the DTES community, serve as a warning sign that the system is not meeting the needs of those who rely on it.

The mere existence of a well-established charitable food system suggests that the problem of food insecurity is deep-rooted. Further, the inability to participate in the market food system is directly linked to income insecurity; thus, food insecurity is closely

\(^2\) The charitable food system includes food banks, free meal, and low cost meal programs.
linked to other social problems, such as poverty. While there are social safety net programs, such as income assistance, to mitigate poverty, citizens are not guaranteed the right to food by the government (Rideout, et al., 2007). The gap between the need-driven demand and supply of charitable food resources is not directly addressed by a government program. Thus, the absence of a formal government action plan indicates the assumption that the charitable food system is responsible for meeting the nutritional needs of those who cannot afford to buy sufficient quality and quantity of food.

To address the policy problem, I provide a contextual overview of the existing regulatory and economic frameworks; a comprehensive review of the existing food insecurity literature; three case study analyses of how food insecurity is addressed in other jurisdictions; and analysis of four in-depth stakeholder interviews. Policy options arise from the analysis, and these options are assessed using criteria which also flow from the analysis. The recommendation establishes a blueprint for positive change in the problem of ongoing food insecurity. The paper concludes with recommendations for future research and policy development.
2. Background

2.1. Charitable Food System: History and Evolution

The charitable food system, within the context of this research, refers to all organizations and food sources that rely on charity and volunteerism to drive its operation. Food banks are the most well-recognized charitable food source, therefore discussion of food banks can be extended to include other charitable food sources, such as soup kitchens. Exploring why these organizations were initially developed and how they have changed over time provides perspective on the driving forces behind the system. Understanding these driving forces is vital to developing effective policy to mitigate the reliance on the system which is caused by the persistence of food insecurity.

Food banks are a relatively recent development in Canadian history. Prior to the existence of food banks there were a high number of small-scale charitable food sources such as church soup kitchens, community nutrition programs, emergency food vouchers, or other not-for-profit agencies’ efforts to feed the hungry on an ad-hoc basis (Riches, 1986, 13). The reason for starting food banks is two-fold: the need to address the problem of hunger and the need to coordinate surplus food (15). Thus, the food bank developed based on the model of accepting surplus or otherwise donated food and redistributing that food to hungry people. Inherent in this model is a lack of choice, consistency, and nutritional selectivity.

Food banks were created in direct response to the inadequacy of social assistance payments, which were exacerbated by a recession in the early 1980s (Riches, 2011). In addition to the increased demand for food charity, there was equal emphasis on the problem of large-scale food waste (Riches, 1986, 17). Thus, the ability for the food bank system to serve as a “clearing-house” function by accepting surplus food from the commercial food industry to redistribute to the hungry justified the
expansion of the system (17). The system was viewed as an efficient way to solve two significant problems based on the assumption that food banks would be a temporary solution for both problems. Regardless of these assumptions, food banks became – and remain – a long term feeding program for society’s most vulnerable, food insecure people.

The founders of food banks in Canada supported the principle that neighbours should not allow neighbours to go hungry (Riches, 1986, 26). Furthermore, some food bank organizers held the perspective that the citizens of a city should be able to take care of each other without asking the government for “hand-outs” (26). Not all original food bank board members supported the refusal of government support; however, the act of creating a volunteer-based charitable food organization legitimized a voluntary resolution to food insecurity as opposed to an appropriate area for government action (27). The dependence on surplus food from industry and the reliance on volunteers to provide free labour both supports the perspective that food insecurity is a problem for charity and not the responsibility of the government; the endurance of food banks perpetuates this perspective.

Food banks have since evolved as common fixtures in our society, gaining a semblance of normalcy and public acceptance; thus, an institutionalization effect has taken place. Institutionalization has been enabled over decades of unrelenting demand for their services and sustained support in meeting that demand. To date, there are 94 food banks across BC (Food Banks BC, 2014). While there is only one food bank depot in the City of Vancouver, there are over 26 free meal programs available within the City of Vancouver, with the majority of them in the downtown eastside (DTES) neighbourhood (DTES Kitchen Tables Project, 2010, appendix C; Food Banks BC, 2014). The charitable food system receives support from private donations, but is primarily stocked through corporate partnerships and large-scale food donation organizations, such as Quest Food Exchange. To provide context for the scale, in 2012, Quest Food Exchange distributed over $5 million worth of food across Metro Vancouver (Quest Food Exchange, 2013). Hence, the institutionalization of the food bank system has enabled the establishment of permanent support services.
Low cost meal programs and grocery stores are an extension of the charitable food system. Quest Food Exchange operates four low-cost, non-profit grocery stores across Metro Vancouver, which are only accessible with a referral through a partnered social services agency (Quest Food Exchange, 2013). The potential administrative barriers of accessing the non-profit grocery stores make these resources inaccessible for many food-insecure Vancouverites. In the same thread, there are approximately four low-cost meal program ($5 or less) available in the City of Vancouver (DTES Kitchen Tables Project, 2010). Furthermore, Vancouver has community kitchen programs, such as the DTES Kitchen Tables Project, which provide nutritious meals on a drop-in basis, along with programs to support and enable cooking skills (DTES Kitchen Tables, 2014). Low-cost meal programs and community kitchens are strong support services for food insecure people; the capacity of these operations is the primary concern in terms of potential efficacy in ameliorating food insecurity on a citywide scale.

Vancouver Coastal Health formally directs those in need to charitable food resources on its website, which implies acceptance of the charitable food system as an acceptable resource for people in need. The crown corporation essentially endorses the charitable food system as an appropriate resource for people in need which is unexpected due to the lack of formalized health protocols by the charitable entity distributing food. There is an absence of formal regulation over the consistency and quality of the nutrition provided, meaning that the healthfulness of the resource is uncertain. Riches states that “charitable food banking has become a national corporate enterprise of considerable reach, a second tier of the welfare system” - a notion which is validated by the apparent approval by government entities (2011). The permanence and prominence of the charitable food system may also serve as rationale for the problem of food insecurity remaining off the policy agenda at any level of government.

2.2. Government Position on Food Insecurity

The policy problem examined and the policy options proposed herein are considered within Vancouver’s current regulatory environment and economic framework to ensure a realistic approach and feasible implementation. Government action or inaction to address societal problems are influenced by the regulatory framework and
political ideology. Factors contributing to the regulatory framework include internationally ratified agreements, declarations, legislation, and the Charter of Rights and Freedoms. The regulatory framework determines the parameters for government decision-making, political ideology influences the position on the social issue and subsequent interpretation of the framework. A foundation is established for identifying an ameliorative approach to the problem of household food insecurity in Vancouver by considering the regulatory framework and positions of the federal, provincial, and municipal governments in the context of food insecurity.

2.2.1. Federal Position

Canada’s commitment to the right to food appears to be strong, having ratified numerous international commitments which promote food as a basic human right (Rideout, et al., 2007). The United Nation’s (UN) International Covenant on Economic, Social and Cultural Rights (ICESCR) was signed by Canada in 1976, and within the ICESCR are specific references to the right to food:

The States Parties to the present Covenant, recognizing the fundamental right of everyone to be free from hunger, shall take, individually and through international co-operation, the measures, including specific programmes which are needed: a) the improve methods of production, conservation and distribution of food by making full use of technical and scientific knowledge, by disseminating knowledge of the principles of nutrition and by development or reforming agrarian systems in such a way as to achieve the most efficient development and utilization of natural resources (Office of the High Commissioner for Human Rights, 2013).

By signing the ICESCR agreement and similar declarations, Canada has taken an international stance in support of the right to food.

The Charter of Rights and Freedoms (“Charter”), part of the Constitution Act of 1982, can be interpreted as a domestic stance on the right to food, as section 7 states that “everyone has the right to life, liberty and security of the person and the right not to be deprived thereof except in accordance with the principles of fundamental justice” (Government of Canada, 2014). Food is integral to life; thus, the Charter can be
interpreted such that no person should be deprived of the right to nutrition as a basic necessity of life. With this said, the courts have not interpreted the Charter in this way. Moreover, the Government of Canada does not have an action plan to mitigate the occurrence of food insecurity nationwide.

Despite its strong track record for supporting the right to food on the international stage, the federal government’s inaction on the issue was scrutinized by the UN Special Rapporteur on the right to food, Olivier De Schutter, in 2012. The Special Rapporteur criticized the proliferation of food banks in Canada and the fact that nearly half of food banks users receive income assistance (2012, 2). The Special Rapporteur stated that the dependence on food banks by food insecure Canadians indicates the failure of a government’s obligation to provide a public social safety net to prevent human suffering as a result of hunger (5). Overall, the Special Rapporteur’s report criticizes the government of Canada’s passivity in dealing with domestic food insecurity and the consequential reliance on charitable food sources.

In Canada’s 5th report to the UN on ICESCR, several cross-jurisdictional initiatives are reported to address the right to an adequate standard of living and the right to adequate physical and mental health (Government of Canada, 2004). There is no reference to the right to food and adequate nutrition as a component of a standard of living and health. All references to provisions of social assistance were deferred to the Canada Social Transfer wherein the federal government provides funding to the provinces and territories to distribute across social programs (Government of Canada, 2004, 22). The federal government thus places the responsibility of delivering the social programs that would address the issue of the right to food – imbedded in the problem of poverty – on the provincial level.

2.2.2. **Provincial Position**

Social services in Canada are the responsibility of provincial governments. While the federal government entitles part of the transfer payments made each year to the provinces as a ‘social transfer’ decisions on how the money is spent are entirely provincial. Thus, there is no federal government role in policymaking respecting social
policies – including support to food banks. The absence of any national role has been criticized for the lack of national accountability on the quality of provincial discretion.

Criticism of the provincial responsibility for the social programs that underscore the right to food came from the Special Rapporteur on the right to food, who “regrets the absence of accountability provisions in the Canada Social Transfer to ensure the protection of the right to food and other human rights” (2012, 5). While the Canada Social Transfer provides provinces with the financial help to address continued and increasing social issues, Canadians are still falling through the social safety net and are suffering despite this assistance.

Income assistance is the crux of the government social safety net. Households which do not earn enough income for the basic necessities of life rely on income assistance to meet their basic needs. In BC, the income assistance program does not include any special provision or allocation for food. The applicable legislation, the Employment and Assistance Act which is stewarded by the Ministry of Social Development and Social Innovation, dictates that “subject to regulations, the minister may provide income assistance or a supplement to or for a family unit that is eligible for it” (Province of BC, 2014). The wording of the Employment and Assistance Act is vague in terms of the type of assistance that programs will provide and suggests subjectivity of program eligibility parameters. It also lacks specification of minimum amounts or what may constitute sufficient assistance, such as support to consistently access adequate nutrition.

The BC Ministry of Social Development and Social Innovation describes eligibility for income assistance as having no current source of income or receiving very little income, and in immediate need of food, shelter or urgent medical attention (2012). Although the urgent need for food serves as a precursor of need, income assistance does not provide a specific allocation for food. Only in special cases are additional resources provided for the specific purpose of obtaining food, such as when a beneficiary must consume a special diet for medical reasons.

Income assistance is reported as the primary source of income for over 40 percent of food bank users, which tells us that the real cost of a nutritious diet, in
addition to the cost of housing and other necessary essentials, is not factored into the
determination of income assistance rates (Food Banks Canada, 2012). The gap
between income assistance rates and the cost of nutritious food leading to dependence
on charitable food sources illuminates the inability for provincial social programs to
adequately address food insecurity.

2.2.3. Municipal Position

Municipal governments across B.C. have taken action toward achieving food
security within their own jurisdictions by creating and supporting local community
initiatives. The City of Vancouver has endorsed and accepted the Vancouver Food
Charter (2007) and its implementation vehicle, the Vancouver Food Strategy (2013),
which were developed by the non-governmental Vancouver Food Policy Council
(Vancouver Food Policy Council, 2013). The vision of Vancouver Food Charter is to
contribute to a healthful community and to support the issue of food insecurity through
the acknowledgement of equitable food consumption. The current Vancouver Food
Strategy does not prescribe specific ameliorative action steps to address food insecurity,
yet does address the importance of equitable food access – an important barrier for food
insecure people.

The Vancouver Food Charter highlights the importance of social justice through
equitable access to affordable, nutritious, and culturally appropriate food. The channel
used to deliver this principle, however, is unclear. The Vancouver Food Charter
recognizes that “access to safe, sufficient, culturally appropriate and nutritious food [is] a
basic human right for all Vancouver residents” (City of Vancouver, 2007). The
Vancouver Food Charter acknowledges the prevalence of food insecurity in the
community, yet makes no reference to the role of charitable food resources is
addressing the problem. The document, perhaps unintentionally, alludes to support for
increased food donations to be distributed through the charitable food system by stating
that increased recovery of food which would otherwise be wasted (“food recovery”) is an
important step in creating a just and sustainable food system. Since the charitable food
system is the primary vehicle to repurposing recovered food, this statement implies an
assumption of the permanency of the current charitable food system structure.
The Vancouver Food Strategy focuses on making food access a priority applicable to all citizens, as opposed to targeting only food insecure citizens (City of Vancouver, 2013, 93-94). The Vancouver Food Policy Council justifies its approach to food access policies and programs as supporting the underlying factors of food insecurity. As such, taking a community-wide perspective on food access is intended to improve food insecurity within that community. The action plan for increasing food access involves the Neighbourhood Food Networks (NFN) which organize food-based programs such as community gardening and education-oriented gatherings; farmers markets; community food markets; healthy food retailers, such as mobile green-grocers and healthy corner store programs; and street food vending (95). Improving food access on a community level is a positive step towards establishing an equitable food system for everyone to participate in. Overall, the City of Vancouver’s adoption of the Vancouver Food Strategy is a positive step toward improving the local food security through the food system, but it does not target or tailor its programs specifically to address food insecurity.

2.3. Economics of Food Insecurity

An economic framework is one lens of many social sciences to provide explanation and rationale as to why the response of the charitable food system, and resulting inadequate access to nutrition, has emerged as a significant, connected problem in our society. This research acknowledges the complexity of the problem and the connections it has to other areas of study, such as psychology and social geography, along with food system, ecology and sustainability fields of study. A brief overview of economic theory shows that the problem of food insecurity is a failure of the free market, exacerbated by increasing income inequality, and perpetuated through the price elasticity of food and misguided food preferences.

