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Experiencing rural household food insecurity: A broad examination and regional example

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A thesis submitted in partial fulfillment of the requirements for the Master of Science degree in Geography

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Abstract

Household food insecurity is experienced by one in every eight Canadians. Food insecurity is

primarily driven by low-income and often accompanied by negative physical and mental health

outcomes. Across the country, food banks attempt to provide local communities with an

emergency food option and have become institutionalized. In rural areas, transportation and

access to affordable food can be a challenge. The experience of household food insecurity in

rural settings has predominantly been left out of the literature. The perspectives of those living in

rural households, who access food banks and experience food insecurity, are explored using

qualitative thematic and content analysis methods. The results reveal a complex experience,

including strategies, skills, external support, and a diverse set of compounding stressors. Taking

an ecological systems perspective, change is required at multiple levels of the environment, from

improved food bank practices to broad policy change. Future research must consider diverse

rural voices.

Keywords

household food insecurity; qualitative; systematic review; rural; food security; ecological

framework; landscapes of care; thematic analysis; directed content analysis

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Summary for Lay Audience

Many Canadians live without access to enough, nutritious food for a healthy life, usually due to having a low income. This can lead to social, physical, and emotional issues. Food banks have become a major source of ongoing relief for many. People who live in rural areas have less food options and often need to travel further to get food. It is important to understand what life is like for those living with household food insecurity. This research uses data from focus groups that were carried out in Huron County, Ontario, Canada to understand this experience. Results reveal that people in rural places, who cannot afford food, rely on many different strategies and forms of assistance to get by. Food banks are a great service in these communities but could be better. These findings call for action to be taken by food banks, communities, organizations, governments, and researchers.

Co-Authorship Statement

Each integrated article within this thesis has been or will be submitted for publication in a peerreviewed journal.

Chapter 2 was written by Angela Piaskoski with Dr. Kristen Reilly and Dr. Jason Gilliland as coauthors. Angela Piaskoski conceptualized the article and methodology, conducted the search,
screening, data extraction, data analysis and wrote the article. Dr. Reilly contributed to the
development of the methodology, screening, data analysis, and assisted in editing of the article.
Dr. Gilliland supervised the review, approved the methodology, assisted in the editing of the
article. In this thesis is a version of Chapter 2, which presents the systematic review which has
been accepted by Family and Community Health.

Chapter 2: Piaskoski, A., Reilly, K., & Gilliland, J. (2020). A conceptual model of rural household food insecurity: A qualitative systematic review and content analysis. *Family & Community Health*. In press

Chapters 3 and 4 were written by Angela Piaskoski, with Dr. Jason Gilliland as a co-author.

Angela Piaskoski performed analyses and wrote the articles. Dr. Gilliland provided guidance and was involved in editing the final articles. Secondary data for both articles was collected by the Huron County Food Bank Distribution Centre (HCFBDC) for their Food Tracking Project.

Chapter 3: Piaskoski, A., & Gilliland, J. A. (2020). Living with household food insecurity in a rural context: a qualitative study of strategies and impacts

Chapter 4: Piaskoski, A., & Gilliland, J. A. (2020). Experiences of food bank patrons: Unpacking emergency food aid in rural Huron County

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Chapter 1

1 Introduction

1.1 Research Background & Context

Food security is defined as when all people have ongoing physical, economic, and social access to enough of the nutritious and safe food that they prefer and require to live an active and healthy life (FAO, 2009). A recent estimation indicates that 12.7% of the Canadian population has experienced some level of household food insecurity (Tarasuk & Mitchell, 2020). Household food insecurity (HFI) is characterized by simply not having enough money to purchase sufficient food (Tarasuk & Mitchell, 2020). Research on HFI in Canada has focused on factors that lead to it, its negative impacts, and current interventions.

The primary driver of HFI is low income (Gorton et al., 2010; Sriram & Tarasuk, 2016; Tarasuk, Fafard St-Germain, & Mitchell, 2019; Tarasuk & Mitchell, 2020). Having an income that comes from the social safety net (e.g. social assistance, disability support, employment insurance) is associated with a greater risk for food insecurity (Berner et al., 2008; Sriram & Tarasuk, 2016; Tarasuk & Mitchell, 2020). Other factors that are related to food insecurity include higher housing cost, and living in a female-headed, single parent household (Fafard St-Germain & Tarasuk, 2020; Sriram & Tarasuk, 2016; Tarasuk & Mitchell, 2020). A recent study determined some of the pathways to food insecurity, revealing that there are both direct (i.e. low education) and indirect (i.e. smoking) paths to food insecurity (Daly et al., 2018).

Physical and mental health is negatively impacted by HFI (Gundersen & Ziliak, 2015). Adequate and nutritious food is required for health and many food insecure people are not getting enough vital nutrients (Power et al., 2016; Tarasuk et al., 2010). Physical health impacts of poor nutrition and food insecurity include chronic disease, such as: diabetes, heart disease, and obesity

(Gundersen & Ziliak, 2015; Hanson & Olson, 2012; Seligman et al., 2010; Tait et al., 2018); as well as an increased risk for premature death (Men et al., 2020). Mental health impacts include depression, anxiety, and suicidal ideation (Davison et al., 2015; Hanson & Olson, 2012; Huddleston-Casas et al., 2009).

The achievement of food security occurs when food is accessible, available, adequate, and acceptable, and in addition, there is agency in place to ensure it; these elements are known as the five A's of food security (Rocha, 2007; Ryerson University, 2018). The path to achieving food security is not clear, but there are programs in place that aim to provide food for their communities. These community food programs (e.g., food banks, food pantries, community kitchens, and community gardens) are established in many places across the country (Loopstra, 2018). Food banks have become a necessary part of life for many Canadians (Riches, 2002). Research on food banks has shown that they often do not meet the needs of the population they are attempting to serve, falling short in two ways: first, by not reaching all of those who are in need (Loopstra & Tarasuk, 2015; Tarasuk, Fafard St-Germain, & Loopstra, 2019); secondly, by providing less than what is necessary for a healthy life (Bazerghi et al., 2016; Simmet et al., 2017). However, food banks are also determined to be spaces of care that meet an urgent need for many who use them (Roncarolo et al., 2016), and should not be entirely discounted. The focus of research on HFI in Canada has predominantly been on the situation in urban centres and less frequently on remote Indigenous communities, while rural (non-remote) areas are rarely covered. A rural area is defined based on having a low density of settlements that are disconnected and having economic ties to the agricultural sector (Warf, 2010). The difficulty in making healthy food purchases in a rural setting has been highlighted in previous studies (Liese et al., 2007); however, studies of alternative food procurement (i.e., food banks) in rural areas are limited. In recent qualitative research, rural mothers identified their rural location as a dominant barrier, while providing examples of coping strategies which were common in the area (Buck-McFadyen, 2015).

Researchers have written extensively on the state of food security, its implications, and interventions in Canada. In addition, they have been concerned with the institutionalization and corporatization of food aid and have called for an urgent public policy response (Riches, 2011, 2011; Riches & Tarasuk, 2014; Silvasti & Riches, 2014). In one study from British Columbia, a short-term increase in social assistance was found to significantly decrease food insecurity (Li et al., 2016).

Recently there has been movement towards a larger solution to food insecurity. The issue was recognized in consultations towards a Food Policy for Canada (Government of Canada, 2018) and included in the recommendations for action (Minister of Agriculture and Agri-Food, 2018), however the subsequent policy and action plan falls short of offering a solution to food insecurity by not acknowledging the right to food (Agriculture and Agri-Food Canada, 2019; Food Secure Canada, 2019). Thus, continued reliance upon charitable food programs such as food banks is inevitable and the experiences of those who are living with HFI should be called upon to further understand this issue. An effective way to gain a better understanding of the lived experiences of vulnerable populations, including food insecure individuals, is to conduct qualitative research to capture the direct perspectives of such individuals. Middleton et al. (2018) reviewed qualitative literature to better understand the experience of food bank users; however, they revealed that rural voices were largely absent.

This thesis aims to gain a deeper understanding of the experiences and perspectives of rural households living with food insecurity in Huron County, Ontario, Canada. In particular, this

research aims to reveal how rural food bank users navigate and mitigate their circumstances, the impacts food bank use has on them, the external institutions that provide for them, and the barriers and challenges they face. In doing so, this thesis provides guidance for future research, organizational improvement, and speaks to the need for broad policy change.

1.2 Theoretical Framework & Researcher Positionality

The definition of a theoretical framework is a key step as it provides a scheme upon which this research is built (Grant & Osanloo, 2014). This thesis will utilize two frames in order to understand the lived experience of rural HFI: (1) Ecological systems theory (Bronfenbrenner, 1979); and (2) landscapes of care (Conradson, 2003; Milligan & Wiles, 2010).

1.2.1 Ecological Systems Theory

Ecological systems theory considers the relationship between the human and their environment. In Bronfenbrenner's (1979) seminal depiction of the socio-ecological model they demonstrate the environmental influence on human development at four levels; microsystems, mesosystems, exosystems, and macrosystems. In work on food insecurity this ecological perspective is used to ensure social, political, and environmental factors are considered along with individual circumstances and behaviours (Green-LaPierre et al., 2012; Rodriguez & Grahame, 2016). The influential work of Bronfenbrenner is used as a base by researchers across various disciplines; for example, it was recently adapted to address food security within the nursing paradigm with implications for practice at the individual, community, and societal levels (Schroeder & Smaldone, 2015). The adapted ecological framework for food (Story et al., 2008) frames this research. It depicts the environment as having four levels of influence on the food that people eat (Figure 1-1) (Story et al., 2008). At the base of the framework are the individual-level factors such as demographics and behaviour, followed by the social and physical

environments and finally the larger society (macro-level). An example of the application of this framework is a photovoice study which found that food that is available in the physical environment may not be accessible due to individual factors (Belon et al., 2016). The Story et al., (2008) framework focuses on food behaviour, and many of its components require that a person has access to food or autonomy over food choice to be applicable. Consideration for this must be made when discussing individuals with HFI who may not have access or autonomy.

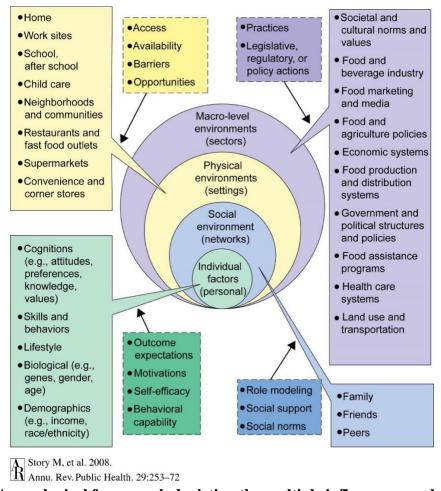


Figure 1-1 An ecological framework depicting the multiple influences on what people eat (Story et al., 2008)

There are four assumptions in social ecology research: (1) that both the physical and social environment impact health and well-being; (2) that human environments are complex; (3) that

participants can be considered at different scales from individual to large populations; and (4) that human-environment interaction is cyclical (Stokols et al., 1996). These assumptions guide this research which considers all levels of the environment, the participants, and the organizations and institutions they interact with. Being healthy involves not only the physical but the social and emotional well-being (Stokols et al., 1996). Using the ecological models to frame food security research highlights the complexity of the topic and allows for influential environmental elements to be determined.

1.2.2 Landscapes

As a concept, landscape has evolved to include what is experienced and imagined, as well as its relationship with humans (Castree et al., 2013); it is actively being constructed and changed (Mitchell, 1998). Landscape, as a way of studying places, requires a situation specific definition (Pries, 2018). The second frame for this research is the less prevalent idea of landscapes of care. In this research landscapes of care are encountered by those who experience HFI and access the charitable food system. Landscapes of care are presented in health geography (Conradson, 2003; Milligan & Wiles, 2010) and are similar to therapeutic landscapes, where previous researchers have placed food banks (Williams et al., 2016). The landscape metaphor is the ideal frame for a geographer to consider the experience of a vulnerable population group. This landscape can be fraught with barriers, adversity, and stigma. It can also provide security, community, livelihood, and personal fulfillment. The following definition provides impetus for its use in this thesis: "Landscapes of care are thus spatial manifestations of the interplay between the sociostructural processes and structures that shape experiences and practices of care." (Milligan & Wiles, 2010, p. 749). The research presented here allows personal stories to create a narrative, and build an understanding of the landscape of care encountered by participants.

1.2.3 Researcher positionality

With the pursuit of validity in mind, researchers search not only the data but themselves, this is especially true for qualitative methodologies. As a student qualitative researcher working with data obtained from vulnerable populations, it is important that I begin to construct and understand my positionality and poise for reflexivity within this work. For this research I have used the Social Identity Mapping tool (Jacobson & Mustafa, 2019) in order to begin this process. I refined the tool to reflect important aspects of my own social identity (Figure 1-2). There are three levels representing general components of social identity (e.g. gender, ability, citizenship, etc.), the impact of these, and the resulting emotions or behaviour. The level 1 facets which are important to this research are food security status, class, and body. Identifying as food secure makes me an outsider in the data I am working with, I have not used a food bank before, or experienced the worry of not having enough food. The identification of middle class, similar to food secure, makes me an outsider in this work, but it also equates to an urgency to share the knowledge gained. Identifying as having a fat body means having a more complicated relationship with food and the emotions it is tied to, an important consideration when doing food research. An additional point of reflexivity not included in this map is my identification as rural dwelling. Being part of a rural community provides a first-hand understanding of the environment in which the experiences are presented. In addition, experience working in community engagement with isolated rural people also impacts my lens.