2.3.1. Markets and the Food System

The food system is based on market arrangements for production, processing, and distribution. A market failure is an economic term for clearly defined situations which the free market does not adequately serve and requires government intervention for
correction (Ragan & Lipsey, 2011, 19). Governments may also intervene in markets to achieve equity and fairness within its population. An example of government intervention to correct in part a market failure is the public health care system, which addresses such things as inefficiencies in insurance markets, and the spread of infectious diseases. Despite the connection between nutrition and good health, no level of government has implemented policy to ensure equitable access to sufficient, quality food for all citizens regardless of socio-economic status.

The current structure of the food market system serves those who have the financial capacity to participate in that system; that is, sufficient food is supplied to those who can afford to buy it. A failure of the system is that there is no recourse for those who cannot participate – partially or fully – in the market system. There are no incentives or economic gains to be had by profit-maximizing businesses to adjust their food pricing system or mode of operation to meet the needs of those without means to acquire their food needs; therefore, the solution to the problem does not lie in the private sector. Moreover, the mechanisms which determine the market price of food are complex and beyond the scope of an individual business, or even region, to change and remain competitive. If there is consumer demand and willingness to pay for the food being sold in markets today, then it is rational to assume that markets will remain consistent with the model they are finding success in. Two key aspects of food insecurity are captured by the theory of market failures. One problem - the combination of premium prices on healthy food items (such as organic produce) and the low cost of nutrient-poor foods (such as packaged, processed food) is the result of market evolution without corrective government intervention.

The concept of a public good is an aspect of market failure theory pertaining to food insecurity. Rocha explains that while nutritious food and a healthy diet itself is not a public good, their insufficiency can lead to poor health outcomes and significant consequences for public health (2007, 17). Food is rivalrous and excludable – two characteristics of a private good (17). Once a food item is consumed by one person, it is not possible for that same food item to be consumed by somebody else. Public health is a public good because all taxpayers suffer the consequences of the costly effects of diet-related diseases and loss of productivity. As with negative externalities, the absence of corrective measures from the market calls for government intervention. In the case of
food insecurity and the subsequent barrier to adequate nutritious food from the market, the charity sector has responded to the call for intervention instead of government.

2.3.2. Income Inequality

Income insecurity, a precursor of poverty, is connected to food insecurity in almost all cases. Once financial constraints have escalated to a state of food insecurity, sufficient quality food to meet the recommended nutrition intake for good health as established by Canada’s Food Guide, cannot be reliably accessed. The barrier to reliable nutrition in a state of food insecurity is through financial means and charitable food sources. Increasing income inequality makes it increasingly challenging for people to recover from food insecurity.

The Kuznets Ratio serves as a measure for income inequality:

\[
= \text{income share of the 20% richest} \div \text{income share of the 60% poorest}
\]

The interpretation of the Kuznets Ratio is the larger the ratio, the more inequality there is in the society. Furthermore, Kuznet’s 1955 hypothesis about income inequality proposed that inequality will first increase as a society’s standard of living begins to improve in the early stages of economic development, declining as the country reaches a higher level of per capita income (Bhandari, Pradhan, & Upadhyay, 2010, 7). Kuznet’s hypothesis, depicted by the graph in figure 2, shows a distinctive half circle wherein – within a certain range of income – inequality is eventually zero.
Canada's high per capita income level would suggest this country is on the declining side of the inequality curve; however, the Conference Board of Canada reports that income inequality is actually increasing as shown by a declining Gini coefficient (2014).

The Gini coefficient is a commonly used measurement for income inequality. The Conference Board of Canada describes its calculation as “the extent to which the distribution of income among individuals within a country deviates from an exactly equal distribution” with a score of 0 represent perfect equality and a score of 1 representing total inequality (2014). As shown in figure 3, income inequality is growing in Canada. With the assumption of no outliers among the major cities in Canada, this data can be extrapolated to represent increasing income inequality in Vancouver.
Income inequality is an important consideration for the problem of food insecurity for two key reasons. The first reason is linked to the inherent social injustice', for income inequality has implications for health outcomes and life satisfaction (Conference Board of Canada, 2014). Secondly, aside from morality, economists are finding that income inequality is harmful to economic growth due to the inability of increasingly large segments of the population to gain the skills necessary for participation in an evolving workforce (Conference Board of Canada, 2014).

Income inequality contributes to inequitable market pricing, which contributes to the cycle of low income status and ongoing food insecurity. Government transfers such as social assistance and child benefits contribute to the reduction of inequality. Government transfers do not, however, solve the problem – particularly when the transfers are not high enough to cover fixed costs, such as housing and food.

2.3.3. Elasticity of Demand for Food

Food insecurity is never a choice; although those experiencing food insecurity are often forced to make expenditure choices which lead them into a state of food insecurity. These expenditure choices are necessary trade-offs. An income-insecure household functions within a strictly limited budget. Price elasticity of demand is a measurement of the degree to which demand will change in response to a change to price. Price changes are relative; for example, if one’s income decreases, the relative price of goods will increase. If a good has highly elastic demand, consumption will change significantly when prices change, and if the good is inelastic, the demand will change relatively little. The demand for nutrient-dense food is quite elastic, especially for low income consumers. Thus, as prices increase, lower quality food will be purchased instead of nutritious food.

Researchers Pieroni, Lanari and Salmasi find that shifts in relative prices impacts the net effect of food consumption with a statistically significant impact on the increase of unhealthy food consumption (2011, 144). Pieroni et al also find the falling prices of unhealthy food contributes to overweight and obesity in Italy, as people substitute unhealthy foods for healthy foods (134). Moreover, the substitution effect impacts poorer and less educated people on a disproportionately high level (135). This
finding is consistent with Lundberg and Lundberg’s research results identifying food as a normal good.

The quality of food demanded should be considered along with the quantity of food demanded. Lundberg and Lundberg support the inclusion of quality in the assessment of demand changes with income, noting that “high-income groups probably change to more exclusive food when receiving an increase in income” (2012, 387). Income elasticity of demand – that is, how a change in income affects demand – differs for different income groups. It can be inferred that low income groups likely change to lower quality food when experiencing a decrease in income.

Price and income elasticities (specifically for nutrient-dense food) is important to the issue of food insecurity because people will more readily substitute unhealthy food for healthy food when faced with changes to the relative price of the two, or changes in income at certain income and price levels. Studies show that consumers will replace more expensive goods (such as costly whole food items) with less expensive alternatives (such as cheap processed foods) at lower income levels. With the constraint of a restricted budget, low income people make the choice to substitute unhealthy food for healthy food reflecting a higher elasticity of demand for nutrient-dense food within certain price ranges. While the demand for food is normally inelastic, this is not the case for higher quality foods at certain price points. Consumer demand for unhealthy food responds to price reductions, as lower income consumers substitute higher quality for lower quality food. Positive feedback to the market supports the supply of unhealthy food products at a price poor people can (sometimes) afford. The key characteristics of these unhealthy food products, in addition to low levels of nutrients, are high levels of fat, sugar and salt; and such unhealthy food products are demanded because consumers have developed preferences for them.

2.3.4. Food Preferences

Preferences guide consumer choices. Drewnowski discusses the connection between taste and food preference, citing the sensory pleasure response elicited in the human brain through an opiate effect when consuming sugar and fat (1997, 243). Drewnowski explains that taste preference is not the only factor influencing food
consumption, citing that demographic, economic, and sociocultural variables also play important roles; in particular, economic factors, including income, determine group consumption of sugar and fat (1997, 248). Inexpensive food options tend to be high in sugar, fat, and salt, and provide a positive endorphin response to the person consuming the food resulting in enjoyment, despite the low nutritional quality. Birch supports Drewnowski’s finding, echoing that “repeated association of food sensory cues with these positive post-ingestive signals can produce learned preferences” (1999, 55). The development of preferences for unhealthy food contributes to the barrier of food insecure households accessing sufficient, quality food to meet the recommended nutrition intake for good health.

Taste is not the only factor to consider in the development of food preferences. A study of why women of lower socioeconomic status (SES) have poorer dietary behaviours than women of higher SES shows that household income does not influence taste preferences of fruits and vegetables, negating taste as a key barrier for consuming healthy food (Inglis, Ball and Crawford, 2005, 4). Inglis, et al find other differentiating factors which lead to why lower SES groups make poorer dietary choices - for themselves and their families - including: 1) strong value of traditions and familiar dietary practices from childhood; 2) accepting and even desiring of being overweight; 3) time constraints a barrier to purchasing ingredients and preparing a healthy meal; and 4) the perceived high cost of healthy eating (2005, 19-23). Underscoring these key differentiating factors is evidence that lower SES groups have significantly less knowledge of nutrition (2005, 4). Thus, the palatable taste of unhealthy foods high in sugar, fat and salt can be viewed as a positive externality of consuming less expensive food items. Moreover, with low income groups lacking nutritional knowledge, and considering the other factors influencing poor diet choices, the barrier to good health through a nutritious diet includes the development of unhealthy food preferences along with barriers to accessing healthy food in the market and charity food systems.
3. Methodology and Data Sources

3.1. Study Design

The methodology of this study includes three elements: literature review, case studies, and four in-depth interviews with food insecurity stakeholders.

The goal of the literature review is to discover the academic perspective of food insecurity and food banks to develop a clear picture of the status quo charitable food system. Further, the recommendations for future change in the literature are useful in developing policy alternatives. The methodology for collecting information is peer-reviewed academic journals and other scholarly sources including publications from large stakeholder organizations.

The goal of the case studies will be to identify alternative approaches to addressing food insecurity to the current charitable model as well as to compare outcomes within those jurisdictions. The case studies will examine the models for remediating food insecurity in two international jurisdictions: the direct nutrition supplement program in United States of America (US), and the Nordic welfare state model in Norway and Denmark; as well as one domestic case study: the Stop Community Food Centre model in Toronto, Ontario.

The goal of conducting interviews with food insecurity stakeholders is to inform the analysis with experiential context and a local Vancouver perspective. Interview participants are selected from the stakeholder groups outlined in table 1, with the exception of the general public and academia. Interview participants from the general public are not sought because this study endeavours to avoid potentially vulnerable populations who may be food insecure. Interview participants from academia are not sought because these viewpoints are adequately covered within the literature review component of this research. Therefore, the interview participants are represented by the
other two stakeholder groups: administrators within the charitable food system and the public sector/government.

**Table 1. Stakeholders**

<table>
<thead>
<tr>
<th>Stakeholder Group</th>
<th>Action Steps Related to Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charitable Food System Administrators</td>
<td>Ensuring adequate support for continued progress in providing individuals in need with food.</td>
</tr>
<tr>
<td>Public Sector / Government</td>
<td>Identifying and implementing strategies and policy options which are effective and realistic for budgetary environment.</td>
</tr>
<tr>
<td>Academia</td>
<td>Researching trends, theorizing accountability in food insecurity.</td>
</tr>
<tr>
<td>General Public (including past, present and potentially future individuals who have experienced or may experience food insecurity)</td>
<td>Donating; volunteering; and making use of or considering using a food bank.</td>
</tr>
</tbody>
</table>
4. Food Insecurity Literature Review

4.1. Causes of Food Insecurity

There is consensus in the academic literature that the underlying cause of food insecurity is low income in all cases. While the myriad of factors contributing to poverty go beyond the scope of this research, the link between low income and food insecurity is reviewed. Understanding some of the characteristics of income insecurity, which leads to food insecurity, will inform the development of policy solutions to ameliorate food insecurity in Vancouver.

Hunger Count 2013, a comprehensive, annual report on food bank use in Canada, reports that within one month, 94,000 individuals were assisted by food banks in BC (Food Banks Canada, 4). Moreover, the food bank usage rate in BC has increased by 20 percent since 2008 (Food Banks Canada, 4). While the frequency of visits has remained relatively constant year-over-year, food bank use is still higher than it was prior to the 2008 recession, despite economic recovery. Although food banks are intended to be an emergency resource used for a short period of time, only seven percent of users reported first time use in 2013 (24). Thus, there is a long-term trend in food bank reliance suggesting that food insecurity is an enduring problem for the vast majority of food bank users.

A ten-year trend of food bank use reflects the trend in unemployment as shown in figure 4 below (Food Banks Canada, 2013, 4). As well, 90 percent of food bank users are not part of the labour force. The connection between unemployment and food insecurity points to income insecurity, or the inability to secure a job, as a correlative factor to food insecurity. Moreover, unemployment rates capture only those who are actively searching for a job and do include those who are not participating in the labour force at all. Given the connectivity between food insecurity and unemployment plus gaps
in labour force participation, support mechanisms to ease the transition into the labour force may lower food insecurity rates. Coinciding with labour force participation is market participation, thereby enabling people to purchase nutritious food.

![Figure 4. Food Bank Use and Unemployment](image)

**Figure 4. Food Bank Use and Unemployment**

Note. Food Banks Canada, 2013

Of the 90 percent of food bank users not in the workforce, 40 percent receive income assistance which suggests that income assistance recipients experience a barrier to accessing food in the market food system (Food Banks Canada, 2013, 24). The barrier to income assistance recipients is explained by the Dieticians of Canada through the comparison of income assistance rates and the cost of the National Nutrition Food Basket (NNFB) (2012). The NNFB is developed based on 60 foods required for a healthy diet, per Canada’s Food Guide, for different age and gender groups and is used by government stakeholders as a monitoring tool for the cost of eating (Health Canada, 2009). Consistent access to a NNFB will prevent food insecurity.

The Dieticians of Canada report the monthly cost of a NNFB for an average family of four in BC is $944 (2012). The Dieticians of Canada consider several scenarios of family units and individuals who are receiving income assistance and find that the percentage of income required for purchasing food ranges between 33-47 percent (2012, 6). In all cases, individuals or family units receiving income assistance are left
with negative dollar amounts after paying for the cost of housing and the cost of a NNFB (6). Receipt of income assistance does not mitigate household food insecurity.

The Dieticians of Canada also highlight that while the cost of food has been rising annually, income assistance rates have been frozen since 2007 (2012, 7). The Consumer Price Index (CPI) tracks fluctuations in domestic food prices. Although the CPI shows a slight decline in aggregate Canadian food prices by slightly over one percent between 2012 and 2013, analysis of the categorical food price changes sheds light on how the CPI may impact food insecurity. (Statistics Canada, 2013). A summary of categorical price changes is provided in table 2.

<table>
<thead>
<tr>
<th>Food Category</th>
<th>Percentage Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preserved and prepared Fruit</td>
<td>-3.4</td>
</tr>
<tr>
<td>Preserved and prepared Vegetables</td>
<td>-4.7</td>
</tr>
<tr>
<td>Sugar and Confectionary</td>
<td>-5.7</td>
</tr>
<tr>
<td>Fresh Fruit</td>
<td>6.1</td>
</tr>
<tr>
<td>Fresh Vegetables</td>
<td>6.7</td>
</tr>
<tr>
<td>Eggs</td>
<td>4.2</td>
</tr>
<tr>
<td>Fish</td>
<td>2.7</td>
</tr>
</tbody>
</table>

The chart shows the cost of fresh, nutrient-dense foods has increased while the cost of processed foods with lower nutritional quality has decreased. Food pricing introduces challenges to income assistance recipients, and other low income groups, in making healthy choices that are affordable as the prices of nutritious foods rise, purchasing power declines. The CPI demonstrates how the greater food system impacts the ability to consistently obtain a nutritious diet among low income groups.

Aside from food banks, many people at low to moderate levels of food insecurity do not seek charitable or governmental assistance. Thus, the impact of food insecurity has a broader reach than the charitable food system. There is a risk to diet quality and negative health impacts at any level of food insecurity.
4.2. Health Implications of Inadequate Nutrition

Food insecure households face barriers to meeting the daily guidelines of Canada’s Food Guide. According to Canada’s Food Guide, the average adult requires 7-10 servings of vegetables and fruit; 6-8 servings of grain products; 2-3 servings of milk and alternatives; and 2-3 servings of meat and alternatives each day (Health Canada, 2007). Further, Health Canada advises Canadians to limit foods containing high levels of sodium, fat, and sugar (2013). Health Canada also recommends eating at least one dark green and one orange vegetable each day, at least two servings of fish once per week, and to prepare food with little to no salt, sugar, or fat (2007). Canada’s Food Guide contains other tidbits of advice for healthy eating including “eating the recommended amount and type of food each day” (2007). Health Canada’s advice is inequitable for citizens experiencing food insecurity cannot consistently access sufficient quantities and varieties of food to meet these requirements through either the market or charitable food system. Moreover, the barriers to food access are underscored by a barriers to personal autonomy over food choice.

Food insecure households which rely on food banks for sustenance generally have little or no choice over the contents of their food hampers. Likewise, food banks traditionally have little to no control over the food donations they receive for distribution (Irwin, et al, 2007, 17. Thus, the quantity and quality of food donations is unpredictable, making it challenging to meet recipients’ nutritional needs (17). The uncertainty regarding the type and quality of food available for distribution means that food banks cannot guarantee consistent access by its users to the nutrients recommended in Canada’s Food Guide. Thus, food banks will not prevent malnutrition or other diet-related negative health outcomes.
The concern over the nutritional adequacy of the food provided by food banks is validated by a case study in Southwestern Ontario conducted by Irwin, et al (2007). This study assessed 180 food hampers for nutritional content as a percentage of the Dietary Reference Intake (DRI) per person per day. The study found that all major food groups with the exception of grains were below the daily recommendation (2007, 18). The micronutrient content was highly inconsistent with only 36 percent of the micronutrients meeting the minimum DRI (18). The gap in micronutrient content can be attributed to insufficient amounts of magnesium, calcium, and vitamins C and D (19). Overall energy – or calories – per person were insufficient as well (19). This study echoes the DTES Kitchen Table’s survey findings of inadequate nutrition provided through charitable food resources in Vancouver.

The study does not assess hampers containing spoiled food, yet addresses that the occurrence of rotten food in hampers will lower the nutritional content available to the recipient. Irwin et al conclude that the provision of more perishable foods over processed foods can improve the nutritional deficiencies in the food hampers (19). Food Banks Canada counters Irwin’s findings by reporting that 38 percent of food distributed through food banks are perishable, such as fresh or frozen fruits, vegetables, eggs, milk, or bread (2013, 9). Over half of food banks also now purchase food items, negating the full dependence on donations, to ensure the availability of healthful food items for its users (Food Banks Canada, 2013, 11). Improvement to food quality through food purchase relates to a reduction in service: nearly 40 percent of Canadian food banks have had to cut back on the amount of food they can supply to each household, and nearly 10 percent of people who request assistance are turned away from food banks (11). Despite good intentions, the existing charitable food system is unable to meet the

Food groups, or macro-nutrients, include milk and dairy, meat and alternatives, fruits and vegetables, and grain products.

Micronutrients include vitamin B12, thiamin, riboflavin, niacin, vitamin A, vitamin D, vitamin C, calcium, magnesium, iron, and zinc.
nutritional needs of its food-secure uses – let alone everyone experiencing food insecurity.

Studies demonstrate the importance of food banks to supplement the gap in otherwise inaccessible dietary nutrition. Kirkpatrick and Tarasuk find that food insecure Canadians experience nutritional deficiencies (2007). In an assessment of the 2004 Canadian Community Health Survey (CCHS) and a 24-hour food intake recall survey, it was found that household food insecurity is directly related to compromised nutrition among adults and adolescents (Kirkpatrick & Tarasuk, 2007, 609). Notably, there were few differences in the nutritional intake of young children based on the level of household food security; however, qualitative studies show that adults report protecting their children from nutritional compromises (Kirkpatrick & Tarasuk, 2007, 610; Tarasuk, 2001, 13). Thus, adults and older children may experience severe food insecurity while young children experience moderate to no food insecurity.

Kirkpatrick and Tarasuk also find a positive association between household food insecurity and consumption of high-calorie foods which could lead to obesity over time (2007, 610). The dietary compromises taken by food insecure adults and adolescents cause nutrient inadequacies, putting these individuals at risk for diet-related health consequences (611). Overall, studies highlight the challenge for food insecure households to obtain sufficient nutritious food to meet the daily health needs of all members of a food insecure household.

Nutritional compromises may lead to malnutrition, and malnutrition is an impact of food insecurity affecting people of all ages. The Community Nutritionists Council of BC (CNC) support the connection between food insecurity and public health, finding that children who are malnourished are at risk for cognitive damage, and behavioural and emotional problems (CNC, 2004, 7). Malnutrition in adolescents has been linked to depressive disorder and suicidal symptoms (7). Moreover, chronic malnourishment will lower a person’s sense of dignity and self-esteem, leading to levels of emotional distress three times that of the general population (7). Due to variance in the severity of food insecurity, instances of malnutrition will vary case by case. Yet, with each case of household food insecurity there is a risk of health consequences – either from self-
deprivation for the sake of a family member or individual reliance on the charitable food system. Moreover, such health consequences include mental health consequences.

Tarasuk discusses the psychological impact of food insecurity and “food anxiety” that typically accompanies this status (2001). The source of the stress is a combination of feeling deprived without choice and a constant concern about whether there would be sufficient food for meals in the near future (Tarasuk, 2001, 10). Recognizing the emotional impacts of food insecurity serves as an important reminder that remediating food insecurity is not only about providing food to those who are hungry. If an individual must repeatedly rely on a charitable food source for subsistence, they may not go hungry but they remain food insecure. The mental health impacts of food insecurity must be considered along with the physical health consequences caused by a link between food insecurity and obesity.

Food insecure households are at risk for consuming foods that are high in calories yet low in nutrient density which contributes to the problem of obesity (Kirkpatrick & Tarasuk, 2007; CNC, 2004). Processed foods are high in sugar and sodium, and are less expensive than fresh produce, protein, and milk products. As demonstrated in the description of the economic framework in which food insecurity occurs, nutrient-dense food is likely traded off for filling, inexpensive alternatives. Malnutrition and obesity are also connected to the prevalence of chronic, preventable disease to which food insecure groups are more susceptible.

A study on food insecurity and obesity shows that 50 percent of low-income food-insecure women were overweight compared to 34 percent of women who did not have difficulty obtaining a nutritious diet (CNC, 2004, 8). The discrepancy depicts inequitable access to health, as obesity commonly leads to chronic diseases such as cardiovascular disease and diabetes (8). From a public perspective, health issues resulting from food insecurity ultimately burden the public health care system resulting in high treatment costs. The total cost of type II diabetes alone to Canada was $1.7 billion in 2000 (Public Health Agency of Canada, 2011). The full extent to which malnutrition or food insecurity results in health care costs, however, has not been measured as a secondary complication is typically recorded as the primary reason for treatment (CNC, 2004, 21).
In the absence of a calculated cost of food insecurity, it is known that “nutritional risk is the single best predictor of physician and emergency room visits, hospital readmission and increased length of stay” demonstrating a clear connection between food insecurity and poor health outcomes (CNC, 2004, 21). Despite the proven link between health and nutrition, there remains a disconnect between health care and nutrition access. Furthermore, the connection to physical and mental health outcomes show that food insecurity is a public health problem which is not being adequately addressed by the current food bank system.

4.3. Proposed Solutions in the Literature

Poverty reduction is the most frequently cited solution to ongoing food insecurity in the literature. There are various recommendations for alleviating poverty which would provide additional income for market food system participation, such as changes to labour policy. The Dieticians of Canada call for the enactment of a living wage policy, while Food Banks Canada focuses its policy recommendations on revising the Employment Insurance (EI) benefits, ensuring job creation, and assisting unemployed people in finding new jobs. The labour-based policy options are important to the long-term success of Canada and prevention of ongoing and increasing levels of food insecurity. Moreover, Kerstetter and Goldberg suggests a flexible income threshold based on market prices along with an earned income benefit to supplement those who are working but earning a low wage – similar to the existing Working Income Tax Benefit (WITB) (2007, 6). Labour policies do not, however, address the majority of food bank users who are not participating in the labour force.

Affordable housing policy appears frequently in the literature as a recommendation to alleviate food insecurity. Since the cost of housing is fixed in one’s budget, securing affordable housing may negate the tendency to trade-off nutritious food for less expensive food items. The Dieticians of Canada highlight the importance of considering food access, food preparation space, and food storage in social housing developments (2012, 11). Some single occupancy housing units do not include refrigerators or stoves; therefore lack of kitchen space is a barrier to a healthy diet regardless of having attained affordable housing. Food Banks Canada provides specific
action steps to improve affordable housing: the federal government should implement tax reforms to benefit the development of social housing projects; and the federal government should reinvest the funds saved on other social housing programs which are expiring to create a new Federal Social Housing Operating Fund (2013, 19). It is interesting that Food Banks Canada directs its policy recommendations to the federal government, as opposed to the provincial government which administers social programs.

Improvements to social assistance programs are echoed across the literature to alleviate poverty and increase financial resources for food. Kerstetter and Goldberg suggest raising income assistance amounts by 50 percent and to index the rates to reflect the rising cost of living (2007, 7). Kerstetter and Goldberg do not, however, explain how this option will be funded. Similarly, Food Banks Canada emphasizes the need to design an income support system that enables the progression to self-sufficiency; an increase in the WITB to ease the transition from income assistance to employment; and to change the eligibility of the WITB to automatically include households below the after-tax low-income cut-off (LICO) (2013, 20). Contrary to the literature, not all entities agree that increases to income assistance will rectify the problem of food insecurity.

While much of the food insecurity rhetoric agrees with Kerstetter and Goldberg’s perspective of increasing income assistance rates, organizations involved at the heart of the issue call for mechanisms that incentivize a transition from income assistance into the workforce (2007). Maintaining the status quo traditional food bank structure will continue to cost the provincial government through social programs, health care, lost productivity, crime, and foregone economic activity (Dieticians of Canada, 2012, 11). Implementing poverty reduction mechanisms would ultimately reduce overall expenditure by alleviating the negative externalities of food insecurity. Although poverty reduction is necessary, it is highly complex and does not address the urgency of food insecurity.

To address the urgency of food insecurity and to mitigate the inadequacy of the nutritional content in food bank hampers, Food Banks Canada has recommended a tax incentive plan to stimulate charitable food donations (2012, 1). The proposal entails
allowing “food manufacturers, importers, distributors, and retailers to deduct from taxable income the production cost of food donated to food banks, plus one half of the unrealized appreciation with a maximum deduction of twice the production cost” (Food Banks Canada, 2012, 1). The rationale for this alternative is a need for increased food donations based on the fact that people are turned away from food banks empty handed. However, perishable food is needed over manufactured food products, yet food donations tend to be non-perishable. Moreover, incentivizing an increase in food donations serves to justify and maintain current food bank demand as opposed to reducing the demand for food bank services through an approach to lowering food insecurity rates.

Apart from the charitable food system, the Dieticians of Canada have called for change to the market-based food system, requiring a major shift in the structure of the local food supply chain, local agriculture land expansion, and altered consumer preferences (2012, 12). A need for increased control over food prices and a boost to the local economy serves as the rationale behind this policy alternative (12). Changing the food system entails a high level of implementation complexity, yet the long-term benefits may result in more control over nutrition equity and improved long-run health outcomes.

Food system change has begun on the community level in the City of Vancouver through community gardens such as the Edible Garden Project. Local growing initiatives have emerged for citizens as an alternative to commercial food sources. Moreover, some garden projects make their yields accessible to those in need through donations or at-cost sale. The capacity and accessibility of these efforts determines the feasibility of such initiatives to serve as a solution to food insecurity on a broad scale. The community garden movement may be viewed as a starting point for the evolution of the food system by beginning a shift in attitude and increase in food literacy. The City of Vancouver supports community garden projects as actions toward a sustainable, local food system as initiated by the Vancouver Food Strategy.

Positive steps have been taken in the City of Vancouver’s food system. However, specific policy action is required to address food insecurity. The policy alternatives proposed in the literature inform the analysis of the problem at hand, though these are theoretical in nature and thus do not provide outcome measures. Exploring approaches
which have been implemented in other jurisdiction will further inform and ground the analysis in actuality.
5. Case Studies

Analysis of programs and models implemented in other jurisdictions build on the academic literature, informing the research of potential policy alternatives for food insecurity in Vancouver. The three case studies this research explores are: the United States direct nutritional assistance program; Nordic Welfare policy; and the Community Food Centre (CFC) model. The method for selecting the case studies to analyze includes identifying the jurisdictions with the lowest levels of unaddressed food insecurity worldwide and to identify efforts which differ from the current efforts in Vancouver. The three jurisdictions ranked best globally for food insecurity are: the United States (US), Denmark and Norway (Economist Intelligence Unit, 2012, 22). Within Canada, the Community Food Centre model is selected due to the success exemplified by The Stop Community Food Centre in Toronto, Ontario.