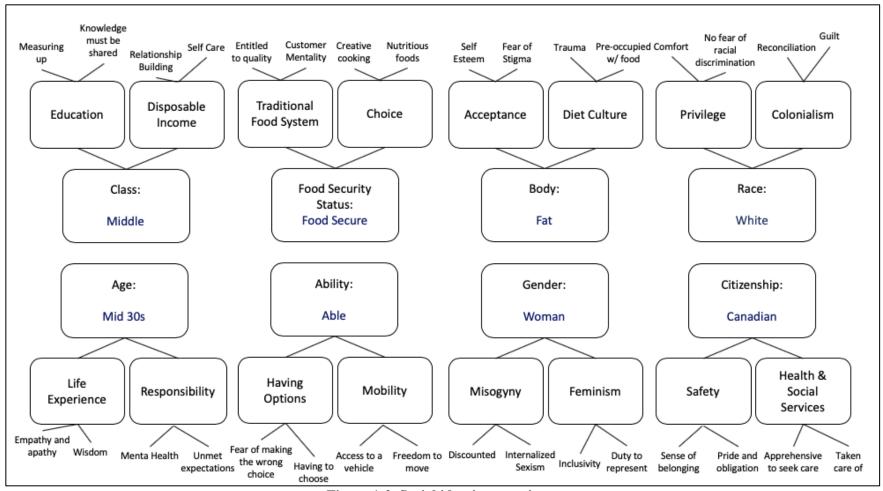


Figure 1-2 Social identity mapping

1.3 Research Objectives and Questions

The overarching purpose of this research is to deepen our understanding of rural household food insecurity (HFI). To do so, the primary aim of this thesis is to examine the first-hand experiences and perspectives of those living with HFI in a rural setting. This research has three specific objectives:

- (1) to systematically identify and synthesize what is known about qualitative research on household food insecurity in rural areas of developed countries;
- (2) to develop a broadened understanding of food insecurity in rural Canada; and
- (3) to deepen our understanding of the use of food banks in rural Canada.

In order to meet the overarching purpose and aim, the following six research questions will be addressed in three subsequent chapters:

- (1) How do the perspectives and experiences of household food insecurity among rural populations demonstrate the five A's?
- (2) What are the experiences and perspectives of rural, household food insecurity beyond the five A's?
- (3) How is household food insecurity managed
- (4) by those who experience it in Huron County?
- (5) What impacts does household food insecurity have on the lives of those who experience it in Huron County?
- (6) What is the experience of accessing food banks in Huron County?
- (7) How can food banks in Huron County be improved to ensure food security in the communities they serve?

Research questions #1 & #2 will be answered by undertaking a systematic review of previous qualitative studies. Research questions #3 through #6 will be answered by using qualitative data

analysis of data collected through the Huron County Food Bank Distribution Centre during the Food Tracking Project involving food bank patrons in communities across Huron County.

1.4 Study Area & Setting

1.4.1 Huron County

Huron County (HC), in Southwestern Ontario (**Figure 1-3**) has a population of almost 60,000 people spread out over 3,400 sq km (Statistics Canada, 2017a). The most populated towns include Goderich (7,536), Exeter (4,649), Clinton (3,049), Wingham (2,934), and Seaforth (2,680) (Statistics Canada, 2017b) (**Figure 1-4**).

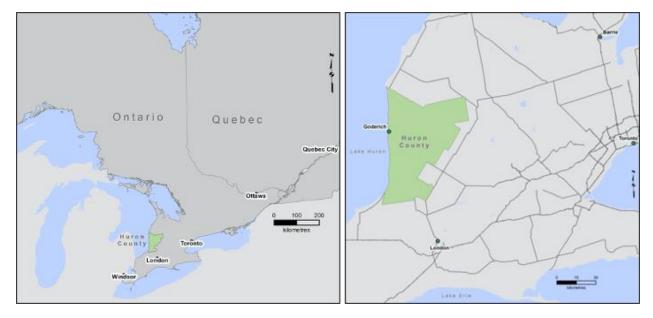


Figure 1-3 Location of Huron County, Ontario, Canada

The median age of the county is 46.3 years, the population is predominantly English speaking (98.7%), and the median household income in 2015 was \$65,994 (CAD) (Statistics Canada, 2017a). In 2015, 13.7% of the population was considered low income using the Low-Income Measure (LIM) (Statistics Canada, 2017a), which indicates that the household makes below 50% of the median household income for Canada (Statistics Canada, 2017c). The unemployment rate for the county (5.3%) is lower than that of the province (7.4%) (Statistics Canada, 2017a). The

living wage in Huron County has been calculated at \$17.55 per hour while the current minimum wage in Ontario is \$14.00 per hour, living wage is defined based on local measures and is "the hourly wage a worker needs to earn to cover their family's basic everyday expenses, such as food, housing, utilities, childcare, and transportation" (The Social Research & Planning Council, 2019).

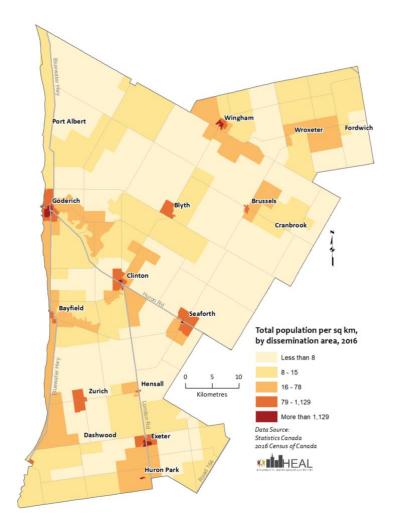


Figure 1-4 Towns and population density of Huron County, Ontario, 2016 Census According to Census estimates, the industry category which employed the most people in Huron County in 2015 was the *Agriculture, forest and hunting* classification making up 14.9% of the total labor force followed by the *Manufacturing* classification (10.9%). The occupations which

dominate in the county include *Sales and service occupations* (20.0%) and *Trades, transport and equipment operator related occupations* (19.9%) (Statistics Canada, 2017a).

Measures of food insecurity in the county are not available; however, the use of community food programs indicates that food insecurity exists. There are ten active food banks in seven communities (**Figure 1-5** – maps of food banks). In 2018, there were 17,626 visits to these food banks (Huron County Food Bank Distribution Centre, 2020). Three of the county food banks are affiliated with the Salvation Army, while the rest are religious and not-for-profit organizations. These food banks are unique to the communities they serve and the organizations that run them. Two of the food banks are members of Feed Ontario and the Huron County Food Bank Distribution Centre (HCFBDC) provides food for eight of the ten food banks.

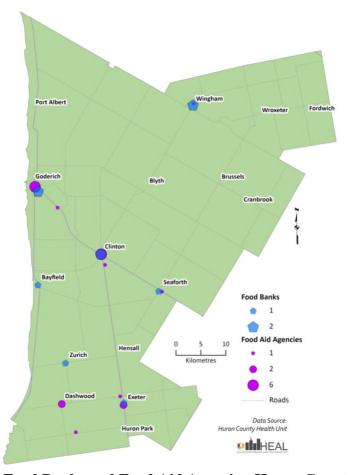


Figure 1-5 Food Banks and Food Aid Agencies, Huron County, Ontario

1.4.2 Huron County Food Bank Distribution Centre & The Food Tracking Project The HCFBDC is a unique solution for collecting and supplying food to the county food banks. It receives funding by way of donations and uses those funds to purchase food in bulk and redistributes it to the participating food banks. The organization distributes food on a regular schedule not only to food banks, but also to social service agencies and shelters who give out food on an as-needed basis.

Secondary data for this thesis was collected during the Food Tracking Project (FTP), a collaborative, community-based project that was initiated and overseen by the HCFBDC who sought to understand the needs of the food banks and their patrons. The FTP took place in 2017/18 and involved collaboration between the HCFBDC, Huron County food banks, community partners, researchers and volunteers (including A. Piaskoski). The goal of the FTP was to determine gaps in the food aid distribution system in Huron County and improve the system to better meet the needs of food insecure people across the vast geography. The FTP involved multiple stages of data collection including: (1) spatial analysis, (2) surveys with food bank patrons, (3) focus groups with food bank patrons, and (4) interviews with service providers. Respondents for parts two and three of the project were self-identified, food insecure individuals, that had used the food bank and at the time, resided in Huron County.

1.4.3 Mapping the study area

A mapping inventory of the food environment and a spatial analysis of socioeconomic distress and accessibility measures provide context to this research. Food retail outlets including grocery stores and convenience stores that sell groceries were mapped (**Figure 1-6**), as well as food banks and aid agencies that provide food (**Figure 1-5**).

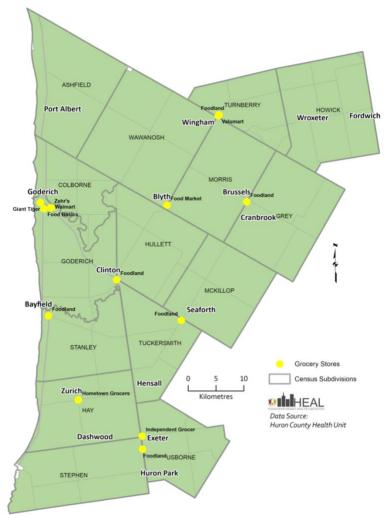


Figure 1-6 Grocery stores in Huron County

Network analysis was performed in ArcGIS (Esri, 2017) using the 'Closest Facility' tool to determine the maximum distance (km) from each road segment centre point to the nearest grocery store (**Figure 1-7**) and food bank facility (**Figure 1-8**) in the county. Previous work done by Bacon & Baker (2017) used similar methods to determine poverty and food insecurity but used proximity buffers instead of network analysis to determine access. Using a geographic network is more meaningful in a rural area where there are fewer roads going from one place to another. These maps demonstrate large areas where it would be difficult to access food without vehicular transportation, even in some smaller population centres.

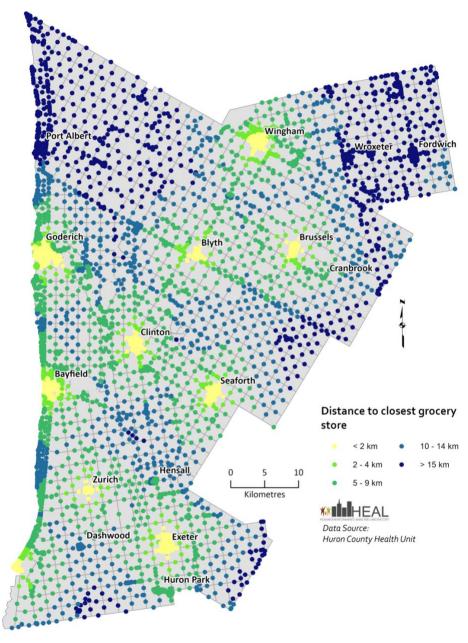


Figure 1-7 - Access to grocery stores in Huron County by road centre point

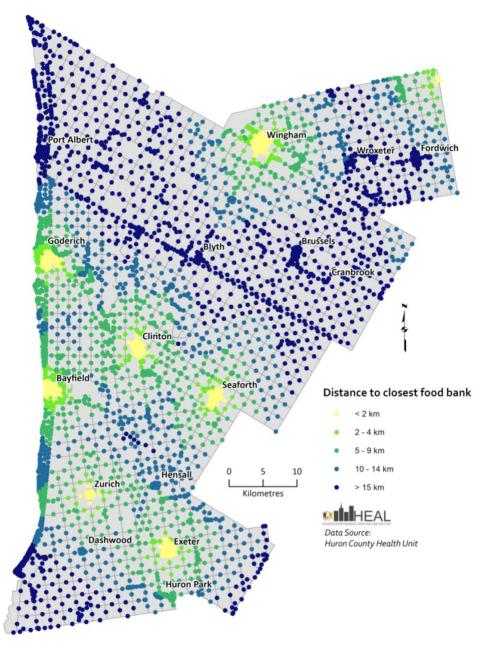


Figure 1-8 Access to the nearest food bank in Huron County by road centre point

A socioeconomic distress index (SDI) was calculated by Census Dissemination Area (DA) using four factors: low income, lone parenthood, low educational attainment and receipt of government transfers (individual maps of these four features can be found in Appendix 1). Factors were chosen based on their known relationship to food insecurity (Tarasuk et al., 2016), and on previous research on area-based socio-economic measures in Canada (Canadian Public Health

Association, 2012). Low income refers to the Statistics Canada's calculation of Low-Income Measure After Tax (Statistics Canada, 2017b) and government transfers include money and benefits that are received from the federal, provincial or local government (Statistics Canada, 2017a). Z-scores for each of the four indicators were combined to create an overall SDI for each DA geographic area (Sadler et al., 2011). Areas that are orange and red represent the greatest risk of distress (Figure 1-9). Considering the highlighted areas alongside the network analysis of access to food banks (Figure 1-6) reveals areas that both have a high SDI and poor access to food banks.

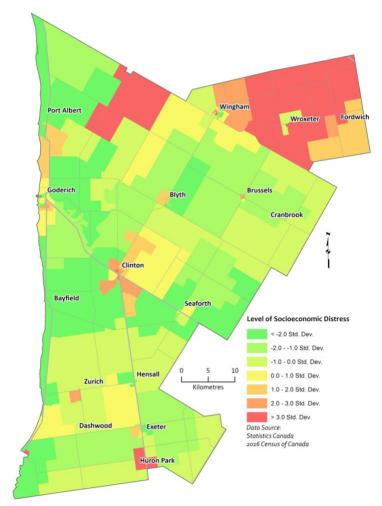


Figure 1-9 Level of socio-economic distress in Huron County
by Census Dissemination Area

1.5 Thesis Format

This thesis follows the integrated article format, first looking at experiences of rural household food insecurity (HFI) in a systematic way, across the literature, then focusing on the case study example from Huron County. Ethics approval was obtained through Western University Non-Medical Research Ethics Board (#112152). Each thesis chapter is described below.