The Global Food Security Index (GFSI) assesses national food security based on three categories established by the World Health Organisation (WHO): affordability, availability, and quality and safety (EIU, 2012, 22). The GFSI ranks Canada 8th out of 107 countries for food security with a score of 83.4 out of a possible 100 (2012). The US ranks first with 89.5 points, and Denmark and Norway effectively tie for second with Denmark scoring 88.1 points, and Norway scoring 88 points (2012). The high rankings of the United States, Denmark and Norway are the reason for selecting these countries for jurisdictional case studies. Due to the similarities between Denmark and Norway as Nordic countries, this research will combine Norway and Denmark into one section. For the third case study, this research sought a domestic case of an alternative approach to the traditional charitable food model. The models considered include community kitchens, neighbourhood houses, urban gardening projects and the CFC model. The CFC model has been selected for the case study on a qualitative basis because the model embodies many attributes of the alternative models and has a strong, measure impact assessment.
The case studies are developed with the following guidelines:

1. How prevalent is food insecurity in the jurisdiction?
2. What are the key systemic findings impacting food insecurity rates?
3. What are the system limitations?

The first guideline will establish a point of comparison and will provide context to the jurisdiction; the second guideline will look at the system or program in place –direct or indirect – and how that system mitigates food insecurity within its jurisdiction; and the third guideline will highlight potential gaps within the system, such as limitations to replication, excluded beneficiaries, or unintended consequences. I acknowledge that space limitations impede the ability to include all facts and perspectives of the respective cases and are intended to provide the reader with an overview of these alternative models for addressing food insecurity.

5.1. Direct Nutritional Assistance Program: United States

The United States (US) provides its citizens access to a federal direct nutritional assistance program for the purpose of addressing national food insecurity. The US federal government provides 13 different national food assistance programs, however this case study will focus on the largest program - the Supplemental Nutrition Assistance Program\(^5\) (SNAP). SNAP plays an essential role in ameliorating food insecurity and subsequent poor nutrition among America’s low income population. SNAP was born out of the Food, Nutrition and Conservation Act of 2008 (also known as the Farm Bill) wherein 75 percent of the budget was allocated to improving nutrition. SNAP received the largest portion of federal funding for nutrition programs at approximately $78 billion (Aussenberg & Collelo, 2014, 7). The substantial government funding commitment

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\(^5\) SNAP has replaced the US Food Stamp Program.
enables the SNAP to function on a broad-based scale. SNAP can also be construed as government acceptance of accountability for its national food insecurity rates.

SNAP provides nutrition assistance to millions of low-income Americans and serves as a nation-wide nutritional safety net (USDA, 2012, 1). In 2011, over 45 million people in the US received a SNAP benefit and about 40 percent live in households with some earnings (USDA, 2012, 1). The nutrition assistance is made available by means of a cash benefit delivered through an electronic debit card, or electronic benefit transfer (EBT) (USDA, 2012, 2). The EBT loaded with SNAP benefits enables recipients of the program to make food product purchases at authorized grocery stores. The EBT cannot be used at restaurants, fast-food chains, non-authorized grocery stores or other retailers. Furthermore, the EBT cannot be used for purchase of products other than food or seeds and plants for the purpose of growing food, and cannot be withdrawn for cash (2).

The SNAP program has a low barrier to access, for the eligibility criteria excludes familial, demographic, and employment status restrictions. To qualify for SNAP benefits, a household must have a gross income level of less than 130 percent of the Federal poverty guidelines (see table 3) and assets of less than $2,000 (USDA, 2012, 2). Seniors and people with disabilities are exempt from the gross income level and the asset limit is expanded to $3,250 (2). Notably, property is excluded from the asset valuation (USDA – Food and Nutrition Service, 2013).
Table 3. **US Poverty Guidelines**

<table>
<thead>
<tr>
<th>Persons in family/household</th>
<th>Poverty guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$11,490</td>
</tr>
<tr>
<td>2</td>
<td>$15,510</td>
</tr>
<tr>
<td>3</td>
<td>$19,530</td>
</tr>
<tr>
<td>4</td>
<td>$23,550</td>
</tr>
<tr>
<td>5</td>
<td>$27,570</td>
</tr>
<tr>
<td>6</td>
<td>$31,590</td>
</tr>
<tr>
<td>7</td>
<td>$35,610</td>
</tr>
<tr>
<td>8</td>
<td>$39,630</td>
</tr>
</tbody>
</table>

For families/households with more than 8 persons, add $4,020 for each additional person.

Note. US Department of Health and Human Services, 2013

There are additional deductions applicable to net income such as a shelter, dependent care, and medical expenses (9). These deductions reflect the understanding that mandatory expenses will lower available income to purchase food, which is assumed to cost 30 percent of income. SNAP benefits are calculated based on the following formula:

\[
\text{SNAP benefit} = \left( \text{Net Monthly Income} \times 0.3 \right) - \text{maximum SNAP benefit}
\]

Table 4 shows the maximum monthly SNAP benefit based on the number of household residents (USDA – Food and Nutrition Service, 2013).
Table 4. Monthly SNAP Allotments

<table>
<thead>
<tr>
<th>People in Household Maximum</th>
<th>Monthly Allotment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$189</td>
</tr>
<tr>
<td>2</td>
<td>$347</td>
</tr>
<tr>
<td>3</td>
<td>$497</td>
</tr>
<tr>
<td>4</td>
<td>$632</td>
</tr>
<tr>
<td>5</td>
<td>$750</td>
</tr>
<tr>
<td>6</td>
<td>$900</td>
</tr>
<tr>
<td>7</td>
<td>$995</td>
</tr>
<tr>
<td>8</td>
<td>$1,137</td>
</tr>
<tr>
<td>Each additional person</td>
<td>$142</td>
</tr>
</tbody>
</table>

(USDA – Food and Nutrition Service, 2013)

In Canada, the poverty guideline is determined by Statistics Canada’s Low Income Cut-off (LICO). Statistics Canada reports approximately 14 percent of the population in Vancouver is low income based on 2011 data, meaning that over 84,000 citizens would qualify for a monthly allotment under the SNAP structure.6

5.1.1. Key Findings

Wide participation in federal food assistance programs has not eradicated the problem of food insecurity in the US. Over 14 percent of Americans were food insecure, of which nearly 6 percent were severely food insecure, at some point in 2012 per the United States Department of Agriculture (USDA) (Coleman-Jensen, Nord & Singh, 2013, 7). Severe food insecurity is characterized by concern of running out of food, inability to purchase balanced meals, and cutting meal size or frequently skipping meals (5). Nearly

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6 Percentage calculation based on the LICO before tax; number of qualifying citizens based on City of Vancouver population per 2011 census data at 603,502.
60 percent of those food insecure households participated in at least one federal food assistance program such as the SNAP.

SNAP participation is effective in reducing food insecurity, as Mabli et al found in 2013. The percentage-change reduction in food insecurity is 7 percent among a cross-sectional group of households at the time of program entry and six months later; and a 16 percent change reduction in food insecurity is found among a longitudinal group of new program entrants compared with households enrolled for six months (Mabli, 2013, 47). The percentage change in food insecurity shows a positive impact of SNAP participation in reducing food insecurity; however, the relative impact is low. The finding thereby indicates that SNAP participation alone does not resolve household food insecurity in the US.

SNAP addresses the financial barrier to food insecurity but not the barriers of food literacy and food preferences. This finding is drawn from household food spending and the finding that food expenditure varies depending on the size of the SNAP benefit received (Mabli, et al, 2013). Increased food expenditure indicates purchase of a healthy diet as nutrient-dense food is more expensive than alternatives. Mabli et al report that households which receive high SNAP benefits are associated with an increase in food spending relative to the cost of the Thrifty Food Plan\(^7\) (TFP); however households which receive low SNAP benefits are associated with a decrease in food spending relative to the TFP (2013, 48). The Mabli et al findings indicates that SNAP beneficiaries do not spend their earned income on food. Moreover, the finding that SNAP benefits correlate with food expenditure indicates that income not the only barrier to accessing a nutritious diet for food insecure Americans.

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\(^7\) The TFP is the US national standard for a nutritious, minimal-cost food basket and serves as the basis for calculating SNAP benefits. The TFP adjusts for inflation in food prices.
There are over 200 food banks nationwide despite the broad scope of SNAP and initiatives in the works to make healthy food more affordable for SNAP recipients (Feeding America, 2014). The existence of a national network of food banks demonstrates a gap in government services caused by insufficient SNAP benefits or cut-off SNAP recipients, which is filled by the charity sector. SNAP is beneficial in the short-run; yet in the long-run, a stop-gap approach is a disservice for, in the absence of preventative measures, the problem will perpetuate.

5.1.2. Limitations

SNAP is criticized as a stop-gap solution because it fails to address the underlying causes of food insecurity. Food insecure populations have an increased susceptibility to obesity and associated health complications, as explained by the Food Research and Action Centre (FRAC), and thus would benefit from food literacy education and guidance toward improving food choices (2010). The USDA does provide other food education programs, such as through its Centre for Nutrition Policy and Promotion, which may fill the food literacy gap; however, there are no apparent facets that encourage beneficiaries to utilize education resources external to SNAP.

SNAP does not address the influence of the beneficiary’s geographic location and the characteristics of the local food retailer on food purchases on food choices. FRAC reports that barriers to accessing fresh produce are problematic for low income neighbourhoods because they are more likely to host only convenience stores which sell processed or packaged food items as opposed to grocery stores (2010). Thus, SNAP recipients who do not reside close to a grocery store will be more likely to spend their benefits on unhealthy food items. Additional barriers to accessing a grocery store over a neighbourhood convenience store includes mobility barriers, such as the high relative cost of public transportation, which contributes to the disincentive for SNAP beneficiaries to access nutrient-dense foods.

The perceived cost of nutritious food is another barrier to SNAP recipients obtaining a healthy diet. The USDA has taken steps to mitigate the cost barrier of nutritious food by rolling out a pilot project called the Healthy Incentives Pilot (HIP), which ran for one year between 2011 and 2012 within a random sample of SNAP
participants (Bartlett, et al, 2013). The HIP provided 30 cents for each dollar of SNAP benefit spent on a fruit, vegetable, or other healthy food item which did not contain added sugars, fats, oils, or salt. The HIP incentive is capped at 60 dollars per month and placed the financial incentive back on the SNAP EBC (Bartlett, et al, 2013, 1). The HIP Interim Report found an average increase of 25 percent consumption in fruits and vegetables per day compared to non-HIP participants in a control group. Controlling for preferences and other barriers to healthy food, the report finds that the HIP can be attributed to increasing the amount of fruits and vegetables purchased and consumed by SNAP beneficiaries. Overall, the HIP demonstrates that direct financial support does not ensure access to a nutritious diet; therefore, SNAP benefits alone do not mitigate food insecurity.

5.2. Nordic Welfare State Model: Denmark and Norway

Denmark and Norway have two of the lowest rates of food insecurity in the world, according to the EIU. The primary difference between these two Nordic countries, the US, and Canada is that no government programs can be attributed to this ranking. That is, the Nordic countries do not have dedicated programs to the amelioration of food insecurity. Instead, the low food insecurity levels can be attributed to the governance of food and wider social programs under the guidance of the Nordic Welfare State model.

The Nordic Welfare State model emphasizes state financing, full employment, and equality (Greve, 2007, 43). As well, universalism is argued to be the fundamental basis of the Nordic – or Scandinavian – welfare model (Greve, 44). Greve discusses how universal programs are less stigmatizing and garner more support from middle-class citizens compared to programs targeted at low income populations using income-tested, selective policies and programs (44). Providing programs that are accessible to the middle class as well as low income populations better positions the government for voter support and political buy-in while serving as a mechanism of wealth redistribution. By making services more affordable or free, such as child care, citizens have more available income to spend on the necessities of life – like food.
Norway is not a member of the European Federation of Food Banks (FEBA), and there is no indication that food banks currently operate in this country on a large, organized scale. There have been discussions in the local media on the potential for Norway to open its first food bank, yet the goal of this endeavour is to be a solution for food waste – not to address food insecurity as North American food banks do (Green Growth Web Magazine, 2014). There is acknowledgement that if a food bank were to be opened there is a segment of the population that would utilize it; however, this does not serve as an indicator of demand for a charitable food resource. The literature provides consensus on the notion that household food insecurity is not considered a problem in Norway with one report stating that “there is more than enough food, and the vast majority can afford all the food they can eat” (Flaten, 2001, 2). Those who fall outside the “vast majority” are the people with whom this research is most concerned; yet with no indication as to how this country directly addresses national food insecurity, I infer that the approach within Norway is not one of amelioration but rather prevention.

Denmark, unlike Norway, is a member of FEBA and has one food bank operating in Copenhagen (Munk, 2012). FEBA’s mandate is to fight against food waste, which is echoed in the purpose of the Copenhagen food bank: to provide a solution to food waste and to provide food to hungry people (Munk, 2012). The literature suggests that the motivation behind opening the food bank, and the consideration of launching a second food bank, is mitigation of food waste with the opportunity to feed hungry people as a positive component. Moreover, Søndergaard-Thorsen cites that food insecurity has not been a point of concern or public discussion in Denmark (2011). In the absence of reporting, this research turns to a poverty measure to extrapolate the proportion of the population susceptible to food insecurity.

The Nordic countries have also been more protective over their food system in terms of international trade agreements compared to Canada and the US, and have been slow to engage in large-scale international trade agreements for food products. Norway has particularly high import tariffs for food items, which has been criticized within the European Union (Milio, 1991, 211). A benefit to more controls over the domestic food system is the ability to influence food production through policy, thereby influencing food consumption patterns. As well, without an influx of imported food items, the government has access to price control mechanisms which also influences domestic consumption.
While the Nordic countries have recently opened up to trade, the prior hesitancy indicates a governmental awareness of the implications outside influence may have over its national food supply and subsequent citizen consumption patterns.

### 5.2.1. **Key Findings**

A major difference between the Nordic Welfare State model and the North American social safety net is the role government plays in regulating the food market and administering social services to combat income gaps that may cause food insecurity. In Canada and the US, on the other hand, the invisible hand of the market has had less interference, and the charity sector has absorbed the needs of those who cannot adequately participate in the market-based food system. This research finds that within the Nordic welfare state model, there has been little to no emergence of the charitable food sector.

Three percent of the population of Denmark and eight percent of the population of Norway reportedly live in poverty, therefore it may be inferred that these people are also susceptible to food insecurity (Søndergaard-Thorsen, 2011, 1; OECD, 2011, 82). The rate of poverty is relatively low in these countries considering the average was 11 percent in the 2000s across OECD countries (OECD, 2011, 82). The measure of poverty used by the OECD is the number of people earning 50 percent of the nation’s median income; the median income level in Norway and Denmark are high compared to Canada and the US, as shown in table 5.