Chapter 2 systematically reviews the existing body of qualitative literature about experiences of household food insecurity (HFI) in rural areas of developed countries. Where HFI is self-identified, measured, related to low-income, or related to community food program utilization. First-hand data from the literature was analyzed through a directed content analysis. This review resulted in the development of a conceptual model for rural food insecurity consisting of four elements interacting with the household and their food security status: human capital, social capital, compounding stressors, and complex systems. It also shows that elements of food security (accessibility, availability, adequacy, acceptability, and agency) exist to varying degrees in the experiences of those studied.

Chapter 3 explores experiences of HFI in rural residents. It considers the management of HFI and the impact that it has on their lives. The findings from this study demonstrate that there are strategies for coping with HFI which can be fostered to mitigate the negative impacts of HFI. It also reveals broad external mechanisms which exacerbate poverty and food security status which need to be addressed at a policy level.

Chapter 4 investigates how those who access food banks in Huron County experience them and how they can be improved to ensure adequate food is obtained. The findings from this study highlight the inconsistencies in food, organizational practices, and experience across the rural food banks. The study also highlights a dependency on food banks and the desire for autonomy

over food choice and experience. Food banks are meeting some of the needs of the communities they serve, but this research indicated a need for improvement, oversight, and ultimately broad change that would render them obsolete.

Chapter 5 delivers a synthesis of the findings from the three research studies and a discussion of their collective contribution in relation to the existing body of literature. It presents the limitations of this study while providing in depth conclusions for policy and practice. It also provides key ideas for future research.

1.6 References

- Agriculture and Agri-Food Canada. (2019). Food policy for Canada: Everyone at the table.

 Government of Canada. https://www.canada.ca/content/dam/aafcaac/documents/20200311-en.pdf
- Bacon, C. M., & Baker, G. A. (2017). The rise of food banks and the challenge of matching food assistance with potential need: Towards a spatially specific, rapid assessment approach.

 Agriculture and Human Values, 34(4), 899–919. https://doi.org/10.1007/s10460-017-9783-y
- Bazerghi, C., McKay, F. H., & Dunn, M. (2016). The role of food banks in addressing food insecurity: A systematic review. *Journal of Community Health*, 41(4), 732–740. https://doi.org/10.1007/s10900-015-0147-5
- Belon, A. P., Nieuwendyk, L. M., Vallianatos, H., & Nykiforuk, C. I. J. (2016). Perceived community environmental influences on eating behaviors: A Photovoice analysis. *Social Science & Medicine*, 171, 18–29. https://doi.org/10.1016/j.socscimed.2016.11.004
- Berner, M., Ozer, T., & Paynter, S. (2008). A portrait of hunger, the social safety net, and the working poor. *Policy Studies Journal*, *36*(3), 403–420. https://doi.org/10.1111/j.1541-0072.2008.00274.x
- Bronfenbrenner, U. (1979). *The Ecology of Human Development: Experiments by Nature and Design*. Harvard University Press.
- Buck-McFadyen, E. V. (2015). Rural food insecurity: When cooking skills, homegrown food, and perseverance aren't enough to feed a family. *Canadian Journal of Public Health*, 106(3), e140–e146. https://doi.org/10.17269/CJPH.106.4837

- Canadian Public Health Association. (2012). Contemporary use of area-based socio-economic measures. *Can J Public Health*, *103*(8), 1–32.
- Castree, N., Kitchin, R., & Rogers, A. (2013). Landscape. In *A Dictionary of Human Geography* (1st ed., Vol. 2013). Oxford University Press. https://doi.org/10.1093/acref/9780199599868.001.0001
- Conradson, D. (2003). Geographies of care: Spaces, practices, experiences. *Social & Cultural Geography*, *4*(4), 451–454. https://doi.org/10.1080/1464936032000137894
- Daly, A., Pollard, C. M., Kerr, D. A., Binns, C. W., Caraher, M., & Phillips, M. (2018). Using cross-sectional data to identify and quantify the relative importance of factors associated with and leading to food insecurity. *International Journal of Environmental Research and Public Health*, *15*(12), 2620. https://doi.org/10.3390/ijerph15122620
- Davison, K. M., Marshall-Fabien, G. L., & Tecson, A. (2015). Association of moderate and severe food insecurity with suicidal ideation in adults: National survey data from three Canadian provinces. *Social Psychiatry and Psychiatric Epidemiology*, *50*(6), 963–972. https://doi.org/10.1007/s00127-015-1018-1
- Esri. (2017). ArcGIS Network Analyst, Software Version 10.5 (10.5).
- Fafard St-Germain, A.-A., & Tarasuk, V. (2020). Homeownership status and risk of food insecurity: Examining the role of housing debt, housing expenditure and housing asset using a cross-sectional population-based survey of Canadian households. *International Journal for Equity in Health*, 19(1), 5. https://doi.org/10.1186/s12939-019-1114-z
- FAO. (2009). Draft declaration of the World Summit on Food Security. *World Summit on Food Security*, 1–10.

- http://www.fao.org/fileadmin/templates/wsfs/Summit/Docs/Declaration/WSFS09_Draft_Declaration.pdf
- Food Secure Canada. (2019). *Policy analysis*. The Launch of the First "Food Policy for Canada Everyone at the Table." https://foodsecurecanada.org/first-national-food-policy-for-canada#analysis
- Gorton, D., Bullen, C. R., & Mhurchu, C. N. (2010). Environmental influences on food security in high-income countries. *Nutrition Reviews*, 68(1), 1–29. https://doi.org/10.1111/j.1753-4887.2009.00258.x
- Government of Canada. (2018). What we heard: A food policy for Canada consultations. https://www.deslibris.ca/ID/10098014
- Grant, C., & Osanloo, A. (2014). Understanding, selecting, and iIntegrating a theoretical framework in dissertation research: Creating the blueprint for your "house."

 Administrative Issues Journal Education Practice and Research.

 https://doi.org/10.5929/2014.4.2.9
- Green-LaPierre, R. J., Williams, P. L., Glanville, N. T., Norris, D., Hunter, H. C., & Watt, C. G. (2012). Learning from "knocks in life": Food insecurity among low-Income lone senior women. *Journal of Aging Research*, 2012, 1–11. https://doi.org/10.1155/2012/450630
- Gundersen, C., & Ziliak, J. P. (2015). Food insecurity and health outcomes. *Health Affairs*, 34(11), 1830–1839. https://doi.org/10.1377/hlthaff.2015.0645
- Hanson, K. L., & Olson, C. M. (2012). Chronic health conditions and depressive symptoms strongly predict persistent food insecurity among rural low-income families. *Journal of Health Care for the Poor and Underserved*, 23(3), 1174–1188. Scopus. https://doi.org/10.1353/hpu.2012.0116

- Huddleston-Casas, C., Charnigo, R., & Simmons, L. A. (2009). Food insecurity and maternal depression in rural, low-income families: A longitudinal investigation. *Public Health Nutrition*, 12(8), 1133–1140. Scopus. https://doi.org/10.1017/S1368980008003650
- Huron County Food Bank Distribution Centre. (2020). *Hungry for change*. Huron County Food Bank Distribution Centre. http://www.huroncountyfoodbank.org/
- Jacobson, D., & Mustafa, N. (2019). Social identity map: A reflexivity tool for practicing explicit positionality in critical qualitative research. *International Journal of Qualitative Methods*, 18, 160940691987007. https://doi.org/10.1177/1609406919870075
- Li, N., Dachner, N., & Tarasuk, V. (2016). The impact of changes in social policies on household food insecurity in British Columbia, 2005–2012. *Preventive Medicine*, 93, 151–158. https://doi.org/10.1016/j.ypmed.2016.10.002
- Liese, A. D., Weis, K. E., Pluto, D., Smith, E., & Lawson, A. (2007). Food store types, availability, and cost of foods in a rural environment. *Journal of the American Dietetic Association*, 107(11), 1916–1923. https://doi.org/10.1016/j.jada.2007.08.012
- Loopstra, R. (2018). Interventions to address household food insecurity in high-income countries. *Proceedings of the Nutrition Society*, 77(3), 270–281. https://doi.org/10.1017/S002966511800006X
- Loopstra, R., & Tarasuk, V. (2015). Food bank usage Is a poor indicator of food insecurity:

 Insights from Canada. *Social Policy and Society*, *14*(3), 443–455.

 https://doi.org/10.1017/S1474746415000184
- Men, F., Gundersen, C., Urquia, M. L., & Tarasuk, V. (2020). Association between household food insecurity and mortality in Canada: A population-based retrospective cohort study.

- Canadian Medical Association Journal, 192(3), E53–E60. https://doi.org/10.1503/cmaj.190385
- Middleton, G., Mehta, K., McNaughton, D., & Booth, S. (2018). The experiences and perceptions of food banks amongst users in high-income countries: An international scoping review. *Appetite*, *120*, 698–708. https://doi.org/10.1016/j.appet.2017.10.029
- Milligan, C., & Wiles, J. (2010). Landscapes of care. *Progress in Human Geography*, *34*(6), 736–754. https://doi.org/10.1177/0309132510364556
- Minister of Agriculture and Agri-Food. (2018). Government response to the tenth report of the Standing Committee on Agriculture and Agri-Food Entitles: A food policy for Canada. Government of Canada.
- Mitchell, D. (1998). Writing the western: New western history's encounter with landscape. *Ecumene*, 5(1), 23.
- Power, E., Abercrombie, D., Fafard St-Germain, A.-A., & Vanderkooy, P. (2016). *Prevalence, severity and impact of household food insecurity: A serious public health issue* (pp. 1–55). Dietitians of Canada (DC). https://www.dietitians.ca/Downloads/Public/HFI-Background-DC-FINAL.aspx
- Pries, S. J. (2018). A geographer looks at the landscape, once more: Toward a posthumanist political ecology approach. *Geography Compass*, 12(10), e12401. https://doi.org/10.1111/gec3.12401
- Riches, G. (2002). Food banks and food security: Welfare reform, human rights and social policy. Lessons from Canada? *Social Policy and Administration*, *36*(6), 648–663. https://doi.org/10.1111/1467-9515.00309

- Riches, G. (2011). Why governments can safely ignore hunger: Corporate food charity keeps hunger off political agenda. *Canadian Centre for Policy Alternatives*, 3–5.
- Riches, G., & Tarasuk, V. (2014). Canada: Thirty years of food charity and public policy neglect.

 In G. Riches & T. Silvasti (Eds.), *First world hunger revisited: Food charity or the right to food?* (2nd ed., pp. 42–56). Palgrave Macmillan Limited.

 https://doi.org/10.1057/9781137298737_4
- Rocha, C. (2007). Food insecurity as market failure: A contribution from economics. *Journal of Hunger & Environmental Nutrition*, 1(4), 5–22. https://doi.org/10.1300/J477v01n04_02
- Rodriguez, R. M., & Grahame, K. M. (2016). Understanding food access in a rural community:

 An ecological perspective. *Food, Culture and Society*, *19*(1), 171–194.

 https://doi.org/10.1080/15528014.2016.1145010
- Roncarolo, F., Bisset, S., & Potvin, L. (2016). Short-Term effects of traditional and alternative community interventions to address food insecurity. *PLOS ONE*, *11*(3), e0150250. https://doi.org/10.1371/journal.pone.0150250
- Ryerson University. (2018). *Guiding principles*. Centre for Studies in Food Security. https://www.ryerson.ca/foodsecurity/
- Sadler, R. C., Gilliland, J. A., & Arku, G. (2011). An application of the edge effect in measuring accessibility to multiple food retailer types in Southwestern Ontario, Canada.

 *International Journal of Health Geographics, 10(1), 34. https://doi.org/10.1186/1476-072X-10-34
- Schroeder, K., & Smaldone, A. (2015). Food insecurity: A concept analysis. *Nursing Forum*, 50(4), 274–284. https://doi.org/10.1111/nuf.12118

- Seligman, H. K., Laraia, B. A., & Kushel, M. B. (2010). Food insecurity Is associated with chronic disease among low-Income NHANES participants. *The Journal of Nutrition*, *140*, 7.
- Silvasti, T., & Riches, G. (2014). Hunger and food charity in rich societies: What hope for the right to food? In G. Riches & T. Silvasti (Eds.), *First world hunger revisited: Food charity or the right to food?* (2nd ed., pp. 191–203). Palgrave Macmillan Limited.
- Simmet, A., Depa, J., Tinnemann, P., & Stroebele-Benschop, N. (2017). The nutritional quality of food provided from food pantries: A systematic review of existing literature. *Journal of the Academy of Nutrition and Dietetics*, 117(4), 577–588.

 https://doi.org/10.1016/j.jand.2016.08.015
- Sriram, U., & Tarasuk, V. (2016). Economic predictors of household food insecurity in Canadian Metropolitan Areas. *Journal of Hunger & Environmental Nutrition*, 11(1), 1–13. https://doi.org/10.1080/19320248.2015.1045670
- The Social Research and Planning Council. (2019). A Living Wage: What it Takes to Make Ends

 Meet in Perth & Huron Counties. United Way Perth-Huron.

 https://perthhuron.unitedway.ca/wp-content/uploads/2019/11/LW-Summary-2019-Web.pdf
- Statistics Canada. (2017a, February 8). *Census profile, Huron, County, 2016 Census*. Statistics

 Canada. https://www12.statcan.gc.ca/census-recensement/2016/dppd/prof/details/page.cfm?Lang=E&Geo1=CD&Code1=3540&Geo2=PR&Code2=35&Da
 ta
- Statistics Canada. (2017b, February 8). *Census profiles*, 2016 Census. Statistics Canada. https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E

- Statistics Canada. (2017c, May 3). *Low-income measure, after tax (LIM-AT)*. Dictionary, Census of Population, 2016. http://www12.statcan.gc.ca/census-recensement/2016/ref/dict/fam021-eng.cfm
- Stokols, D., Allen, J., & Bellingham, R. L. (1996). The social ecology of health promotion:

 Implications for research and practice. *American Journal of Health Promotion*, 10(4),
 247–251. https://doi.org/10.4278/0890-1171-10.4.247
- Story, M., Kaphingst, K. M., Robinson-O'Brien, R., & Glanz, K. (2008). Creating Healthy Food and Eating Environments: Policy and Environmental Approaches. *Annual Review of Public Health*, 29(1), 253–272. https://doi.org/10.1146/annurev.publhealth.29.020907.090926
- Tait, C. A., L'Abbé, M. R., Smith, P. M., & Rosella, L. C. (2018). The association between food insecurity and incident type 2 diabetes in Canada: A population-based cohort study.
 PLOS ONE, 13(5), e0195962. https://doi.org/10.1371/journal.pone.0195962
- Tarasuk, V., Fafard St-Germain, A.-A., & Loopstra, R. (2019). The relationship between food banks and food insecurity: Insights from Canada. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*. https://doi.org/10.1007/s11266-019-00092-w
- Tarasuk, V., Fafard St-Germain, A.-A., & Mitchell, A. (2019). Geographic and sociodemographic predictors of household food insecurity in Canada, 2011–12. *BMC Public Health*, 19(1), 12. https://doi.org/10.1186/s12889-018-6344-2
- Tarasuk, V., Fitzpatrick, S., & Ward, H. (2010). Nutrition inequities in Canada. *Applied Physiology, Nutrition, and Metabolism*, 35(2), 172–179. https://doi.org/10.1139/H10-002
- Tarasuk, V., & Mitchell, A. (2020). *Household Food Insecurity in Canada, 2017-18*. Research to identify policy options to reduce food insecurity (PROOF). https://proof.utoronto.ca/

- Tarasuk, V., Mitchell, A., & Dachner, N. (2016). *Household Food Insecurity in Canada, 2014*.

 Research to identify policy options to reduce food insecurity (PROOF).

 http://proof.utoronto.ca
- Warf, B. (Ed.). (2010). Rural geography. In *Encyclopedia of Geography*. SAGE Publications, Inc. https://doi.org/10.4135/9781412939591.n1004
- Williams, A., Cloke, P., May, J., & Goodwin, M. (2016). Contested space: The contradictory political dynamics of food banking in the UK. *Environment and Planning A: Economy and Space*, 48(11), 2291–2316. https://doi.org/10.1177/0308518X16658292

Chapter 2

2 A conceptual model of rural household food insecurity: A qualitative systematic review and content analysis

2.1 Abstract

This systematic review explores experiences of household food insecurity in rural areas of developed countries. A search of five databases resulted in 32 peer-reviewed articles for inclusion. Data were analysed using directed content analysis in order to broaden the understanding of rural, household food insecurity. Elements of food security (i.e. availability, acceptability, acceptability, adequacy and agency) were exemplified across the literature. In addition, four key themes were found: exercising human capital, realizing social capital, coping with compounding stressors, and navigating complex systems. This review demonstrates the need for interventions that improve social connectedness, individual coping skills, and system navigation.

2.2 Background

Food security is the ability to access sufficient and nutritious food to live a healthy, active life (Power et al., 2016). In low and high-income nations, many people lack food security (FAO et al., 2018; Pollard & Booth, 2019). At an individual or household level, food insecurity is related to having insufficient economic means to obtain food (Power et al., 2016). Individual nationwide measures show that 11.1% of Americans (Coleman-Jensen et al., 2019; Pollard & Booth, 2019), and 12.7% of Canadians (Tarasuk & Mitchell, 2020) experienced some level of household food insecurity in 2018. Food insecurity is linked to serious health issues such as: hypertension, diabetes, hyperlipidemia, and depression in adults; as well as cognitive and behavioral issues in children; and limitations on daily activity in seniors (Gundersen & Ziliak, 2015). Several factors

are associated with food insecurity in high-income countries, including low income, employment, and education level; large family size; renting rather than owning a home; lack of transportation (Gorton et al., 2010); reliance on social assistance (Tarasuk & Mitchell, 2020); and perceived limited social capital (Dean & Sharkey, 2011). There are food assistance programs (e.g., food banks), which provide basic needs in short-term, emergency situations, but are not intended to be a sustainable solution for food insecurity (Berner et al., 2008). Historically, the responsibility of providing food aid has fallen on these charitable and religious organizations, kept afloat by community donations of time, money, and food (Riches, 1985).

Food insecurity is more prevalent in urban than rural environments (Gorton et al., 2010). However, these rates are not significantly different in rural (10.3%) versus urban (12.4%) areas in Canada (Tarasuk et al., 2016), or in the United States (13.2% in metropolitan areas, 12.7% in rural areas, and 8.9% in suburban areas) (Coleman-Jensen et al., 2019). While prevalence rates are similar, there are additional barriers to obtaining food in rural versus urban areas, such as reliance on transportation, distance to travel (Lenardson et al., 2015), nutritious food cost, and healthy food obtainability (Miller et al., 2016). Previous reviews on food insecurity in high-income countries have highlighted aspects such as the quality of food aid (Black et al., 2012), the role of food banks (Bazerghi et al., 2016), and the use of traditional foods in remote indigenous populations (Bussey, 2013). In addition, the sole review of qualitative studies synthesized experiences of food bank users and included only two rural studies (Middleton et al., 2018).

Despite being a global issue, there is no common definition of food security or food insecurity (Power et al., 2016). This review defines food security according to the five A's (Ryerson University, 2018) necessary for its achievement: availability, accessibility, adequacy,

acceptability, and agency, as outlined by the Ryerson University Centre for Studies in Food

Security (**Table 2-1**). In this review, food insecurity is defined as the absence of food security (Power et al., 2016) and food security as the achievement of the five A's (Ryerson University, 2018). Therefore, in terms of the five A's, one is food secure if they have food available, that is accessible (physically and economically), adequate (e.g., nutritious), and acceptable (e.g., culturally appropriate), and they also have agency (i.e., policies and processes in place to achieve it).

Table 2-1 Definitions of the five A's of food security (Ryerson University, 2018) and examples from the directed content analysis

The Five A's	Definition	Examples
Availability	Sufficient food for all people at all times.	Experiences of running out of food, hunger and food deprivation.
Accessibility	Physical and economic access to food for all at all times.	Financial and geographic constraints when accessing food, transportation barriers and the built environment.
Adequacy	Access to food that is nutritious and safe, and produced in environmentally sustainable ways.	Healthy food, spoilage, expired foods, food quality and climate concerns.
Acceptability	Access to culturally acceptable food, which is produced and obtained in ways that do not compromise people's dignity, self-respect or human rights.	Obtaining cultural and traditional foods, had food preferences and spoke of interactions with food service providers.
Agency	The policies and processes that enable the achievement of food security.	Presence of external agencies, organizations or individuals working to promote food security.

The aim of this systematic review is to identify and synthesize qualitative research on household food insecurity in rural areas of developed countries. Specifically, this review will answer two research questions: (a) How do the perspectives and experiences of household food insecurity among rural populations demonstrate the five A's? and (b) What are the experiences and perspectives of rural, household food insecurity beyond the five A's? To our knowledge, this is the first review to explore qualitative studies of rural perspectives and to do so through this lens.

2.3 Methods

Five databases (GreenFILE, PAIS Index, PsycINFO, PubMed, and SCOPUS) were searched in August 2019. The search strategy aimed to identify peer-reviewed, primary, qualitative studies, published in English at any date, and included terms that describe the topic (e.g., food security, food insecurity, food bank) and the population (e.g., rural, remote). The reference lists of included articles were reviewed to identify additional articles. An example search can be found in **Table 2-2**. Abstracts were screened by two authors, independently, and a full text assessment of each selected article was performed against the inclusion criteria. The third author was consulted in cases where an agreement could not be made.

Table 2-2 Example search string from PubMed

Topic		Population
food secur* OR food insecur* OR "food pantry" OR "food aid" OR "food bank" OR "foodbank" O hunger OR "food poverty" OR "food assistance" OR "food program*" OR "food relief" OR "food redistribution" OR "food charity" OR "community food cent*" OR "community kitchen"	AND	rural* OR remote OR non- urban OR per-urban OR pastoral OR rustic OR countryside OR agrarian

Eligibility was determined by five inclusion criteria: (a) study conducted in a high-income country; (b) participants live in a rural setting (Warf, 2010); (c) participants self-identified as experiencing food insecurity, reported accessing food-related support programs, or researchers explicitly define food insecurity by household income; (d) data for the study was obtained through qualitative methods (e.g., focus groups, interviews); and (e) first-hand perspectives of the study population, presented in first-person voice (i.e., direct quotes from participants) were included. Mixed-methods studies with a qualitative component that met all other criteria were also included. Articles were excluded if: (a) results did not differentiate between rural participants and those from other areas (e.g. urban, suburban); (b) authors did not differentiate

between food insecure and food secure participants; and/or, (c) study population was food aid providers, stakeholders, or business owners.

Generally speaking, there is a lack of consensus in the literature regarding the most appropriate methods to determine the quality and rigor of qualitative studies (O'Brien et al., 2014) and thus, a formal risk of bias and quality assessment was not performed. In lieu, an assessment of the reporting for each study was independently conducted by two authors via the Standard for Reporting Qualitative Research (O'Brien et al., 2014). The reporting assessment was performed by two independent authors. No studies were excluded based on reporting assessments, but they provided insight into the strength of reporting across studies.

Direct quotes from each study were extracted for analysis, synthesized, and underwent directed content analysis (Hsieh & Shannon, 2005) in NVivo (v. 12.5.0) software. First, the data was deductively coded by two authors, independently, into the five A's, based on the operational definitions of each element (**Table 2-1**). In phase two, those data 'uncategorized' in the first phase were inductively coded into new themes. Thematic maps were discussed and compared by all authors over multiple iterations before identifying final themes. The collective review of voices across the literature provides insight beyond what individual studies have been able to provide (Middleton et al., 2018).

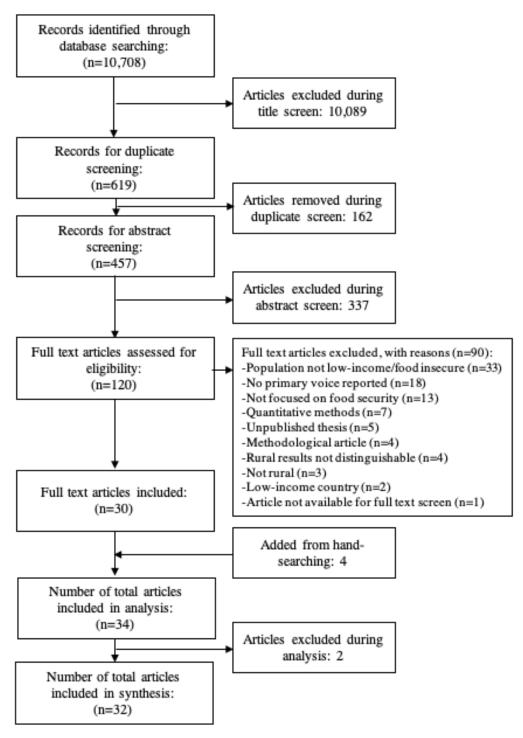


Figure 2-1 PRISMA flow diagram of study selection on experiences of rural household food insecurity

2.4 Results

2.4.1 Review statistics

The search returned 10 708 titles; after title screening, 457 unique articles were retained. After abstract and full text screening, 34 articles remained eligible (**Figure 1**). Two articles were removed during analysis as they focused solely on youth. The final sample included 32 articles, summarized in **Table 2-3**.