<table>
<thead>
<tr>
<th>National Median Income</th>
<th>Multiples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norway</td>
<td>$59,000 CAD</td>
</tr>
<tr>
<td>Denmark</td>
<td>$46,000 CAD</td>
</tr>
<tr>
<td>Canada</td>
<td>$36,000 CAD</td>
</tr>
<tr>
<td>US</td>
<td>$29,000 USD</td>
</tr>
</tbody>
</table>

Note. OECD, 2010
Thus, it may be that households in technical poverty as defined by the OECD may have sufficient income to participate in the market food system and to avoid a state of food insecurity.

Norway and Denmark both have national policies centered on food accessibility and nutritional composition. The vehicle for Norway’s nutrition policy is its National Nutrition Council, which is a permanent, cross-ministerial initiative with the aim of promoting health and reducing illness by changing dietary preferences within the Norwegian population so that they are in line with nutrition recommendations (Northern Ireland Assembly [briefing note], 2009, 5). The primary method of achieving its aim is reducing social inequalities, along with education campaigns on healthy food choices (5). There is potential for government policy to change consumer preference, yet it is complex both in terms of the appropriate vehicle of intervention and the appropriate boundaries of government interference. Consequently, a government must balance public health policies and the personal autonomy of its citizenry to make their own food choices.

Kjærnes identifies that underlying national nutrition policy is the belief that the health implications spurred from diet choice is a social problem and thereby a societal responsibility (2003, 1-2). Publicly acknowledging a health problem as society’s responsibility suggests that the government is not only permitted to intervene in the market to correct the problem, but has the responsibility to do so. Moreover, the concept of societal responsibility and the subsequent policy action it calls for is contradictory to the concept of sustaining citizen autonomy by protecting freedom of choice and business enterprise (2). National nutrition policies in Norway and Denmark demonstrate the willingness to interfere in the market – something that Canadian and American governments prefer to avoid. As a result, Norway’s food policies take a distinctive preventative approach in terms of health. Moreover, the integral link between nutrition and health has been recognized on a government platform which contributes to national food literacy - a mechanism for food insecurity prevention.

Overall, the Nordic Welfare State model demonstrates the potential for national policies to mitigate food insecurity by reducing social inequality. The model enables equitable access to nutritious food by providing support mechanisms to ensure the
relative cost of nutritious food remains within reach for all citizens, thereby mitigating widespread food insecurity.

5.2.2. **Limitations**

The Nordic Welfare State model is limited by the dependency on consistent government priorities over time to ensure the maintenance of public policies which influence the prevention of national food insecurity. Furthermore, polarized views among elected officials could erode public acceptance of the social policy framework. Thus, it is necessary to maintain a clear directive for an extended period of time so that the policy outcomes may become ingrained in the social fabric of the country.

An unintended consequence of the Nordic Welfare State model may be opposition from conservative-minded citizens who prefer limited government intervention. Moreover, the increased government intervention characterizing this model may be perceived as paternalistic. If, however, the outcome is mitigation of food insecurity and the development of a healthy population, then the paternalistic policy will be justified for the sake of the public good.

The potential replication of this model in other jurisdictions is limited due to length of time that policies take to make changes identifiable to the country. Systems develop over long periods of time, and therefore may require an equal length of time to remould into one that suits a progressive position on equity. Moreover, redesigning long-established government policies, such as trade commitments, lacks political acceptability and feasibility. Thus, incremental systemic change over time influenced by the Nordic Welfare State model is the most realistic approach to systemic policies. Incrementalism does not, however, account for the urgent nature of the food insecurity problem.

5.3. **Community Food Centre Model: Toronto, Ontario**

A Community Food Centre (CFC) is an alternative institutional model to the existing food bank structure expansion of the charitable food system as it provides programs to reduce food insecurity in addition to the emergency food programs that characterize traditional food banks. CFCs provide the core areas of programming: food
access, food skills, and education and engagement (Community Food Centres Canada, 2012). Emergency food programs have a mandate to provide nutritious food in a respectful and dignified manner. By eliminating line-ups and offering sit-down, served meals in a comfortable environment. CFCs provide food literacy tools to support the development of healthy food behaviours through cooking and gardening lessons. The engagement programs provide an avenue for advocacy regarding the social issues which empowers its’ members by giving them a voice and agency (CFC Canada, 2012). CFCs are an expansion of the food bank model because they still provide emergency food programs yet expand operational focus to other programs aimed at mitigating food insecurity.

The concept of the CFC in Canada was born at The Stop, which was originally a food bank located in the Davenport West neighbourhood of Toronto, Ontario. In The Stop: How the Fight for Good Food Transformed a Community and Inspired a Movement by Saul (former Stop executive director now President and CEO of CFC Canada) and Curtis, food banks are explained from an experiential perspective to be an ineffective response to food insecurity, further stating that “the very existence of food banks has played a role – however inadvertently – in making hunger worse” because they reinforce the concept of food insecurity being a matter for charity (Saul & Curtis, 2013, 75-78). With this acknowledgement, The Stop deliberately shifted its focus beyond food banking to the creation of programs with measurable, positive outcomes for its members. CFC programs include Healthy Beginnings, a prenatal health class; After School Program, teaching food literacy to children in grades 3 to 6; and Drop In, which provides a nutritious meal and access to information resources such as applying for disability (see Appendix E for full list of programs) (Scharf, Levkoe, & Saul, 2010, 46-49). The expansion of programming beyond an emergency food bank is motivated by the recognition that food is a powerful social tool with the ability to connect people, and act as a catalyst for building relationships. In essence, the Stop CFC model addresses the mental health consequence of food insecurity through its programming.

The CFC model further addresses the psychological aspect of food insecurity by emphasizing the importance of physical space. A CFC space must contain three components to accommodate its programming needs: a kitchen, a garden, and a community space. Saul and Curtis describe applying a fresh coat of paint and improving
the appearance of The Stop’s physical space, inside and outside, as an important step in removing the stigma associated with accessing its services (2013, 39-40). Moreover, the establishment of positive relationships within a supportive network enables food insecure people to access support which may lead to the improvement of the underlying cause of one’s food insecure status.

5.3.1. **Key Findings**

The Stop’s annual survey of a sample of its members documents the impact of CFC programming on its food insecure members. Longitudinal tools have not yet been utilized to measure any long-term changes in behaviour and health status of CFC users; yet, qualitative feedback provides indicators of the effectiveness of the model. Note that while The Stop CFC has not seen a decrease in the number of people who access its food bank program, food bank use does not discount the benefits of its other programs, such as improved health through access to nutrition.

The Stop’s survey findings show that the majority of respondents are better off after participating in one of its programs. Moreover, participating in a non-emergency program increases the likelihood of experiencing an improvement in well-being. Nearly 40 percent of respondents say they learned how to make healthy food choices at The Stop; after isolating the non-emergency program participants this statistic increases to 77 percent (Scharf, Levkoe, & Saul, 2010, 36). Nearly half of the participants report changing their eating habits to be healthier because of The Stop, increasing to 65 percent for those who attended a non-emergency program (36). In terms of health, close to half of all respondents report experiencing an improvement in their physical health; however, 70 percent of all respondents and 80 percent of non-emergency program respondents report an improvement in their emotional health (36). In sum, the survey shows that non-emergency food programs have a stronger positive impact than an emergency food program alone.

The improvement to the emotional health of the respondents is significant because it demonstrates the CFC model to have high potential to improve the quality of life for its members which may prevent the worsening or future development of physical health conditions. Positive changes to physical health conditions may require an
extended period of time with a healthy diet and lifestyle, therefore longitudinal research is needed to uncover linkages to the long-term impact of CFC program participation and physical health outcomes. Since food insecurity has been connected to poor mental health outcomes as cited early in this paper, the improvement of emotional health may be indicative of a reduction in negative consequences of food insecurity.

Improving the quality of nutrition and food literacy are fundamental principles of the CFC model, and the manner in which these principles are implemented is equally important. The CFC model strives to close the nutrition gap in its member’s diets by finding the place where “nutrition meets delicious” (Scharf, Levkoe, & Saul, 2010, 23). The CFC model further recognizes that paternalist programs will fail because they will not be successful in changing people’s preferences. Thus, by “meeting people where they are”, the CFC model seeks to persuade and demonstrate that nutritious food can also be delicious (23). The concept of nutritious food being delicious is reinforced by programs such as the free meal drop-in program, cooking classes, and recipes provided in personally-selected food hampers. Members of The Stop CFC learn to make healthy choices by selecting the contents of their own hampers (three days of food) from an array of fresh, culturally appropriate options. The availability of choice, albeit limited, allows a semblance of dignity for food insecure people in utilizing the resource.

The Stop CFC is able to provide fresh, nutritious choices because it does not rely on donated food items for its supply. In 2009, The Stop purchased approximately $30,000 of local food, and a further $40,000 of local, organic food (Scharf, Levkoe, & Saul, 2010, 33). The CFC is able to expend for its funding model includes private supporters and CFC-run social enterprise revenue thereby achieving sufficient purchasing power to consistently procure perishable, nutritious food. Donated food items are still accepted; however, these items are only accepted if approved by the food bank coordinator (The Stop CFC, 2014). The selective nature of what is accepted and what is offered is a primary reason the CFC is able to achieve positive outcomes for its users.

CFC Canada (CFCC) is an umbrella organization created in 2012 for the purpose of enabling the replication of The Stop CFC model elsewhere in the country. The organization provides vetted underlying core principles and guidelines to replication. Currently, there are four pending CFC projects in Ontario, Nova Scotia and Manitoba.
(CFCC, 2012). CFCC limits expansion to three new locations per year to ensure adequate support. The CFCC expansion model includes partnering with pre-existing charitable organizations which have relationships with low income populations, among other criteria such as a commitment to in-kind support, such as physical space and staff resources, and a commitment to a collaborative fundraising framework to achieve long-term financial sustainability (CFCC, 2012). The structure of the CFCC’s replication model indicates potential success, and successful implementation is vital for the benefits to reach food insecure beneficiaries.

The CFC model is supported by The Conference Board of Canada in its 2013 report *Enough for All: Household Food Security in Canada*:

Excellent models of community programs, such as community gardens and kitchens, greenhouses, food rescue, and others, should be expanded or replicated in communities that could benefit from food security interventions (38).

The Conference Board’s recommendation supports the concept of replicating successful models of food insecurity intervention. Food rescue, however, is not a priority of the CFC model which instead prioritizes perishable, nutritious food over donated food which may be suboptimal. Improving food literacy levels is a separate recommendation in the Conference Board report which can be encapsulated through the educational CFC programs, such as teaching food lifecycles in the garden or cooking skills and nutrition in the community kitchen.

The CFC model differs from the US SNAP and the Nordic Welfare State model by retaining the non-governmental approach to food insecurity. The integrative nature of the CFC model, however, is an improved expansion of the existing charitable food system making implementation achievable. Thus, the CFC model meets the urgent need to address financial and non-financial facets of food insecurity.
5.3.2. **Limitations**

The ability to raise sufficient funding for the initial start-up phase (two years at $400,000) and to secure a consistent, sustainable funding stream is critical to the long-term success of the CFC. While CFCC provides assistance and expertise during the initial fundraising phase, the ability to maintain and build relationships with investors is the responsibility of the independent CFC. Thus, the success of the model is dependent on the capacity of its managers. While CFCC has safeguards in place in its partner selection process, there is inherent risk that insufficient funding will limit the CFC’s success, thereby lowering the potential for it to address food insecurity in the community.

The successful replication of the CFC model is also hinged on securing a partnership with an existing organization or institution. Expansion of CFCs is therefore reliant on applications from partner organizations and consistency in the shared vision as the CFC development progresses. Moreover, the selectivity of CFCC may prevent or delay the establishment of a potential CFC in a community. In February 2014, CFCC announced a partnership with a YMCA in Moncton, New Brunswick to establish a new CFC. Other potential partners include community centres and food banks. The vulnerability of reliance on a partner institution is buffered by the flexibility in the partner type, therefore buy-in from one specific institution is unnecessary. Moreover, community support is important to the overall success of a CFC to ensure that its member benefits are maximized.

The CFC model may encounter limitations in attaining acceptance from existing stakeholders, addressing potential ‘turf conflicts’ over funding sources and the ideological approach to charitable food resources within close geographic proximity (Scharf, Levkoe, & Saul, 2010, 38). Moreover, the ability to establish a working relationship with local food banks may be a potential long-term limitation to the success of a new CFC (42). Correspondingly, The Greater Vancouver Food Bank Society (GVFBS) has announced the intention to implement changes to its current structure which resemble the principles of the CFC model. The GVFBS’s proposed changes include eliminating line-ups, creating a welcoming physical space, and giving people choice of their hamper contents. With efforts underway to reform the food bank depot structure in Vancouver, there is potential for the CFC model to be deemed competition to
the prior work and future endeavours of the GVFBS in Vancouver. Lack of acceptance of the CFC model by local food banks may also hinder the ability to gain traction in the investor community and government support. Administrative challenges may divert attention from addressing food insecurity and poses as a hindrance to the effectiveness of the efforts undertaken by CFCC and GVFBS.