Articles originated from the United States (75.0%) (Andress & Fitch, 2016; Bove & Olson, 2006; Brown et al., 2019; Byker Shanks et al., 2017; De Marco et al., 2009; Gross & Rosenberger, 2010; Hege et al., 2018; Murimi et al., 2018; Quandt et al., 2001, 2014; Ramadurai et al., 2012; Rodriguez & Grahame, 2016; Sano et al., 2011, 2019; Schoenberg, 2000; Smith & Morton, 2009; Swanson et al., 2008; Tomayko et al., 2017; Vaterlaus et al., 2018; Ward et al., 2000; Webber & Dollahite, 2008; Whitley, 2013; Wolfe et al., 1996; Yousefian et al., 2011), Canada (18.7%) (Buck-McFadyen, 2015; Ford et al., 2012; Ford & Beaumier, 2011; Lardeau et al., 2011; Skinner et al., 2013; Socha et al., 2012), and Australia (6.2%) (Lê et al., 2015; Spurway & Soldatic, 2016). Common recruitment criteria included: identification with a specific Indigenous (18.7%) (Brown et al., 2019; Ford & Beaumier, 2011; Skinner et al., 2013; Socha et al., 2012; Tomayko et al., 2017; Ward et al., 2000) or ethnic group (12.5%) (Murimi et al., 2018; Ramadurai et al., 2012; Sano et al., 2011; Schoenberg, 2000); participation in a social or food assistance program (34.4%) (Andress & Fitch, 2016; Bove & Olson, 2006; Ford et al., 2012; Hege et al., 2018; Lardeau et al., 2011; Smith & Morton, 2009; Vaterlaus et al., 2018; Ward et al., 2000; Whitley, 2013; Wolfe et al., 1996; Yousefian et al., 2011);

Table 2-3 Summary of qualitative articles with studies on rural food-insecure households

Citation	Country, State/ Province, (area type)	Data collection method(a)	Other data collection methods(b)	Number of participants (% female)	s Participant characteristics	Ages (years)	Subject of qualitative inquiry
Andress & Fitch, 2016	USA West Virginia (rural)	Focus Groups	-	30 (100%)	Enrolled in the Special Supplemental Nutrition Program for Women, Infants and Children	≥ 21	Perception of the food environment and ability to access healthy food
Bove & Olson, 2006	USA New York (rural)	Interviews	-	28© (100%)	Participating in a program that serves low income families; at least one child under 12 at home	-	Perception of weight social, environmental, and economic factors contributing to obesity; and association between food insecurity and disordered patterns of eating
Brown et al., 2019	USA Multi-state (rural)	Focus Groups	Key informant interviews (n=7)	31 (87%)	American Indian; self-identified primary household shopper; at least one school-aged child at home	≥ 18	Perceptions of social-contextual food environments and associated factors that influence food purchases
Buck- McFadyen, 2015	Canada Ontario (rural)	Interviews	-	7 (100%)	Have children at home	30-50	Experience of food insecurity
Byker-Shanks et al., 2016	USA Montana (rural)	Focus Groups	-	33 (-)	-	≥ 50	Factors that influence food choices from a food environment perspective
De Marco et al., 2009	USA Oregon (rural, urban)	Interviews	-	14 rural, 11 urban (72%)	Participated in survey from the larger study	21-64	Experiences of people around food security, food insecurity, and the role of social support
Ford & Beaumier, 2011	Canada Nunavut (rural-remote)	Interviews, Focus Groups	Key informant interviews (n=19); mapping	66 (-)	Inuit; permanent resident of study area	≥ 18	Nature and experience of food insecurity; and conditions and processes that limit the access, availability and quality of food
Ford et al., 2012	Canada Nunavut (rural-remote)	Interview	Surveys	94 (44%)	Accessed community food programs	≥ 18	Utilization and the food security experience of users of Community Food Programs
Gross & Rosenberger, 2010	USA Oregon (rural)	Interview, Case Study	-	66 (-)	-	-	Challenges faced and the strategies developed in order to increase food security
Hege et al., 2018	USA North Carolina (rural)	Focus Groups	-	24 (-)	Accessed church food pantry or attended the weekly church community meal	Adults	Barriers to health and well-being Perspectives regarding health challenges in their neighborhoods
Lardeau et al., 2011	Canada Nunavut (rural-remote)	Interviews, Photovoice	-	8 (63%)	Accessed community food programs	≥ 18	Factors that affect food security status at an individual level

Lê et al., 2015	Australia Tasmania (rural)	Focus Groups	Survey (n=364)	45 (80%)	-	21-98	Understanding of the issue of food security
Murimi et al., 2018	USA Texas (rural)	Focus Groups	-	13 _(d) (60%)	Hispanic	≥ 35	The household experience of food insecurity, coping strategies, and modifiable factors to inform interventions
Quandt et al., 2001	USA North Carolina (rural)	Interviews	Survey (n=145)	145 (61%)	N/A	≥70	The meaning of food insecurity and the measurement of food insecurity among rural elders
Quandt et al., 2014	USA North Carolina (rural)	Interviews	-	33 (100%)	Mothers; at least one 2-5 year old child living at home; in a farmworker family	-	Nutritional strategies that can address childhood obesity
Ramadurai et al., 2012	USA Texas (rural)	Focus Groups	-	86 (52%)	Members of the three racial/ethnic groups: non-Hispanic Whites, African Americans, and Hispanics	24-86	Health disparities
Rodriguez & Grahame, 2016	USA Pennsylvania (rural)	Interviews	Survey (n=11); Food Price Comparison	11 (55%)	Primary household decision maker regarding food preparation and choice.	20-77	Making food choices
Sano et al., 2011	USA California, Michigan, Oregon, Iowa (rural)	Interviews	-	7 _(e) (100%)	Latino immigrant families; at least one child over 12 years	≥ 18	Diversity of food security statuses in the context of the levels of the ecological framework
Sano et al., 2019	USA Washington (rural)	Interviews	Survey (n=55)	17 (100%)	At least one child under 13 living at home 50% or more of the time	≥ 18	Shaping of children's food experience, and negotiating food parenting practice in the context of rural poverty
Schoenberg, 2000	USA Florida (rural)	Interviews	Survey (n=1,126)	41 (61%)	African American; elderly	65-89	Contextual and experiential pathways that place individuals at nutritional risk
Skinner et al., 2013	Canada Ontario (rural-remote)	Interviews	-	51 (47%)	First Nations; living on-reserve	21-60	Perceptions of food security and adaptive strategies used at an individual and household level, and coping strategies and suggestions to improve food security in the community
Smith & Morton, 2009	USA Minnesota & Iowa (rural)	Focus Groups	-	57 (65%)	Accessed food assistance program or community-based project	≥ 18	Access to food, safety net services available, food availability, social norms and behaviour, and civic structure
Socha et al., 2012	Canada Ontario (rural-remote)	Talking Circle	-	18 (61%)	First Nations; living on-reserve	Adults (f)	Experiences on healthy eating and food security

Spurway & Soldatic, 2016	Australia West Kimberley (rural)	Interviews	-	16 (-)	Family who support disabled family members OR Aboriginal people who self-identified as disabled.	-	The relationship between low socio-economic status and disability
Swanson et al., 2008	USA Multi-state (rural)	Interviews	Survey	326 (100%)	Mothers with at least one child 12 years old or younger	-	Use of and perspectives about formal government food assistance programs and informal social supports
Tomayko et al., 2017	USA - (rural, urban)	Focus Groups	Survey (n=450)	15 rural, 16 urban (-)	American Indians; caregivers with children aged 2-5 living at home	-	The correlates of food insecurity and the relationship between food insecurity and diet
Vaterlaus et al., 2018	USA Montana (rural)	Interviews	Survey	12 (50%)	Users of the food pantry	19-70	Experiences, circumstances, and obstacles of rural food pantry customers
Ward et al., 2000	USA Montana (rural)	Interviews	Secondary Data, Director Interviews (n=25)	40 (-)	Residents of the First Nations study area; recipients of food assistance	-	Experiences of food assistance programs and the impact of recent welfare reforms
Webber & Dollahite, 2008	USA New York (rural, urban)	Interviews	Surveys, Food Acquisition Records	11 rural, 17 urban (89%)	Primary responsibility for household food purchases; at least one child under 18 years at home	-	Acquiring fruits and vegetables and the mainstream local food movement
Whitley, 2013	USA Washington (rural)	Interviews	Ethnography/ Observational Data, Case Study	65 (68%)	Accessed the food pantry	21-82	Food security and access in a changing rural county; strategies to access food resources
Wolfe et al., 1996	USA New York (rural, urban)	Interviews	-	25 rural, 16 urban (78%)	Elderly; clients of subsidized housing programs (urban only), food pantries or a home meal delivery program	60-89	Perspective on experience of food insecurity
Yousefian et al., 2011	USA Maine (rural)	Focus Groups	Surveys (n=48)	48 (80%)	Parents with one or more child enrolled in MainCare program	≥ 18	Food shopping habits, barriers faced when trying to obtain food, where food is obtained and perceptions of healthy food
(a) Primary qua	alitative method u	sed to collect the da	nta in this review (pr	imary voices	of respondents with food insecurity	or low in	come);

⁽a) Primary qualitative method used to collect the data in this lev
(b) Other methods used within the study;
(c) Partners present for 1/2 of interviews;
(d) Study also included 7 food secure participants;
(e) Study also included 3 consistently food secure participants;
(f) One child was also present

and family status (34.4%) (Bove & Olson, 2006; Brown et al., 2019; Buck-McFadyen, 2015; Quandt et al., 2014; Sano et al., 2011, 2019; Spurway & Soldatic, 2016; Swanson et al., 2008; Tomayko et al., 2017; Webber & Dollahite, 2008; Yousefian et al., 2011). The studies represented 1,481 rural voices, with number of participants per study ranging from 7-326. Women's voices were represented most often; 21.8% of studies included only women (Andress & Fitch, 2016; Bove & Olson, 2006; Buck-McFadyen, 2015; Quandt et al., 2014; Sano et al., 2011, 2019; Swanson et al., 2008).

Study design, theory, and qualitative methods varied across the studies. Interviews (65.6%) (Bove & Olson, 2006; Buck-McFadyen, 2015; De Marco et al., 2009; Ford et al., 2012; Ford & Beaumier, 2011; Gross & Rosenberger, 2010; Lardeau et al., 2011; Quandt et al., 2001, 2014; Rodriguez & Grahame, 2016; Sano et al., 2011, 2019; Schoenberg, 2000; Skinner et al., 2013; Spurway & Soldatic, 2016; Swanson et al., 2008; Vaterlaus et al., 2018; Ward et al., 2000; Webber & Dollahite, 2008; Whitley, 2013; Wolfe et al., 1996) and focus groups (34.4%) (Andress & Fitch, 2016; Brown et al., 2019; Byker Shanks et al., 2017; Ford & Beaumier, 2011; Hege et al., 2018; Lê et al., 2015; Murimi et al., 2018; Ramadurai et al., 2012; Smith & Morton, 2009; Tomayko et al., 2017; Yousefian et al., 2011) were the data collection methods used most often. Surveys (34.4%) (Ford et al., 2012; Lê et al., 2015; Quandt et al., 2001; Rodriguez & Grahame, 2016; Sano et al., 2019; Schoenberg, 2000; Swanson et al., 2008; Tomayko et al., 2017; Vaterlaus et al., 2018; Webber & Dollahite, 2008; Yousefian et al., 2011) and other quantitative measures were found in mixed methods studies; 50.0% of studies used multiple data sources (Brown et al., 2019; Ford et al., 2012; Ford & Beaumier, 2011; Lardeau et al., 2011; Lê et al., 2015; Quandt et al., 2001; Rodriguez & Grahame, 2016; Sano et al., 2019; Schoenberg, 2000; Swanson et al., 2008; Tomayko et al., 2017; Vaterlaus et al., 2018; Ward et al., 2000;

Webber & Dollahite, 2008; Whitley, 2013; Yousefian et al., 2011). Where indicated, analysis of data was done using constant comparative method (21.8%) (Bove & Olson, 2006; Brown et al., 2019; Buck-McFadyen, 2015; Byker Shanks et al., 2017; Hege et al., 2018; Schoenberg, 2000; Wolfe et al., 1996), thematic analysis (31.2%) (Andress & Fitch, 2016; Ford & Beaumier, 2011; Lardeau et al., 2011; Lê et al., 2015; Murimi et al., 2018; Quandt et al., 2014; Rodriguez & Grahame, 2016; Skinner et al., 2013; Swanson et al., 2008; Whitley, 2013), or content analysis (18.7%) (Andress & Fitch, 2016; Buck-McFadyen, 2015; De Marco et al., 2009; Ford et al., 2012; Ford & Beaumier, 2011; Smith & Morton, 2009) methods. Regarding reporting quality, the median number of reporting standards covered was 17 of the 21, ranging from 10 (Gross & Rosenberger, 2010) to all 21 (Skinner et al., 2013). Individual assessments for each article are found in **Table 2-4.**

2.4.2 Directed content analysis

Representation of the five A's appeared across the data with accessibility in all articles (100%), followed by acceptability (84.4%), agency (84.4%), availability (75.0%), and adequacy (62.5%). Each element of food security is explored further below, and example quotes can be found in **Table 2-5.**

Consistent with the five A's, occurrences of accessibility were further categorized into financial access and physical access. Participants felt they did not have enough money to purchase the food that was available (Ford et al., 2012; Sano et al., 2011; Skinner et al., 2013), or they experienced barriers to travel to food outlets (e.g. distance or lack of transportation) (Andress & Fitch, 2016; Bove & Olson, 2006; Rodriguez & Grahame, 2016). The two sub-categories of accessibility were related in that food found within, or close to, rural communities was said to cost more (Sano et al., 2019; Skinner et al., 2013), and choosing to leave the

Table 2-4 Standards for Reporting Qualitative Research (O'Brien et al., 2014) completed check list of standards met by reviewed articles

Citation	S1	S2	S3	S4	S5	S6	S7	S8	S9	S 10	S 11	S 12	S 13	S 14	S 15	S 16	S 17	S 18	S 19	S 20	S 21	% coverage
Andress & Fitch, 2016	X	X	X	X	X		X	X	Х	X	X	Х	X	X	Х	Х	Х	X	X	Х	Х	95%
Bove & Olson, 2006	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	95%
Brown et al., 2019	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	90%
Buck- McFadyen, 2015		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	90%
Byker- Shanks et al., 2016		X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	90%
De Marco et al., 2009	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X			81%
Ford & Beaumier, 2011	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X		X	X	90%
Ford et al., 2012	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X	X	X	90%
Gross & Rosenberger , 2010		X	X	X	X		X					X				X	X	X			X	48%
Hege et al., 2018	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X			81%
Lardeau et al., 2011	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			90%
Lê et al., 2015		X	X	X			X	X	X	X	X	X	X	X		X	X	X		X	X	76%
Murimi et al., 2018	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X	X	X		X	86%
Quandt et al., 2001		X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X		X	X	86%
Quandt et al., 2014		X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X			X	81%
Ramadurai et al., 2012		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	90%
Rodriguez & Grahame, 2016		X	X	X	X		X	X	X	X	X	x	X	X		X	Х	X	X	x		81%

Sano et al., 2011		x	X	X	X		X	X		X	X	X	x	X	X	X	X	X	X		X	81%
Sano et al., 2019		X	X	X	X		x	X	X	X	X	X	X	X	X	X	X	X	X			81%
Schoenberg, 2000		X	x	X			x	X		X	X	X	X	X	X	X	X	X		X	x	76%
Skinner et al., 2013	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	x	100%
Smith & Morton, 2009	X	Х	X	х	X		x	X	X	X	X	X	X	X	X	X	X	X	X		x	90%
Socha et al., 2012		X	X	X	X	х	X	X	x	Х	x				x	X	х	X	X		x	76%
Spurway & Soldatic, 2016	X	X	X	X	X	X	X	X	X	X	X	X				X	X	X		X	x	81%
Swanson et al., 2008	X	X	X	X			X	X		X	X	X	х	X	X	X	X	X			X	76%
Tomayko et al., 2017		x	x	x			x	X	x	X	x	x	x	x	X	X	x	X	X	X	x	86%
Vaterlaus et al., 2018		X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	x	90%
Ward et al., 2000	X	X	X	X	X		X	X	X		X	X	X	X		X	X	X				71%
Webber & Dollahite, 2008		X	X	X	X		X	X		X	X	X	X	X	X	X	X	X	X		x	81%
Whitley, 2013		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				81%
Wolfe et al., 1996		X	X	X	X		X	X		X	X	X	X	X		X	X	X	X		x	76%
Yousefian et al., 2011	X	X	X	X			X	X	X	X	X	X				X	X		X		X	67%
% of Articles	47%	100 %	100 %	100 %	75%	22%	100 %	97%	78%	94%	97%	97%	84%	88%	78%	100 %	100	97%	66%	47%	78%	

Standards: S1-Title, S2-Abstract, S3-Problem formulation, S4-Purpose or research question, S5-Qualitative approach and research paradigm, S6-Researcher characteristics and reflexivity, S7-Context, S8-Sampling strategy, S9-Ethical issues pertaining to human subjects, S10-Data collection methods, S11-Data collection instruments and technologies, S12-Units of study, S13-Data processing, S14-Data analysis, S15-Synthesis of interpretation, S16-Synthesis and interpretation, S17-Links to empirical data, S18-Integration with prior work, implications, transferability, and contribution(s) to the field, S19-Limitations, S20-Conflicts of interest, S21-Funding

community for affordable food required that respondents have access to a vehicle (Lê et al., 2015; Smith & Morton, 2009).

Acceptability was predominantly reflected in relation to Indigenous communities where traditional foods were considered vital to cultural identity and food security (Ford & Beaumier, 2011; Lardeau et al., 2011; Socha et al., 2012). It was also evident in the experiences of fear, stigma, and shame when receiving food aid, which acted as a barrier to accessing food (Byker Shanks et al., 2017; De Marco et al., 2009; Hege et al., 2018; Spurway & Soldatic, 2016; Webber & Dollahite, 2008).

Participants' accounts of food insecurity exemplified the relationship between availability and economic accessibility in describing that, while food seemed available for purchase, they could not afford it (Sano et al., 2011; Wolfe et al., 1996). In order to cope with a lack of sufficient food, parents across the studies talked about eating last, and going hungry so that their children could eat (Bove & Olson, 2006; De Marco et al., 2009) and the mental stress of not having food available (Buck-McFadyen, 2015).

Agency was demonstrated in the experience of relying on safety net support programs (e.g. Special Supplemental Nutrition Program for Women, Infants, and Children (Murimi et al., 2018), Supplemental Nutrition Assistance Program (Brown et al., 2019; Hege et al., 2018)), food aid such as local food pantries(Hege et al., 2018; Vaterlaus et al., 2018; Whitley, 2013), and food stamps (Gross & Rosenberger, 2010; Swanson et al., 2008) in order to afford food. Participants found the aid received helpful, such as school snack packs (Tomayko et al., 2017), but at times the aid was hard to get (Murimi et al., 2018), insufficient (Swanson et al., 2008), and not nutritious (Vaterlaus et al., 2018).

Participants described a lack of adequacy in the food available to them. They expressed health-related concerns around food, such as the high amount of sodium in canned food provided at food banks (Vaterlaus et al., 2018) and the limited amount of fresh fruit and vegetables available (Brown et al., 2019; Ward et al., 2000; Whitley, 2013). Respondents contrasted the short supply (Skinner et al., 2013) and high cost of fresh, healthy food with cheaper junk foods (Yousefian et al., 2011) which are remarked as empty calories (Gross & Rosenberger, 2010).

Table 2-5 Representative quotes from the directed content analysis

The five A's (% of studies)

Representative Quotes

Availability (75%)

"It's easier as the adult to go without than to have them [the children] say they're hungry." (Bove & Olson, 2006, p. 66)

"Cuz I wanted my kids to have food. I feed everybody first. If there is some left over, I eat it. If not, I won't. I constantly have to tell the kids that they can't eat so that you can make it last. It is hard. Then they say, 'I'm hungry,' and I say, 'I'm sorry.' I don't know what to do." (De Marco et al., 2009, p. 108)

"...it's almost a point to where it can become an obsession because you're so worried about having the food there." (Buck-McFadyen, 2015, pp. e141-142)

"Sometimes the children would ask for food because they wanted to eat," [but food ran out too quickly] "because we are too many." (Sano et al., 2011, p. 118)

"As far as food, we never have a shortage of food. What we have a shortage of is money." (Wolfe et al., 1996, p. 97)

Accessibility (100%)

"We don't have a choice, we don't have money to buy food" (Ford et al., 2012, p. 5)

"It's too expensive to shop around there." (Sano et al., 2019, p. 120)

"Lower cost of food would be nice so all people can afford, especially welfare recipients." (Skinner et al, 2013, p. 7)

"Maybe an all-season road will help to have more food in cupboards, like winter time." (Skinner at al., 2013, p. 8) 42(p8)

"But if you can't afford to pay the price of the food that they have in town, then you probably can't afford to drive to another town to pay cheaper prices, so you're kind of stuck either way you look at it." (Smith & Morton, 2009, p. 182)

"And that's something people who live in other parts of the state don't understand because everything is available to them, even though you are only 10 minutes away of Branxholm, it is a matter of getting to Branxholm and the average cost in getting there." (Lê et al., 2015, p. 18)

"It's [grocery store] probably what, 45 min? About a half an hour, 45 min just one way." (Andress & Fitch, 2016, p. 152)

"not unless I want to walk 6 or 7 miles ... or have to cross the highway. Scary with kids." (Rodriguez & Grahame, 2016, p. 181)

"[We] have to drive to 30 or 50 miles to, you know, to buy groceries." (Ramadurai et al., 2012, p. 800)

Adequacy (63%)

"I think a lot of the issues are not just education but the fact that the foods that you can afford are foods that are not healthy for you. Your ramen noodles, your white bread, and your white rice. Stuff like that, it fills up the stomach but its not good quality food. It's all calories, no nutrition." (Gross & Rosenberger, 2010, p. 61)

"A lot of their meat is really freezer burned and their fresh stuff is slimy and really overripe. Unless you can get there early enough . . . to get the stuff." (Vaterlaus et al., 2018, p. 1900)

". . . The kids are getting tired of commodities. They want fresh fruit and vegetables." (Ward et al., 2000, p. 268)

"I hate that we can't eat better because we live all the way out here. I know how we eat affects our health, but at the same time we are just trying to get by. I wish we would have never come to this area." (Whitley, 2013, p. 48)

"I can understand why a lot of people buy junk food, because junk food is cheaper than vegetables, but it is awfully expensive for vegetables today for kids." (Yousefian et al., 2011, p. 8)

Acceptability (84%)

"The [health professionals] go on the radio and say 'eat traditional foods, they are good for you/ But I shout at the radio and say I would love to eat traditional foods if there were any, I don't have any. That is the problem, we have no traditional foods." (Ford & Beaumier, 2011, p. 47)

"Traditional foods are healthier compared to the nontraditional. But traditional foods are harder to obtain than nontraditional foods because you can't just go to the store." (Socha, et al., 2012, p. 7)

"We always come here because we feel accepted, good and safe here...and we can eat country foods." (Lardeau et al., 2011, p. 7)

"[It] was a major cultural shift I had to make when I came here. It was an adjustment because I was used to . . . having the Vietnamese and Greek delis and all the lovely fresh produce dripping with water. [When I came] here and I had to start to come to terms with using canned products, packets, mixes or going to [major regional center] or [Capital city]." (Lê et al., 2015, p. 9)

"And it feels like everyone just keeps kicking, kicking, kicking, kicking! It's like, "Just let me try [to] get back up and try to get back on my feet", and it's hard . . . I feel like no one listens to me when I go there to see them..." (Spurway & Soldatic, 2016, p. 1123)

"Well, she [social worker] said, 'How can you not know how many hours [you work] on a farm?' You can't, you know?! But she made me cry. I was crying when I left there, and I told my husband, 'I will go without before I go and ask them for food stamps.'" (Webber & Dollahite, 2008, p. 196)

Agency (84%)

- "The commodity programme has really improved. They get fresh fruits and vegetables but it's only during a certain time of the month that you can get it when their truck comes in. So again it's like with the EBT [electronic benefit transfer; i.e. SNAP dollars] if you don't get there then you're not going to get any." (Brown et al., 2019, p. 5)
- "We get \$400 in food stamps per month. We spend \$300 at the beginning of the month and then use the rest for eggs and milk and fresh stuff." (Gross & Rosenberger, 2010, p. 54)
- "...And even though they were giving me \$30 to \$60 or \$180, you know, it would help even though it was just \$50, but now we have to struggle even for that to make our take home pay stretch out to get what we need for food." (Swanson et al., 2008, p. 682)
- "Our school district has snack packs that they send home and I think that helps a lot of parents too." (Tomayko et al., 2017, p. 7)
- "The food bank is very helpful, especially having 2 small kids who don't understand there is no food" (Ford et al., 2012, p. 5)
- "Any food that I get comes from [the food pantry]. And there are certain things that you can't really get that you miss. . . . I'm lucky if I can get milk. I need lactose-free milk. So if it's not there, it's not there. . . . and for those of us who have to watch our sodium all the canned stuff is not an option. I get it and eat it, and do it really sparingly so I can keep my numbers down." (Vaterlaus et al., 2018, pp. 1898-1899)

2.4.3 Thematic analysis of uncategorized data

The experience of living with food insecurity in rural areas is dynamic and involves reacting to changing and uncertain conditions, which is illustrated by four interacting themes: human capital, social capital, complex systems, and compounding stressors. These themes are explained in the following section with exemplifying quotes in **Table 2-6.**

Human capital is exercising individual means such as education, experience, skills, and opportunities, in order to manage while experiencing food insecurity. Participants described creative ways of procuring food such as gardening, hunting and foraging (Yousefian et al., 2011). Food literacy, which includes both nutrition knowledge and food skills, was reflected in activities like cooking from scratch (Byker Shanks et al., 2017; Gross & Rosenberger, 2010), making use of leftovers (De Marco et al., 2009), and storing and preserving food (Quandt et al., 2001), which allow limited resources to be stretched. Elements of financial literacy were also

reflected in accounts of price matching (Andress & Fitch, 2016), shopping for sales (Byker Shanks et al., 2017), budgeting (Quandt et al., 2014), and financial planning.

Beyond individual strengths, realizing social capital was a common theme, which means using social networks in order to obtain food. Receiving assistance from friends (De Marco et al., 2009), family (Bove & Olson, 2006; Swanson et al., 2008), and neighbors (Byker Shanks et al., 2017) was a positive and welcomed experience for many respondents. The reverse role of exhibiting social capital was demonstrated in accounts of sharing food with neighbors and family (Byker Shanks et al., 2017; Skinner et al., 2013), and volunteering at the local food pantry (Whitley, 2013), giving assistance to others was important to the respondents. Having positive social connections allowed for ease of sharing (Buck-McFadyen, 2015; Byker Shanks et al., 2017; De Marco et al., 2009; Schoenberg, 2000; Skinner et al., 2013) and trading (Tomayko et al., 2017) practices, which meant that through community, they were able to make more with fewer resources. Sharing was seen as a necessary community endeavor by food insecure groups (Smith & Morton, 2009; Whitley, 2013).

The third theme, compounding stressors, involves occurrences that are additive to the challenging state of living with food insecurity and has two subthemes, managing aggravating factors and subsisting. Poor physical (Schoenberg, 2000; Smith & Morton, 2009) and mental health (De Marco et al., 2009; Ford & Beaumier, 2011; Lardeau et al., 2011), isolation and stigma (Bove & Olson, 2006; Byker Shanks et al., 2017; Hege et al., 2018; Whitley, 2013), lack of time (Brown et al., 2019; Lê et al., 2015; Ramadurai et al., 2012), family responsibilities (Quandt et al., 2014; Sano et al., 2019; Vaterlaus et al., 2018), and unexpected expenses (De Marco et al., 2009; Gross & Rosenberger, 2010) were discussed as aggravating factors while living with food insecurity. Individual accounts of insecure employment (De Marco et al., 2009;

Vaterlaus et al., 2018; Ward et al., 2000) and insecure housing (Ford et al., 2012; Sano et al., 2011; Whitley, 2013) exacerbated the situation. Subsisting was discussed as making sacrifices or going without, in order to prioritize basic needs such as shelter (Vaterlaus et al., 2018), and heat (Quandt et al., 2001) above food.