An unintended consequence of the CFC model is the limited capacity of its food bank program. A CFC has a maximum capacity point, as demonstrated by The Stop CFC’s utilization of a geographical boundary for its members. Restricting food bank access to only community members is necessary to mitigate the risk of having insufficient food inventory to meet the demand, or having to comprise the health of the hampers to stretch the food inventory. Excluding access to the food bank program may inherently exclude food insecure, non-community members for accessing the other programs the CFC offers. Moreover, the increased food access the CFC provides its community members may lead to geographic inequities by excluding potential beneficiaries outside of the boundary. However, if the target beneficiary group is restricted to the immediate community the CFC operates in – such as the City of Vancouver - then it is logical to ensure that those community members are able to realize the maximum benefit the CFC model has to offer. In order to maximize the potential benefit to its food insecure members, the CFC must operate within its capacity.
6. **Stakeholder Interviews: Key Findings**

Four in-depth interviews were conducted with Vancouver-based food insecurity stakeholders with the purpose of identifying factors which may not be reflected in the literature or case studies, and to gain a local perspective on the issue. Research participants included the CEO of the Greater Vancouver Food Bank Society; a representative of the Vancouver Food Policy Council; a representative of a provincial health authority; and a representative of a charitable food organization in Vancouver’s DTES. Interviews were conversational in nature, guided by a set of questions available in appendix B of this report, and lasted approximately one hour each. Using the software program NVivo, 19 separate themes are identified from the interview transcriptions. Table 6 lists the themes of discussion along with the number of participant sources the themes are referenced. Key findings are extrapolated from these themes with predominante attention paid to the themes discussed by all participants to ensure a balance of viewpoints are presented.
### Table 6. Interview Themes

<table>
<thead>
<tr>
<th>Theme</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountability</td>
<td>4</td>
</tr>
<tr>
<td>Charitable Food System</td>
<td>4</td>
</tr>
<tr>
<td>Income Assistance</td>
<td>4</td>
</tr>
<tr>
<td>US SNAP</td>
<td>4</td>
</tr>
<tr>
<td>Community Gardens</td>
<td>3</td>
</tr>
<tr>
<td>Cost of Food</td>
<td>3</td>
</tr>
<tr>
<td>Dignity</td>
<td>3</td>
</tr>
<tr>
<td>Employment Opportunities</td>
<td>3</td>
</tr>
<tr>
<td>Food Donations</td>
<td>3</td>
</tr>
<tr>
<td>Food System</td>
<td>3</td>
</tr>
<tr>
<td>Health</td>
<td>3</td>
</tr>
<tr>
<td>Food Literacy</td>
<td>2</td>
</tr>
<tr>
<td>Food Recovery</td>
<td>2</td>
</tr>
<tr>
<td>Housing</td>
<td>2</td>
</tr>
<tr>
<td>Other country</td>
<td>2</td>
</tr>
<tr>
<td>Potential Solution</td>
<td>2</td>
</tr>
<tr>
<td>Social Enterprise</td>
<td>2</td>
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<tr>
<td>Volunteerism</td>
<td>2</td>
</tr>
<tr>
<td>Food Preference</td>
<td>1</td>
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### 6.1. Key Finding 1: Charity alone is not the solution

There is consensus among the participants that the existing charitable food system will not solve the problem of food insecurity in Vancouver. There is disagreement, however, on the role that food banks and other charitable food sources have to play in remediating the problem of food insecurity. Table 7 summarizes the perspectives of each participant on the charitable food system. The participants who view food banks negatively focus on the system as it currently is, whereas the participant who sees a positive role for food banks emphasizes the potential for future change in the structure of the institution. The key inadequacies identified are: 1) inability to meet
nutritional requirements of people through donated food – particularly those with special nutrition needs due to health conditions; and 2) the growth of the charitable food system has enabled government to withdraw social services.

Table 7. Summary responses on charitable food system

<table>
<thead>
<tr>
<th>Participant</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant 1</td>
<td>Reliance on food donations will never meet people’s nutritional needs.</td>
</tr>
<tr>
<td>Participant 2</td>
<td>In an ideal world, food would be a right for everyone. Food banks are not the best solution – they were started as a temporary, stop-gap measure.</td>
</tr>
<tr>
<td>Participant 3</td>
<td>Questionable whether there is a role for a charitable food system at all. The more the charitable system grows, the more the government pulls back.</td>
</tr>
<tr>
<td>Participant 4</td>
<td>I don’t think food banks will ever disappear. There will always be a group of people who need extra help. Food banks can change the way they have been operating to assist in reducing the number of people who need the food bank.</td>
</tr>
</tbody>
</table>

Dignity has emerged as a concept closely linked to perceptions of how the charitable food system should function. Moreover, choice is a key factor in whether there is dignity in the system. One participant describes the connection between choice and dignity:

[That’s] the reality of relying on a publicly available food system: you have zero choice. The charitable food system does not allow for people to do anything more than just receive food. It’s a power dynamic that I think is really dehumanizing. The charitable food system relies on stripping away people’s dignity and accessing food banks and food security is a very intimate and personal problem – it’s a public problem and a societal problem – but it’s felt at a very human and intimate level.

A description of the new model that the Greater Vancouver Food Bank plans to adopt contrasts the notion that there is no choice or dignity in the charitable food model:

In the new system, people get a shopping cart and they will make their own choice. They can select their own apple, instead of me saying, here’s your apple. They can choose from miscellaneous items too. We changed the set up. There’s no more line up, there’s a welcoming area where people can have a coffee or soup, the Beatles were playing last week, or we’ll have classical music – so it’s a whole different environment. And people are shopping! Ok, limited choice, but still choice.
With Vancouver’s food bank system shifting toward increased choice and healthier food options by directly purchasing increasing quantities of food, the dignity of the food insecure people is being taken into account. Inherent in the view that charity will not resolve food insecurity is the perspective that increased food donations – including recovery of food that would otherwise be wasted – will not contribute to a solution. Three interview participants discuss the impending ban of organic material in landfills with concern, with two participants expressing concern that charitable food resources will see an influx of undesirable donations of which they must bear the cost of disposing themselves. An influx of donations will require increased resources by the charities, yet they will not receive support or compensation in exchange for this burden. Conversely, another participant mentions the possibility of a rise in discount grocery stores as a channel for the surplus food; this perspective alludes to potential market adaptation in a direction that may make food more accessible to food insecure groups.

6.2. Key Finding 2: Accountability is inconclusive

The participants identify multiple sources of accountability, highlighting the complexity of the issue and pointing to the need for a multi-pronged approach to food insecurity involving all stakeholders. Identifying who should be accountable for food insecurity in Vancouver informs the appropriate implementing authority for change. The participants do not agree on whom the accountability for food insecurity should lie; as shown in the summary of responses in table 8. Participants generally agree that all levels of government have some role to play – the extent to which is debated. Personal accountability is also identified as a factor; yet the system in which those personal choices are made is influenced by government, therefore public policy has the capacity to influence personal accountability.

<table>
<thead>
<tr>
<th>Participant 1</th>
<th>Food insecurity is a public problem, yet it does not make the policy agenda because it is viewed as a personal problem.</th>
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<tbody>
<tr>
<td>Participant 2</td>
<td>People are responsible for themselves, and have to make choices; but there is also a responsibility at all levels of government since legislation determines what food is available. Canada should have national food policy. There is also a lot that can be done on the municipal/community level.</td>
</tr>
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</table>
### 6.3. Key Finding 3: Systemic solutions are preferred

The participants favour the policy options which embarked on systemic change. Policy options which directly alleviate hunger rather than addressing food insecurity are not opposed yet are not advocated. Six policy options to ameliorate food insecurity in Vancouver arose from the interviews:

1. Introducing a direct food supplement (such as the US SNAP).
2. Implementing national housing policy.
3. Increasing income assistance rates.
4. Implementing education programs focused on food literacy.
5. Creating more employment opportunities.
6. Shifting the food system to make nutrition more accessible and affordable.

Participants predominately support efforts to shift the market food system toward sustainable agriculture and local supply. Efforts to shift the food system include supporting local producers so their prices can be reduced, thereby reducing the control held by multinational companies over the food system and providing improved choices to consumers of all income levels. Furthermore, participants identify improving food literacy is a key step in shifting the food system. Food literacy can be improved through education programs, such as a school lunch program that incorporates nutrition into school curriculum, and cooking and food skills training on a community level. Enhancing food literacy will improve food insecurity within the existing food system by providing people with the tools to make healthy choices and to prepare nutritious food.

Along with change to the food system, participants identify the need for labour policies to create employment opportunities for vulnerable, food-insecure populations. Key features of this alternative include the need for flexible jobs, skills training, abolition of the training wage, and implementation of a living wage in BC; hence, the implementing authority for this option is the provincial government. The rationale is to

<table>
<thead>
<tr>
<th>Participant 3</th>
<th>The provincial government has to be accountable. National food policy would also be helpful, yet the ministries connected to the issue (health and education) are under provincial jurisdiction.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant 4</td>
<td>I support a collaborative approach between government, the not-for-profit sector, and the private sector. Government can play a role in educating people on food literacy again. The not-for-profit sector does a good job at service delivery.</td>
</tr>
</tbody>
</table>
enable people to participate in the market and to make their own choices; to support the transition from income assistance; and to ease the financial hardship of those earning minimum wage. Because income insecurity is the main predictor of food insecurity, reducing poverty through employment opportunities will reduce the reliance food banks for nutritional needs.

The charitable food system may be a channel for employment opportunities through the potential for offshoot social enterprises, as discussed by two participants. There are several models for social enterprises, which may include flexible job opportunities for hard-to-employ people, yet the primary function is to create economic activity to generate profit which is then re-invested into the charitable cause. The GVFBS, for example, plans to launch a Mobile Fresh Market to bring fresh, local produce into communities that struggle with food access. Profit from the Mobile Fresh Market will be invested in community programs and emergency food resources provided by the GVFBS food bank depots.

Another option to increase the financial means of a large food insecure group is to increase income assistance rates; however this alternative is contested among the participants. The general consensus among the participants is that food insecurity would persist should income assistance rates be increased to a level sufficient for recipients to purchase a nutritious food basket, as determined by the NNFB. The reason the problem is predicted to persist provided by some participants is the failure to address all underlying factors of food insecurity. That is, increasing income assistance rates does not address food literacy or the inherent structure of the food system. While two participants do advocate for raising income assistance rates, they do not assume that the additional income would be spent on improving the nutritional quality of food.

8 The current minimum wage in BC is $10.25 per hour.
purchased. Thus, resources are needed to guide food choices in addition to the financial resources to purchase food.

One participant emphasizes the importance of the cost of housing as a barrier to accessing nutrition. Noting that the cost of housing in Vancouver is disproportionately high compared to other parts of the province and the inflexible nature of housing costs, people typically prioritize their housing over nutrition. Therefore, implementing housing policy to make shelter more affordable to low income people may dissipate the necessary trade-off between housing and food.

Participants are generally favourable toward the concept of providing a direct financial supplement for the purchase of food, such as the US SNAP. However, this option is met with caution by each of the participants. Attitudes toward the “SNAP” option reflect the unintended consequences of the program discussed in the US SNAP case study: the supplement would provide short-term relief, but would not mitigate long-term food insecurity. Moreover, the government internalizing the problem of food insecurity is viewed positively for the most part, demonstrating acceptance of government accountability. Some participants, on the other hand, feel that it is unnecessary for government to accept accountability lest they interfere with the work of the non-profit sector in applying their own remediation for food insecurity.
7. Policy Options

This research has demonstrated that food insecure citizens in Vancouver cannot reliably access sufficient, quality food through either the market-based food system or the charitable food system to meet the recommended nutrition intake for good health, as outlined in Canada’s Food Guide. Moreover, food insecure people are at increased risk for developing diet-related illnesses such as diabetes and heart disease, as well as experiencing negative mental health impacts. Nutritional deficiencies are also detrimental to the economy through increased health care costs and lost productivity. The implementation of policy will mitigate the prevalence and negative impacts of food insecurity in Vancouver.

Numerous policy options have been recommended or made apparent within the literature, case studies, and stakeholder interviews analyzed in this research. The policy options selected for consideration are based on the frequency of mention and an assessment of efficacy in ameliorating food insecurity in the short to medium term. Note that short to medium term impacts are prioritized given the urgency of the problem. As well, feasibility of implementation is considered in the context of multi-level government positions and the economics of food insecurity. The guiding principles of these policy options are to enable self-sufficiency within the food insecure population – the target beneficiaries – and to enable equitable access to nutritious food to all Vancouver citizens. The list of excluded policy options deemed not to meet these guiding principle is provided in appendix D of this report.

7.1. Community Food Centre Pilot

The first option is to pilot the Community Food Centre (CFC) model in one location in Vancouver. This policy option is based on the CFC model originated by The Stop in Toronto, Ontario explored in the case study. The CFC pilot will be located in a
pre-existing organization with an established relationship with the target beneficiaries. The CFC will include an emergency food bank program which supplies a three-day food hamper once per month, and will offer a unique array of programs to teach food literacy and provide social resources to its users. A full list of CFC programs is available in appendix D of this report.

The CFC model differs from the current charity model of food banks by emphasizing non-emergency food programs and by maintaining high nutritional standards. These differentiating factors enable the CFC to improve the food literacy levels and health of its members which the typical food bank cannot do. The CFC model is able to maintain high nutritional standards and to focus on non-emergency programs by avoiding dependence of food donations and by undertaking self-funding initiatives such as operating Social Enterprise Organizations (SEO). A SEO operates as a business selling a good or service, is owned by a non-profit entity, and streams its profits into a societal benefit (Social Enterprise Canada, 2014). The incorporation of the SEO flows from the need to create employment opportunities for community members who are food insecure and have barriers to traditional employment, and to mitigate income insecurity which perpetuates food insecurity. Moreover, operating a SEO function will contribute to the financial sustainability necessary for the CFC to procure its own food.

The majority of food insecure people who access the facility will experience increased and consistent access to nutritious food. The potential effectiveness of the model is shown through The Stop’s annual survey data, which finds that the majority of people who access The Stop CFC benefit from its wide range of programs, with non-emergency food programs realizing stronger benefits. While not every individual who utilizes the CFC will identify as being better off than they were before they visited the CFC, no one will be made worse off by accessing the CFC resources.

The CFC model is a resource open to anyone in the community to benefit from. The model includes an intake process which includes a short interview with new users to collect data that will be used for program design; however, there is no income testing which may deter or exclude some community members from accessing the CFC’s resources. The CFC may utilize an excludability function by limiting the users to a geographical area to ensure the benefits of its resources remain in the community.
Excluding people outside of the community does not, however, impact the equity measure because the Vancouver community members are target beneficiaries in the scope of this research. As well, the CFC model ensures equity in the treatment of the people who access it by engraining equity into one of its core principles: “Provide a welcoming and respectful environment: reduce the blame and the shame” (Scharf, Levkoe, & Saul, 2010, 26).

There is a strong element of dignity in the CFC model due to the range of choices the option provides food insecure people. These choices include the ability to select the contents of emergency hampers, along with the optional programming which seeks to provide people with the skills to make healthy food choices on a limited budget. Empowering people with knowledge will increase the number of choices they are able to make going forward. While there are some limited aspects of choice, such as pre-prepared meals in the drop-in program, the CFC model values culturally appropriate food for its users and accepts feedback to provide options that people will enjoy. Moreover, the CFC model strives to breakdown the giver-receiver relationship between the user and the institution which reduces stigmatization. An example of the reduction in stigmatization is the drop-in meal program wherein people are served a sit-down meal by volunteers. There is a strong sense of dignity in being a program participant and establishing an affiliation with a positive community.