Finally, complex systems refer to the pathways to receiving food aid or the money to obtain food. Participants discussed barriers such as; transportation (Hege et al., 2018), eligibility requirements (De Marco et al., 2009; Ward et al., 2000), language (Sano et al., 2011), caregiving (Buck-McFadyen, 2015; Ward et al., 2000), complicated paperwork (De Marco et al., 2009; Ward et al., 2000), wait times (Rodriguez & Grahame, 2016), and staff that behave as gatekeepers (Ward et al., 2000). While there are services available for those who live with food insecurity and low income, these systems require knowledge and skills to access.

Table 2-6 Representative quotes from the thematic analysis

Theme

Representative Quotes

Human Capital

"We're trying to save as much as we can so that, if work runs out or if there isn't any [money], we'll have something saved up so we can buy things for our children. Now, we make more salads and try not to eat that much meat – more beans, rice, and soup." (Quandt et al., 2014, p. 10)

"I budget it out. I always put rent first then food." (Vaterlaus et al., 2018, p. 1899)

- "What I usually do is get enough ingredients to make a large pot of something that will last a few days instead of making individual meals each day. Yeah, I'll have chili one night, then chilidogs, and then, you know, stuff like that. Pretty much every meal is leftovers." (De Marco et al., 2009, p. 1015)
- "My husband does a lot of part time jobs that add to his job, in our house to have enough to pay our bills, to put food on the plate. I mean he does a lot of other stuff and it helps other people but he is also making a little bit of money to help us! We just try whatever we can." (Murimi et al., 2018, p. 11)
- "A lot of people have gardens. That's what really you have to do unless you want to drive somewhere and get something. Most people around here grow a spring garden." (Ramadurai et al., 2012, p. 799)

"I know that if my kids didn't pick their fruit when it is fruit season, I wouldn't be able to afford it now. They get out there and they pick their own strawberries, they pick their own blueberries." (Yousefian et al., 2011, p. 6)

"I love foraging foods. I do stinging nettles a lot." (Byker Shanks et al., 2017, p. 516)

"We hunt deer, we fish the lakes and the ponds and I mean anything that you can put in the freezer for winter. When things get bleak in the middle of January and February and you don't have two pennies to rub together, it is kind of nice to fall back on" (Yousefian et al., 2011, p. 5)

Social Capital

"There are some who fall through the cracks, but for the most part there is a pretty good sense of sharing in the community, where needs are and what kinds of needs there are. That's what makes this [community] different." (Smith & Morton, 2009, p. 182)

"There's a guy next door, and I bring him hot soup. He'll come over and ask for it, and I'll give him some bread. We call it 'hunt and gather,' to give it more dignity." (Byker Shanks et al., 2017, p. 516)

"I can't really get that much access to traditional foods. Like my mother-in-law would invite us over sometimes but like where I really see a lot of it is in the communities, but there is also women whose husbands go out regularly and they get it regularly. But with us, it's once in awhile when we buy it or if someone gives it to us." (Socha et al., 2012, p. 9)

"My mother will go to...the warehouse (store), so she'll have big cases of like soups and rice. She'll say 'Go shopping at my house.' That means get a grocery bag, and I can go through and get what I want. That's really helpful sometimes." (Swanson et al., 2008, p. 686)

"Food problems? What kind of food problems would we have? No, everyone watches out for everyone out here." (Whitley, 2013, p. 45)

"I ran out of food and didn't know how I was going to get it, but the lady down on second floor, she always tries to help me when I get that way." (Quandt et al., 2001, p. 367)

Complex Systems

"I don't really know the DHS [Department of Human Services] system, I'm kind of nervous to get involved with anything else. I can't afford to go down there and twiddle my thumbs for an hour and wait for them to tell me if I'm eligible or not." (De Marco et al., 2009, p. 1015)

"It is hard for me to meet their requirements. I have no vehicle, and I have to get the childcare to go do my hours. You have to do a lot just to get food stamps, and then they don't even last all month." (Ward et al., 2000, p. 263)

"Especially in...County because the state didn't agree for federal funding. Is that right? For the Medicaid. To a certain income group. Who gets hurt by this is the poorest of the poor. The rest of the folks have some options, but the others have nothing that is available to them." (Hege et al., 2018, p. 248)

"Even though at the time I wasn't working when I applied for [food stamps] they didn't hurry about it at all and it took me a month to get them." (Rodriguez & Grahame, 2016, p. 183)

"The paperwork usually has to be in before we can get an appointment. Like right now, I have to wait until way after the first to get an appointment. We will have to hustle around for food for two weeks. After the appointment, you still have to wait five to seven working days to get your food stamps." (Ward et al., 2000, p. 262)

Coping with Compounding Stressors

"It is hard to have food in the house when there is no house." (Ford et al., 2012, p. 6)

"On account of these bad knees, with the arthritis in them, I can't hardly stand to be at the stove no more. So, I'll fix me a piece of bread with some lunch meat for my supper and that's about what I can take, with these knees you should have seen me years ago, making all this good food!" (Schoenberg, 2000, pp. 239-240)

"Kids around. Always want too many things. Yeah, they like different foods, and then I got 2 grown and 2 small ones. They want pizza and we want squash. You know, they are always different. So I always end up cooking 2 meals." (Smith & Morton, 2009, p. 180)

"I don't know anybody I could ask. I just don't get around, I just sit around at home because I can't afford to do anything or go anywhere. I don't have any family left. They're all gone." (De Marco et al., 2009, p. 1019)

"The gambling is a big problem. I noticed a young family just playing gambling with their money instead of providing food first for the children. She goes to the gambling house right away before buying groceries and that is a big problem." (Ford & Beaumier, 2011, p. 54)

"So just like a lot of the cooking is a lot more – takes a lot more time. But I think it's easier for us because we have a big family just to put a pizza in with fries and stuff. So it is kind of hard like challenging, well, different ways and how much time you have to cook if we're busy that day." (Brown et al., 2019, p. 5)

"Quality is a very hard qualifier in our household. I would love to feed my kids the best meat and best vegetables and the best fruits and everything; however, if I want to pay the light bill or if she needs new shoes for school, then this week it's potatoes because they're on sale. Next week we'll live on rice and chicken." (Yousefian et al., 2011, p. 7) "If things get too hard, I myself have to sell one of my jackets or my boots." (Ford & Beaumier, 2011, p. 47)

"If we had daycare, he could get a job. To get the job, he has to have the daycare. To get the daycare you have to have the subsidy. To get the subsidy he's got to have the job. So where's the starting line there?" (Buck-McFadyen, 2015, p. e143)

2.5 Discussion

This review synthesized the perspectives and experiences of household food insecurity in rural areas through the five A's. This is the first review of this kind to focus on this population. The five A's provide direction on what is necessary for people to be food secure, however they do not capture the full experience of food insecurity within the rural context. Data within this review

describe living with food insecurity as a balancing act wherein availability, accessibility, adequacy, acceptability, and agency are not static, and people harness their human and social capital in order to manage food insecurity and mitigate compounding stressors. Through their skills, knowledge, and supportive social networks, respondents had an advantage despite their food insecure status. Concurrently, the structures and services meant to assist those in need were found to be complex, often difficult to navigate within the described circumstances. A number of compounding stressors interact with food insecurity status, adding complication to an already stressful act of obtaining food. This review, and subsequent conceptual model, highlight the inconsistency of food security status and the elements that impact it. The idea that there is a complex path to and from food insecurity is reflected in a study by Daly et al. (2018) who used quantitative measures from cross-sectional survey data (n=17 682) to model the factors that preceded and followed occurrences of respondents running out of food. Factors related to income, spending, food, and health status were probable predictors of food insecurity and were intricately related to one another (Daly et al., 2018). A similar level of complexity is seen in the qualitative data found across the literature.

In the proposed conceptual model from this review (**Figure 2-2**), the dynamic experience of rural, household food insecurity is depicted as a balance beam. The five A's are shown along the beam, and at any point in time they are present to differing extents. For example, in rural environments, while food may be available at the store, it may not be physically accessible or nutritionally adequate; in another example, the food may be fresh and healthy, but not financially accessible. At food banks, food may be accessible but not obtained in ways that preserve dignity and thus, not acceptable. In the conceptual model, the rural household sits as a ball on this beam, its location is dependent upon which factors are currently weighing the beam down, either

toward food insecurity or toward food security. On one side, the weight represents the compounding stressors that tip the household toward food insecurity, while on the other end, this is counteracted by human capital and social capital that tip it back toward food security. At the base of the beam are the complex systems, depicted as a triangle upon which the rest of the model sits. No one part of the balance beam can change or move without affecting the rest.

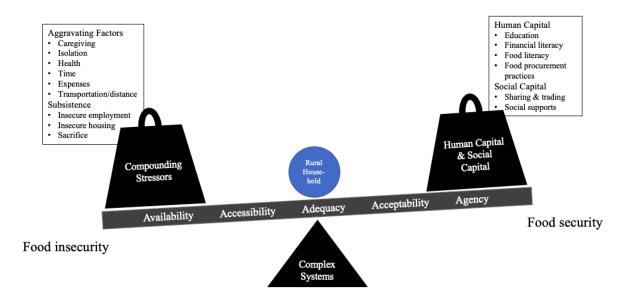


Figure 2-2 Conceptual model - the dynamic experience of rural food insecurity

The systems at the base of the model include social safety nets and food aid organizations whose goal it is to provide money and food that steady households at risk for food insecurity. The support provided in these systems is insecure. Social safety nets are not keeping people out of food banks (Berner et al., 2008), and emergency food aid organizations have administrative barriers to use such as eligibility criteria, and paperwork (Ginsburg et al., 2018) along with the fear of stigma by users who would benefit from them (Middleton et al., 2018). One systematic review of food bank studies (n=20) in developed countries found that food banks are used by food insecure households on a regular basis, rather than as an occasional emergency measure (Bazerghi et al., 2016). They also found that food banks were not able to provide enough fresh

foods such as fruits, vegetables, and dairy products for a healthy diet (Bazerghi et al., 2016). In another review of randomized control trial studies of food subsidy recipients (n=14), it was found that food subsidy programs increase nutrient intake and may mitigate some health issues, however further research is needed to determine whether the benefits are sustained and what the long-term impacts are (Black et al., 2012). A study of 326 rural mothers found that formal government food programs were helpful and well attended (80% of families), but not protective against food insecurity; the authors concluded that although these programs met some needs, they were simply not enough (Swanson et al., 2008). Navigating support systems is difficult and especially discouraging when the outcome is still not enough.

Those living in rural areas face physical access constraints while also paying a higher price for transportation and food (Lenardson et al., 2015; Miller et al., 2016). In one study respondents felt food access was limited, citing physical and social environment factors such as the absence of competitive food vendors, lack of variety and choice, and issues with food quality (Smith & Morton, 2009). An example of this is found in one study of food insecure individuals in rural Pennsylvania, where there was a significant difference between what participants reported they wanted to purchase and what they actually purchased. The main barriers preventing them from obtaining those desired foods were cost of food and distance to food stores (Rodriguez & Grahame, 2016). The relationship between poverty and food access is clear (Tarasuk & Mitchell, 2020) and additive financial stressors, such as insecure employment, insecure housing, and unexpected expenses exacerbate the situation (Gorton et al., 2010). Additive to the access constraints, are health implications which are discussed across the literature as co-existing with food insecurity (Gorton et al., 2010; Whitaker et al., 2006). The direction of the relationship between food insecurity and health implications is debated (Gorton et al., 2010). There are

examples of health issues leading to food insecurity, for example, when health-related physical limitations get in the way of food procurement practices like going to the store and gardening, or when they make preparing food more difficult (Schoenberg, 2000). There are also examples where food insecurity creates or worsens existing health issues, as seen in one study that emphasized the psychological toll that living with food insecurity can have on single mothers (Zekeri, 2007). In this study, the shame felt because of the inability to provide quality food for their families led to mental health struggles (Zekeri, 2007). The nutritional quality of food available and accessible could also lead to health issues.

Social capital is a fundamental part of rural living (Ramadurai et al., 2012). In one longitudinal study, three forms of informal (non-governmental) support were considered: emergency food assistance; meal sharing; and, food assistance from family and friends (Swanson et al., 2008). Of those who mentioned these supports (n=187), 41.0% used at least two of them and they were found to be protective against food insecurity (Swanson et al., 2008). There is a sense of gratitude (Middleton et al., 2018) and a willingness by those who experience food insecurity to help others that are also in need. Sharing food with family is a common and important practice when food is scarce (Skinner et al., 2013; Swanson et al., 2008). However, research on urban and rural food deserts show that while food-sharing practices are more common in rural rather than urban food insecure populations, these practices are not entirely protective against food insecurity (Morton et al., 2008) and thus more needs to be done. Those who have low perceived social capital are also more likely to report food insecurity than those who are connected (Berner et al., 2008). Those who experience food insecurity may feel simultaneously connected with others who are in a similar situation and also alienated from the rest of the community (Mott et al., 2018).