The annual survey data conducted by The Stop CFC illustrates positive benefits for physical and emotional health. In the absence of longitudinal health data, I infer that the full utilization of the CFC resources will mitigate the poor health outcomes associated with food insecurity in the target beneficiary population. The provision of nutritious meals and education programs targeting both children and adults serve as value-add measures in addition to the maintenance of an emergency food program.

CFCC has imbedded start-up fundraising support in its replication plan. The commitment of financial support from a parent organization insulates the pilot CFC for the first two years. The estimated start-up cost is $400,000 – a feasible goal which has been vetted in other Canadian jurisdictions. Furthermore, the cash flow breakdown of cost categories can be mirrored, or at least taken as a starting point, by new CFC projects. The successful existence of this model elsewhere strengthens the funding
proposa for private supporters and government funding. Financial sustainability is a necessary component of the long-term success of the model; however, the budgetary impacts are absorbed solely by the independent CFC after the pilot phase has ended.

There are a number of obstacles to CFCC as the implementing authority to successfully establish the pilot. The primary obstacle is the dependency on a suitable, competent partner organization. The ideal partner organization is a food bank due to its ability to reach the food insecure community members and its established physical space. An obstacle may be the ability to merge ideologies, principles, and operation styles such that the food bank is transformed into a CFC. Long-time food bank volunteers, for example, may resent change and retraining for the new model may be perceived to undermine their prior efforts.

There may also be obstacles to the target beneficiaries – the food insecure people within the community. Such barriers may include physical access if the location is not within walking distance and the cost of transit is a burden. As well, a person or household which would benefit from participating in CFC programs may have time constraints preventing participation. Such barriers are important to consider in selecting the physical location of the CFC and in designing the program schedule.

In terms of government positions, aside from sources of public funding the project may be eligible for, there is minimal government intervention in this option. The absence of government intervention makes this option highly feasible in terms of governmental acceptability. The option is also feasible in the context of the economics of food insecurity, for the CFC model is shown to have a positive impact on food preferences. Although the option does not change the price elasticity of demand in the market food system, the CFC improves equity by making nutrition more accessible to those who cannot participate, fully or in part, in the market food system.
7.2. Food Literacy Education Program

Low levels of food literacy\(^9\) among low income populations has been identified by interviews and the literature as a significant contributing factor to food insecurity in Vancouver. Low levels of food literacy lead to unhealthy food choices within low income groups. Thus, by introducing supports to improve food literacy, food preference may be shifted toward more nutritious food choices. Some food literacy programs are currently underway such as the BC Agriculture in the Classroom Foundation which offers an array of school-based education programs teaching food literacy to students across BC (BC Agriculture in the Classroom Foundation, 2012, 18). The Food Literacy Education Program ("the program") option, then, is an expansion of the existing efforts to incorporate nutrition education and access in Vancouver schools.

The program will be administered by Vancouver Coastal Health (VCH) to increase food literacy among children and adults. VCH is the appropriate authority to implement this option because of its existing involvement in nutrition programs. The policy option is adapted from interview participants and the literature which reinforces the connection between cooking and nutrition knowledge, and the ability to make healthy food choices. This policy option will target low income neighbourhoods and will be delivered through primary schools and community centres. Participants will receive a free, nutritious meal at each class. Overall, the program will address food insecurity by increasing access to nutritious food through knowledge.

Primary schools will feature a nutrition-oriented, after-school cooking class for students in grades 4 to 7 once per week for one month, occurring twice per year. Grades will rotate so that one grade participates at a time. The class will be led by a nutritionist or a chef, provided the individual is capable of delivering the curriculum. Moreover,

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\(^9\) Food literacy refers to food knowledge, including the food system, nutrition, and food preparation.
parents and guardians will be encouraged to attend the program along with their children. The food and cooking tools would be provided by VCH. As well, in a parallel initiative, free cooking classes with interwoven nutrition education will be hosted by community centres in three time slots (day, evening, and weekend) offered once per month. Offering food literacy education through community centres will extend the reach of this option to food insecure people who do not have children. Both channels of delivery are voluntary to attend yet will be designed with accessibility in mind.

The program differs from the existing programs by broadening the reach to parents and adults without children, and by focusing on nutritional knowledge and cooking skills as opposed to agriculture systems. Healthy Families BC is an initiative launched in 2012 by the BC provincial government which features web content on healthy food choices and cooking skills. As well, there are other school-based food literacy programs operating in Vancouver such as secondary school home economics and cooking classes. The similar education initiatives validates the program as a viable path to improving nutritional knowledge and the health of low income community members who may face food insecurity.

The existing education programs do not track or report on the effectiveness of their initiatives. While participants will receive a nutritious meal at each class – typically a meal they have prepared themselves with guidance from an instructor – the quantity of food disbursed through the program will not change an individual’s state of food insecurity. Moreover, education programs alone will not directly improve access to nutritious food – an important step in addressing food insecurity. The indirect benefits of increased food literacy will provide food insecure people with tools to make healthier decisions with their limited resources; yet the efficacy of the program is dependent on the participation rate within the target beneficiary population, and learning retention rates and application in the long-run.

The program would not exclude participants within Vancouver. However, there may be some inherent beneficiary exclusion such as through language barriers. The location of the programs may inherently deter participation, yet this may be mitigated by advertising the programs by posting notices in grocery stores. An example of an unintentional deterrent may be selecting one school within a 5 kilometre radius to host
the program; yet students from a neighbouring school may be less likely to attend. This deterrent could be mitigated by rotating the schools the program is held at. Ideally, the program would be offered at all schools within the Vancouver School District. Likewise, there are some barriers to adult participation in the community centres if food insecure adults do not typically frequent the space, therefore program uptake may be low within the target beneficiary population. Outreach to community members through the local food bank may enhance the participation rate.

The program will be open to all community members, food insecure or not, therefore those experiencing food insecurity will not receive different or specialized treatment. This aspect may be both positive and negative: positive as it ensures a sense of dignity in attending the program; negative because the program may not be sensitive to the vulnerable situation that some of the attendees are in.

The potential for the program to impact the health of the participants hinges on the application of the tools acquired through the program by the participants. Positive health outcomes will be realized through improvements to the nutritional quality of food prepared by participating families with a reduction in unhealthy food intake mitigating the risk of obesity and diet-related disease. There is, however, a high degree of variability in how participants will utilize the program. The variability can be mitigated by encouraging parallel participation in an online community, such as the pre-established Healthy Families BC initiative. As well, the frequency of the program offering may strengthen health outcomes through nudging food preferences toward nutritious choices, even with a restrained budget.

The cost of this option is estimated based on implementation in 92 Vancouver elementary schools and 24 community centres. The program is estimated to offer 1,600 sessions annually between the school-based and community centre-based methods of
delivery. The cash flow needed for the program is extrapolated from the expenditure of the BC Agriculture in the Classroom program, as the program is an expansion of this model. Estimating an average of 20 participants in each session, approximately 32,000 portions of healthy food will be needed on an annual basis. The estimated cost of procuring the food resources is slightly over $250,000 per year.\(^\text{10}\)

In addition to ingredient procurement, the Food Literacy Program requires curriculum. *Healthy Buddies*, an initiative of BC Children’s Hospital, supplies food literacy curriculum to elementary schools for a cost of $690 per two partnered classrooms (2012). This curriculum may be adaptable to suit an adult classroom, for the fundamental concepts of food literacy are constant. It is anticipated that the curriculum can be shared since the program will be conducted one session at a time, therefore one “classroom bin” would be needed per institution. The total curriculum cost would be $80,000 per year. The total annual cost of the policy option is $330,000.

The program requires cross-institutional partnerships between VCH, the Vancouver School Board, and the Vancouver Parks Board which oversees the community centres. Thus, there is risk for misalignment of priorities in terms of how space and time resources are allocated which could be a barrier to the successful implementation of this policy option. There is a medium degree of complexity in the procurement and set up of necessary items to successfully conduct the program including potential need to recruit and train instructors to deliver the course curriculum. Overall, the program is a viable alternative for improving food literacy – a component of food insecurity.

\(^\text{10}\) Cost estimated is based on 6% of the BC School Fruit and Vegetable Program expenditure of $3.9 million (BC Agriculture in the Classroom Foundation, 2012, 29).
7.3. Direct Nutritional Supplement Pilot Program

The third policy option is to pilot an expanded direct nutritional supplement program for low income households in Vancouver. This policy option is modelled after the US SNAP program and is an extension of the existing but restricted Diet Supplement Program in BC. This policy option will be administered by the Ministry of Social Development and Social Innovation. By providing eligible recipients with an in-kind financial supplement, low income households will be able to increase participation in the market food system to thereby enable the purchase of nutritious food. The supplement will be available to households receiving Income Assistance, Persons with Disability Assistance, and the Canada Working Income Tax Benefit\(^{11}\) (WITB) residing in the City of Vancouver. Linking eligibility with existing social programs which target the food-insecure population will reduce administrative costs.

The financial supplement is intended to close the gap between the cost of a nutritious food basket and the income received by a household below the LICO. The gap is considered closed when food comprises 75 percent of the household budget or less after the cost of housing. The literature demonstrates that Income Assistance and the working poor are consistently unable to obtain a NNFB in the market food system, thus a supplement will top-up the income gap and prevent food insecurity from occurring. Moreover, this option will reduce the need for charitable food resources in Vancouver.

Eligibility will be determined in two ways: 1) automatic eligibility for Income Assistance and Persons with Disability (PWD) recipients; and 2) households below the LICO as demonstrated by the previous year’s tax return. Beneficiaries must opt-in to receive the supplement. This option excludes those who may experience temporary food

\(^{11}\) WITB is a refundable tax credit to provide tax relieve to working low-income individuals and families (Canada Revenue Agency, 2014).
insecurity as a result of job loss or other sudden change to income with no liquid assets, and therefore will not capture all food insecure citizens.

The financial supplement would be delivered as a cash benefit, therefore the recipient has the autonomy to spend the supplement at any venue of their choosing. The US SNAP delivers its benefits through an electronic card system, yet the benefit cards are fungible and therefore direct cash will yield the same outcome. Enabling market participation provides an increased sense of dignity in the beneficiary, for the supplement will mitigate the need to access a food bank, which can be a humiliating experience, and gives the beneficiary autonomy over their food choices and equitable access to nutrition.

The health outcomes of a nutrition supplement would be optimal – meaning no further improvements could be made – would be realized only if the financial supplements were used solely for the purchase of nutritious food per the Canada Food Guide. The health outcomes of SNAP beneficiaries in the US do not indicate positive diet-related health outcomes with SNAP participation. A nutrition incentive component, such as the HIP initiative piloted in the US, may improve diet-related health outcomes; however, including an incentive initiative in this policy option is not feasible without including a method of tracking purchases.

The budget implications of expanding the nutrition supplement is the most challenging aspect of this option. The supplement will demand substantial administrative costs in addition to the cost of the supplements. As well, the variation of the amounts required to top-up the recipients will make it difficult to create a budget. A conservative estimate of $9 million per year is based on approximately 12,000 basic income assistance recipients in Vancouver\textsuperscript{12} with a nutrition income gap of $65 per month. The income gap for families with children is significantly higher: a family of four (two parents

\textsuperscript{12} Figure derived from 2\% of the population of 603,502 based on BC Stats report (2012, 7).
and two children) receive $860 per month, leaving an income gap of over $800 per month for a NNFB; thus, one family will cost of over $10,000 to supplement per year. If half of the recipients are families, the cost of the nutrition supplement expansion will be approximately $65 million per year. This estimate is conservative as it does not factor in PWD and WITB recipients. In the absence of a calculated cost of food insecurity, it is difficult to ascertain the net benefit of this option to the general public.

Apart from the high cost of this policy option, the implementation process poses challenges due to the opt-in nature of enrollment. The Ministry of Social Development and Social Innovation will need to design an intake process and train staff on processing supplement applications and disbursements. Moreover, steps must be taken to notify the target beneficiaries of the program roll-out which may include mail-out notices or advertising. Overall, extensive administrative planning is required for this option to ensure smooth implementation and success in significant reductions to the inequitable access to nutrition in Vancouver.
8. Analysis of Policy Options

This section evaluates the three policy options discussed in the previous section against a set of criteria. The criteria represent determinants of success in ameliorating food insecurity by enabling equitable access to nutrition in Vancouver.

8.1. Evaluation Criteria

The policy options are evaluated based on the criteria, measures, and scales outlined in table 9. The application of ranking assists in establishing the extent to which the policy option meets the determinants of success. Note that because policy options were excluded from analysis in a preliminary assessment of potential efficacy, only policy options deemed to have potential efficacy were considered for further analysis. The calculation for each criterion score has not been standardized due to the variation between each policy option and the subjective nature of the results each option will yield. Thus, scores are assessed based on the author’s knowledge base. A cumulative score for each policy option is found after applying the criteria matrix for the purpose of informing the analysis. The scores translate into a ranking for the policy option: Strong (average of 3); Fair (average of 2); and Weak (average of 1). The scores for each policy option are presented in the evaluation matrix shown in table 10.
Table 9. Criteria Evaluation Matrix

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Description</th>
<th>Measure</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Effectiveness</strong></td>
<td>The extent to which consistent, equitable access to nutritious food is increased among the food insecure population.</td>
<td>The number of food insecure people who establish consistent, equitable access to nutritious food as a result of accessing the option.</td>
<td>3 = High</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 = Medium</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 = Low</td>
</tr>
<tr>
<td><strong>Equity</strong></td>
<td>Whether food-insecure citizens have equal access to the policy benefits.</td>
<td>The number of target beneficiaries - food insecure citizens in Vancouver - who are eligible for the option.</td>
<td>3 = High</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 = Medium</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 = Low</td>
</tr>
<tr>
<td><strong>Dignity</strong></td>
<td>If the target beneficiary has a sense of dignity in utilizing the policy option.</td>
<td>The number of choices the target beneficiary is able to make and the sense of stigma the user perceives when utilizing the option.</td>
<td>3 = High</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 = Medium</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 = Low</td>
</tr>
<tr>
<td><strong>Health</strong></td>
<td>Whether the policy option supports the target beneficiary’s health.</td>
<td>Assessment of the extent to which the policy leads to improved physical and emotional health by participating in the option.</td>
<td>3 = High</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 = Medium</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 = Low</td>
</tr>
<tr>
<td><strong>Budgetary Impacts</strong></td>
<td>The policy option is financially feasible for the implementing authority.</td>
<td>Estimates of the cost of the alternative and where the funding would be derived from.</td>
<td>3 = Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 = Medium</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 = High</td>
</tr>
<tr>
<td><strong>Implementation Complexity</strong></td>
<td>How complicated the policy option is for both the implementing authority and the target beneficiary.</td>
<td>The number of obstacles that would have to be overcome by the implementing authority and target beneficiary.</td>
<td>3 = Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 = Medium</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1 = High</td>
</tr>
</tbody>
</table>
Table 10. Evaluation Matrix

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>POLICY OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CFC Pilot</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>High (3)</td>
</tr>
<tr>
<td>Equity</td>
<td>High (3)</td>
</tr>
<tr>
<td>Dignity</td>
<td>High (3)</td>
</tr>
<tr>
<td>Health Impacts</td>
<td>High (3)</td>
</tr>
<tr>
<td>Budgetary Impacts</td>
<td>Low (3)</td>
</tr>
<tr>
<td>Implementation Complexity</td>
<td>Medium (2)</td>
</tr>
<tr>
<td>Total (out of 18)</td>
<td>17 (Strong)</td>
</tr>
</tbody>
</table>

8.2. Evaluation Matrix Findings

Option one receives the highest overall score. Options two and three than are remarkably close in score, yet rank differently among several criteria. The highlights of each criterion ranking are briefly discussed below.

8.2.1. CFC Pilot

The criteria analysis indicates this policy option is strong overall. The CFC pilot will be highly effective because it is estimated that a higher number of food insecure people will access the CFC than existing food bank depots due to the positive environment and reduced stigma. There is no eligibility requirement for CFC access, aside from an intake process for emergency food hamper recipients, therefore the CFC model is deemed be highly equitable. The reduced stigma along with the ability to choose hamper contents and other CFC programs imparts a strong sense of dignity in their utilization. The positive health outcomes demonstrated by The Stop’s annual survey provides a basis for assuming the Vancouver CFC pilot would yield similarly strong health outcomes. The budgetary impacts are low primarily because the CFC model does not rely on government funding. Although private funders will need to be acquired, the support of the parent CFCC organization creates a two-year buffer to establish financial
independence and a sustainable funding model. The implementation complexity of this option is medium because a pre-established partner organization is required; if the partner is not a food bank, there may be tension from real or perceived competition for beneficiaries.

8.2.2. **Food Literacy Program**

The criteria analysis indicates this policy option is fair overall. The effectiveness of this option is low because it does not directly increase the access to nutritious food. This policy option may be more effective in the long run, yet the analysis focuses on the context of the problem considered in this research. The Food Literacy Program is highly equitable because participation is available to all Vancouver community members. The dignity criterion is given a medium score because there is minimal room in the program design to allow for choice among the participants, such as the cultural origins of recipes taught in the program. The health impacts of this option are scored medium to balance the strong potential for food literacy to increase nutrition consumption and thereby incite positive diet-related health outcomes, and the factor of not providing direct access to resources that will ensure the acquisition of the physical food. The cost of the program would not be overtly taxing on the VCH budget; however, it would require increased budget allocations to the population health and wellness category of expenditures, which may require cuts within other categories. Implementing this option may have initial challenges due to the reliance on trained instructors to deliver the curriculum in a consistent, effective manner.

8.2.3. **Nutrition Supplement**

The criteria analysis of the Nutrition Supplement policy option yields a fair score overall. The option is assessed to be highly effective as the financial supplement would eliminate the inability for food insecure people to adequately participate in the market-based food system. The supplement captures the majority of target beneficiaries, yet is inequitable by pegging eligibility to another social program based on income as it excludes households that experience temporary or intermittent food insecurity. The recipient has full control over how and where the nutrition supplement is spent, and the cash delivery of the supplement maintains confidentiality of the beneficiary utilizing it
which suggests optimal dignity. The supplement does not, however, guarantee that nutritious food is purchased as opposed to unhealthy food or spending on non-food items. Thus, the supplement has the potential to incite positive health outcomes, yet there is a high probability that the supplement would be spent on unhealthy food choices rather than nutrient-dense food. Assuming spending is restricted to the attainment of a consistent nutritious food basket, the cost of funding and administering this program is high. The budget is uncertain due to variability in income levels which alter the income gap. Moreover, there is risk that the supplement will act as a disincentive to increase income in light of the claw-back effect that will impact recipients: for every extra dollar of earned income, the recipient will lose a dollar of nutrition supplement until their income level meets the 75 percent break-even point. Along with administrative cost is a high degree of administrative complexity for both the recipient due to the opt-in aspect, and the civil servants who will be processing the supplement.

This research recommends option one: pilot the Community Food Centre model in Vancouver. The criteria analysis indicates the CFC model has high potential to incite positive change in the lives of its users, whilst maintaining the provision of emergency food hampers through a food bank program.

9.1. Recommended Implementation Strategy

The Greater Vancouver Food Bank Society (GVFBS) has initiated progression toward modifying its depots similar to the CFC model. Moreover, the GVFBS is taking active steps toward procuring its own locally sourced food for distribution, along with stricter parameters for acceptable food donations. There is increasing awareness of the nutritional quality of food hampers distributed by GVFBS depots. In light of their cohesive ideologies, a partnership between GVFBS and CFCC is recommended to optimize the progression toward expanding the institutional model of the charitable food system. It is recommended that CFCC initiate contact with FVFBS to instigate the process. A contractual agreement specifying that GVFBS management will uphold CFCC principles should be signed by both parties. This agreement will clarify the relationship and will ensure the CFC model is implemented successfully. In addition to a contractual agreement, training should be provided to GVFBS management and volunteers.

It is recommended the CFC host community be consulted to identify unique programming needs and preferences. Identifying the demographics of the community will assist in establishing programs and food options that are culturally appropriate and appealing for the target beneficiaries. Conducting community consultations, such as by issuing a survey, will communicate that the CFC resources are non-exclusionary, and may broaden the reach of community members who utilize it. Thus, the consultation process will double as advertising for the launch of a new institutional model.
9.2. Assessment of Risk

The assessment of risk is summarized in table 11. Identifying potential risks and establishing a mitigation strategy will increase the likelihood of successful implementation.

Table 11. Assessment of Risk

<table>
<thead>
<tr>
<th>Risk</th>
<th>Risk Rating</th>
<th>Mitigation Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>GVFBS Denial of Partnership with CFCC</td>
<td>High</td>
<td>CFCC proposes with GVFBS by providing a value proposition.</td>
</tr>
<tr>
<td>Misallocation of resources to non-target beneficiaries</td>
<td>Medium</td>
<td>Pilot CFC implements an intake process for emergency hampers; other programs open to community.</td>
</tr>
<tr>
<td>Low Uptake Among Target Beneficiaries</td>
<td>Medium</td>
<td>GVFBS will have reached most; community advertising to expand reach.</td>
</tr>
<tr>
<td>Other Charitable Food Resources view CFC as Competition</td>
<td>Medium</td>
<td>Pilot CFC develops a referral system within the network of food resources.</td>
</tr>
<tr>
<td>Financial Malfeasance</td>
<td>Low</td>
<td>Pilot CFC develops and publicizes a five-year budget plan including funding resources and cash flow allocation.</td>
</tr>
<tr>
<td>Failure to Achieve Financial Sustainability</td>
<td>Medium</td>
<td>Dedicate at least one full-time staff member to fundraise.</td>
</tr>
</tbody>
</table>

9.3. Summary

Implementing a pilot of the CFC model in Vancouver will build on the program expansion efforts underway by the GVFBS. The partnership of the CFCC is necessary to reduce costs by avoiding duplication of efforts, such as program design and fundraising. Moreover, altering the model to mirror the existing CFC model will broaden the scope to include all community members as opposed to only those who access food bank services.

A call for government action is absent in the recommendation. While government may contribute as a funding source, the implementing authority is decisively non-
governmental. This approach is taken to preserve the autonomy of the non-profit entities who are experienced in addressing food insecurity. Further, it acknowledges the efficiency, flexibility, and community connectedness of these entities, as illustrated by the new strategic direction taken by the charitable food system. Maintaining the response to food insecurity in the non-profit sector in the short-medium term will shield the pilot and potential expansion of the CFC initiative from future infidelity should government priorities shift. Some may argue that the recommended course of action excuses government accountability for the failures of the social safety net. In response to this assertion, food insecurity is an urgent problem requiring an expeditious response which only the non-profit sector can deliver. The government remains accountable for mitigation and prevention of food insecurity in the long run.
10. Conclusion: Outlook to the Future

A National Food Strategy is needed to ensure all Canadians have access to nutritious food in the long run. Nutrition is a vital component for maintaining the health of the population, therefore food should be on the federal policy agenda to ensure a productive population. The road to safeguarding Canada’s health is two-fold: providing tools to consumers to make healthy food choices, and creating a food system that enables consumer access to healthy food choices. Access can be supported through considering the food system in the context of food security – for example, calculating the cost of a nutritious food basket and housing into the determination of living wage policy. Further, it cannot be assumed that making adequate nutrition accessible will lead to consumption. Food literacy, which includes knowledge on nutrition and cooking skills, is a key component of developing healthy food preferences within vulnerable populations. In the long term, a national school lunch program and the incorporation of food literacy into school curriculum would contribute to the development of healthy food preferences and subsequent healthy choices as adults.

The food system was created by consumer behaviour, therefore this system can be shifted by consumer behaviour. The evolution of the charitable food sector has begun and will accelerate with CFCs; yet, the market food system must also change for complete eradication of food insecurity in Canada.
Bibliography


Appendix A. Canada’s Food Guide

The chart above shows how many Food Guide Servings you need from each of the four food groups every day.

Having the amount and type of food recommended and following the tips in Canada’s Food Guide will help:
- Meet your needs for vitamins, minerals and other nutrients.
- Reduce your risk of obesity, type 2 diabetes, heart disease, certain types of cancer and osteoporosis.
- Contribute to your overall health and vitality.

Note. Health Canada
Appendix B. Sample Interview Questions

List of Sample Interview Questions

The interviews will be guided by the questions below. The interviews will be conversational in nature, therefore follow up questions to clarify or expand responses given to the questions below will be asked.

1. In your opinion, are charity-driven food banks the best solution to providing individuals experiencing food insecurity with their daily nutritional requirements?
   a. If yes, do you believe that charity-driven food banks are the best long-term solution to address the issue of food insecurity?
   b. If no, what alternative solutions do you believe would be more effective than charity-driven food banks?

2. In your opinion, do the individuals who access food bank resources receive food that meets their daily dietary requirements based on the Canada Food Guide? If yes, how reliable and consistent is the nutritional quality? If no, can you comment on the potential health impacts that may result from inadequate nutrition? A copy of the food guide will be available for reference.

3. In your opinion, who is or who should be accountable to individuals experiencing food insecurity by ensuring they can obtain sufficient and healthy food to meet their needs in a dignified way? For example, government-funded social services? Charity-based organizations?

4. Describe the approach to food insecurity in the United States by briefly explaining the food stamp program. Do you think that this alternative could be effective here?
   a. If yes, how do you see it changing the current environment?
   b. If yes, do you have any suggestions for successful implementation?
   c. If no, why do you believe that it will not be effective?

5. Describe the approach to food insecurity taken by the government in Norway by briefly explaining the policy perspective there. Do you think that this alternative could be effective here?
   a. If yes, how do you see it changing the current environment?
   b. If yes, do you have any suggestions for successful implementation?
   c. If no, why do you believe that it will not be effective?
6. *Describe community garden projects, community food hubs, and other community-based grassroots initiatives.* What are your thoughts on how these initiatives will impact the problem of food insecurity in the long-run?

7. What other changes could or should be made, and at what level of government, to reduce food insecurity?
Appendix C. Excluded Policy Options

The policy options below are excluded from consideration as recommendations in this report; however, this does not imply that I disagree with efforts to pursue the excluded options; these options simply did not address the problem of food insecurity as defined in this report.

1. Status Quo: recommending no change to the current food bank/charitable food system.
   
   Reason for exclusion: The problem of food insecurity is getting worse within the status quo model, therefore it is ineffective.

2. Housing Policy: Affordable housing policy to make nutritious food more financially accessible to people earning low incomes.
   
   Reason for Exclusion: Affordable housing policy will provide indirect benefits to food insecure people; however, it does not meet the goal of this paper to recommend policy alternatives that will have a direct impact on the problem of continued food insecurity.

3. Labour Policy: Reduce benefit claw-backs which may serve as disincentives to pursuing employment or increasing earnings. Examples of the programs to consider are the Working Income Tax Benefit; Canada Child Tax Benefit; National Child Benefit; and income assistance.
   
   Reason for Exclusion: the option is too broad to adequately address the problem of food insecurity as it lacks direct mechanisms to improve the problem.

4. Food Donation Tax Credit: Alternative to increase food donations including food recovery efforts and new tax incentives to food donors to charitable food resources.
   
   Reason for Exclusion: Increasing food donations validates the continued high dependence on the charitable food system, which does not serve as a solution to the problem of food insecurity. While emergency food resources are necessary, the charitable food sector is shifting toward supplementing the nutritional quality of the food they provide with direct food procurement, further decreasing the reliance on recovered food.
Appendix D. CFC Programs

The Stop CFC programs as of 2009:

- **Food Bank** Community members can receive a three-day supply of food once a month. We strive to provide a dignified environment and the highest-quality, freshest food possible.

- **Drop-in** In our safe, welcoming space, community members enjoy nutritious food and an opportunity to connect with others as well as find access to information on social issues, housing, health care, and welfare.

- **Community Kitchens** Groups range from Meals Made Easy and Sabor Latino for Spanish speakers to moms-and-kids cooking classes. Participants learn new skills and connect with others over nutritious food.

- **Community Advocacy** Trained peer-support workers use their own experience navigating social services to provide one-on-one assistance to others who need help accessing community resources.

- **Healthy Beginnings** and Family Support Pre- and post-natal nutrition and support programs for women living on low incomes.

- **Civic Engagement** We offer support and training so community members can speak out about and work for change on issues of poverty, hunger, and inadequate income.

- **Community Gardens** At our 8,000-square-foot garden in Earls Court Park, we engage community members in growing, tending, and harvesting more than 2,000 lbs of organic produce for use in our programs.

- **Bake Oven & Markets** Neighbours come together at an affordable fresh food market and enjoy a free weekly pizza-baking session at our outdoor, wood-fired bake oven.