Employing individual skillsets is key to living with food insecurity. Through food knowledge and proficiencies, individuals are able to use what is available efficiently, and to understand which foods to purchase with limited funds. Gardening should also be used as a means to obtain healthy foods that are not offered by food banks or are too expensive at the local stores. Gardening as a practice is seen more often in rural than urban households and while it is found to increase fruit and vegetable intake, it does not result in decreased instances of food insecurity (Morton et al., 2008). In Aboriginal communities, using skills such as hunting, preserving, and other traditional food practices is demonstrated (Skinner et al., 2013) though there is a reported loss of some traditional knowledge which make these practices less relevant (Socha et al., 2012). Financial literacy plays a role in counteracting the stress experiences with unexpected expenses and insecure employment. Common interventions directed at those with financial insecurity, who are at risk for food insecurity include lessons on cooking healthy on a budget and making food stretch. In an American study by Rivera et al., (2016) those food insecure households who participated in an education program which included nutrition and budgeting, were more likely to be food secure one year after the program than the control group. Beyond these strategies, parents demonstrated making sacrifices so that others can eat (Bove & Olson, 2006; De Marco et al., 2009), this can result in a situation where adults report food insecurity but their children do not, as was shown in one study of American households where 14% more adults than youth reported personal food insecurity (Zekeri, 2007). It is important that all family members have access to enough food and this data has demonstrated that this is not the reality.

2.5.1 Limitations

Despite the novelty of this review and applicability of its findings, several limitations should be noted. First, it is recognized that people from low-income countries with food insecurity have

their own unique perspectives and experiences, which this review does not include. While these accounts are important and meaningful, they are beyond the scope of this review. This review does not include grey literature (i.e. non-refereed sources such as government reports) and instead focuses on peer reviewed journals with standards for reporting qualitative methods. The respondents in these studies represent a vulnerable population. Working in rural, isolated, areas creates the potential that participants will feel marginalized and may not participate, only those willing and able to speak to researchers are represented in the literature.

Adults were the focus of this review, and though young people have less autonomy over food acquisition and choice, they still adjust to cope with food insecurity when their household does not have enough. In their study of youth in focus groups (n=46), Mott et al., (2018) found that youth understood and expressed how factors in their environment influenced their food insecurity status, with themes such as limited employment opportunities for their parents and a lack of community connections. There is a demonstrated need for more research on the perspectives of children and youth, the potential physical consequences of nutrient deficiency during a time of rapid physiological development are great, and although adults tend to make sacrifices to account for this, they should not have to. Most studies focused on the United States. Of the few studies from Canada and Australia, most were from remote areas; there is a need for more research in these diverse rural settings. While this review and subsequent model focuses on rural settings, application in non-rural areas should be considered in future research.

2.6 Conclusion

For those living with food insecurity in a rural context, emergency food and social assistance exist but they are not enough, and changes need to be made to improve their efficacy. Easing system navigation, encouraging social connectedness, and enhancing human capital should be

priority areas for those working directly with this population group. Reaching households that are in need of services may require creative planning especially in small, sparsely settled areas where eligible participants may be unserved. For example, a community food bank could include transportation considerations as an integral part of program planning, or a government agency could provide those living in rural areas access to a system navigator who is familiar with their local services.

Taken together, these experiences and perspectives demonstrate that there is not currently one single solution to food insecurity for rural households. Intervening factors allow the respondents to survive and create the dynamic picture seen in the conceptual model. Considering how the individual, social, and contextual aspects interact with the household enhances our understanding of rural household food insecurity. This leaves space for continued research on the various aspects of the model, how they interact, and also for the development of interventions that address multiple elements. For example, a multi-component study of a community wide intervention that promotes food literacy and food sharing, while at the same time provides increased access to affordable food.

The synthesized themes reflected across the literature can be used to incite governments to take action, and support those who are living with, and vulnerable to, food insecurity in rural areas. Researchers must continue to engage small rural populations in community-based research and provide a platform for these voices to be heard. Various organizations and social programs are currently working to meet the needs of people in their communities; however it is clear that a system-wide, sustainable solution is necessary, one that guarantees food is available, accessible, adequate, and acceptable for all.

2.7 References

- Andress, L., & Fitch, C. (2016). Juggling the five dimensions of food access: Perceptions of rural low income residents. *Appetite*, 105, 151–155. https://doi.org/10.1016/j.appet.2016.05.013
- Bazerghi, C., McKay, F. H., & Dunn, M. (2016). The role of food banks in addressing food insecurity: A systematic review. *Journal of Community Health*, *41*(4), 732–740. https://doi.org/10.1007/s10900-015-0147-5
- Berner, M., Ozer, T., & Paynter, S. (2008). A portrait of hunger, the social safety net, and the working poor. *Policy Studies Journal*, *36*(3), 403–420. https://doi.org/10.1111/j.1541-0072.2008.00274.x
- Black, A. P., Brimblecombe, J., Eyles, H., Morris, P., Vally, H., & O'Dea, K. (2012). Food subsidy programs and the health and nutritional status of disadvantaged families in high income countries: A systematic review. *BMC Public Health*, 12(1), 1099. https://doi.org/10.1186/1471-2458-12-1099
- Bove, C. F., & Olson, C. M. (2006). Obesity in low-income rural women: Qualitative insights about physical activity and eating patterns. *Women and Health*, *44*(1), 57–78. https://doi.org/10.1300/J013v44n01_04
- Brown, M. C., Shrestha, U., Huber, C., Best, L. G., O'Leary, M., Howard, B., Beresford, S., & Fretts, A. M. (2019). Characterizing the local food environment and grocery-store decision making among a large American Indian community in the north-central USA:

 Qualitative results from the Healthy Foods Healthy Families Feasibility Study. *Public Health Nutrition*, 1–9. https://doi.org/10.1017/S1368980019001095

- Buck-McFadyen, E. V. (2015). Rural food insecurity: When cooking skills, homegrown food, and perseverance aren't enough to feed a family. *Canadian Journal of Public Health*, 106(3), e140–e146. https://doi.org/10.17269/CJPH.106.4837
- Bussey, C. (2013). Food security and traditional foods in remote Aboriginal communities: A review of the literature. *Australian Indigenous Health Bulletin*, *13*(2), 10. https://doi.org/10.1136/ard.2005.046904
- Byker Shanks, C., Haack, S., Tarabochia, D., Bates, K., & Christenson, L. (2017). Factors influencing food choices among older adults in the rural western USA. *Journal of Community Health*, 42(3), 511–521. https://doi.org/10.1007/s10900-016-0283-6
- Coleman-Jensen, A., Rabbitt, M. P., Gregory, C. A., & Singh, A. (2019). *Household Food Security in the United States in 2018* (ERR-270; pp. 1–39). U.S. Department of Agriculture, Economic Research Service.

 https://www.ers.usda.gov/webdocs/publications/94849/err-270.pdf?v=963.1
- Daly, A., Pollard, C. M., Kerr, D. A., Binns, C. W., Caraher, M., & Phillips, M. (2018). Using cross-sectional data to identify and quantify the relative importance of factors associated with and leading to food insecurity. *International Journal of Environmental Research and Public Health*, *15*(12), 2620. https://doi.org/10.3390/ijerph15122620
- De Marco, M., Thorburn, S., & Kue, J. (2009). "In a country as affluent as America, people should be eating": Experiences with and perceptions of food insecurity among rural and urban Oregonians. *Qualitative Health Research*, *19*(7), 1010–1024. https://doi.org/10.1177/1049732309338868

- Dean, W. R., & Sharkey, J. R. (2011). Food insecurity, social capital and perceived personal disparity in a predominantly rural region of Texas: An individual-level analysis. *Social Science & Medicine*, 72(9), 1454–1462. https://doi.org/10.1016/j.socscimed.2011.03.015
- FAO, IFAD, UNICEF, WFP, & WHO. (2018). The State of Food Security and Nutrition in the World 2018: Building Climate Resilience for Food Security and Nutrition (pp. 8–9).

 FAO. http://www.fao.org/3/i9553en/i9553en.pdf
- Ford, J., & Beaumier, M. (2011). Feeding the family during times of stress: Experience and determinants of food insecurity in an Inuit community: Feeding the family during times of stress. *The Geographical Journal*, *177*(1), 44–61. https://doi.org/10.1111/j.1475-4959.2010.00374.x
- Ford, J., Lardeau, M.-P., & Vanderbilt, W. (2012). The characteristics and experience of community food program users in arctic Canada: A case study from Iqaluit, Nunavut. BMC Public Health, 12(1), 464. https://doi.org/10.1186/1471-2458-12-464
- Ginsburg, Z. A., Bryan, A. D., Rubinstein, E. B., Frankel, H. J., Maroko, A. R., Schechter, C. B., Cooksey Stowers, K., & Lucan, S. C. (2018). Unreliable and difficult-to-access food for those in need: A qualitative and quantitative study of urban food pantries. *Journal of Community Health*, 44, 1–16. https://doi.org/10.1007/s10900-018-0549-2
- Gorton, D., Bullen, C. R., & Mhurchu, C. N. (2010). Environmental influences on food security in high-income countries. *Nutrition Reviews*, 68(1), 1–29. https://doi.org/10.1111/j.1753-4887.2009.00258.x
- Gross, J., & Rosenberger, N. (2010). The double binds of getting food among the poor in rural Oregon. *Food, Culture and Society*, *13*(1), 48–70. https://doi.org/10.2752/175174410X12549021368063

- Gundersen, C., & Ziliak, J. P. (2015). Food insecurity and health outcomes. *Health Affairs*, *34*(11), 1830–1839. https://doi.org/10.1377/hlthaff.2015.0645
- Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis.

 *Qualitative Health Research, 15(9), 1277–1288.

 https://doi.org/10.1177/1049732305276687
- Lardeau, M.-P., Healey, G., & Ford, J. (2011). The use of photovoice to document and characterize the food security of users of community food programs in Iqaluit, Nunavut. Rural and Remote Health, 11(1680), 17.
- Lê, Q., Auckland, S., Nguyen, H. B., Murray, S., Long, G., & Terry, D. R. (2015). The socio-economic and physical contributors to food insecurity in a rural community. *SAGE Open*, 5(1). https://doi.org/10.1177/2158244014567401
- Lenardson, J. D., Hansen, A. Y., & Hartley, D. (2015). Rural and remote food environments and obesity. *Current Obesity Reports*, 4(1), 46–53. https://doi.org/10.1007/s13679-014-0136-5
- Middleton, G., Mehta, K., McNaughton, D., & Booth, S. (2018). The experiences and perceptions of food banks amongst users in high-income countries: An international scoping review. *Appetite*, *120*, 698–708. https://doi.org/10.1016/j.appet.2017.10.029

- Miller, V., Yusuf, S., Chow, C. K., Dehghan, M., Corsi, D. J., Lock, K., Popkin, B., Rangarajan, S., Khatib, R., Lear, S. A., Mony, P., Kaur, M., Mohan, V., Vijayakumar, K., Gupta, R., Kruger, A., Tsolekile, L., Mohammadifard, N., Rahman, O., ... Mente, A. (2016).
 Availability, affordability, and consumption of fruits and vegetables in 18 countries across income levels: Findings from the Prospective Urban Rural Epidemiology (PURE) study. *The Lancet. Global Health*, 4(10), e695–e703. https://doi.org/10.1016/S2214-109X(16)30186-3
- Morton, L. W., Bitto, E. A., Oakland, M. J., & Sand, M. (2008). Accessing food resources: Rural and urban patterns of giving and getting food. *Agriculture and Human Values*, 25(1), 107–119. https://doi.org/10.1007/s10460-007-9095-8
- Mott, R., Keller, K., Britt-Rankin, J., & Ball, A. (2018). 'Out of Place around other people':

 Experiences of young people who live with food insecurity. *Children and Society*, *32*(3), 207–218. https://doi.org/10.1111/chso.12270
- Murimi, M. W., Kanyi, M. G., Mbogori, T. N., Amin, M. R., Rana, Z. R., Nguyen, B., & Moyeda-Carabaza, A. F. (2018). Voices and perspectives of rural Hispanic households on food insecurity in west Texas: A qualitative study [Article in Press]. Scopus. https://doi.org/10.1080/19320248.2018.1434105
- O'Brien, B. C., Harris, I. B., Beckman, T. J., Reed, D. A., & Cook, D. A. (2014). Standards for reporting qualitative research: A synthesis of recommendations. *Academic Medicine*, 89(9), 1245–1251. https://doi.org/10.1097/ACM.00000000000000388
- Pollard, C. M., & Booth, S. (2019). Food insecurity and hunger in rich countries—It is time for action against inequality. *International Journal of Environmental Research and Public Health*, *16*(10), 1–13. https://doi.org/10.3390/ijerph16101804

- Power, E., Abercrombie, D., Fafard St-Germain, A.-A., & Vanderkooy, P. (2016). *Prevalence, severity and impact of household food insecurity: A serious public health issue* (pp. 1–55). Dietitians of Canada (DC). https://www.dietitians.ca/Downloads/Public/HFI-Background-DC-FINAL.aspx
- Quandt, S. A., Arcury, T. A., McDonald, J., Bell, R. A., & Vitolins, M. Z. (2001). Meaning and management of food security among rural elders. *Journal of Applied Gerontology*, 20(3), 356–376. https://doi.org/10.1177/073346480102000307
- Quandt, S. A., Grzywacz, J. G., Trejo, G., & Arcury, T. A. (2014). Nutritional strategies of Latino farmworker families with preschool children: Identifying leverage points for obesity prevention. *Social Science & Medicine*, *123*, 72–81. https://doi.org/10.1016/j.socscimed.2014.10.029
- Ramadurai, V., Sharf, B. F., & Sharkey, J. R. (2012). Rural food insecurity in the United States as an overlooked site of struggle in health communication. *Health Communication*, 27(8), 794–805. https://doi.org/10.1080/10410236.2011.647620
- Riches, G. (1985). Feeding Canada's poor: The rise of food banks and the collapse of the public safety net. *2nd Conference on Provincial Social Welfare Policy*, 1–20.
- Rivera, R. L., Maulding, M. K., Abbott, A. R., Craig, B. A., & Eicher-Miller, H. A. (2016).

 SNAP-Ed (Supplemental Nutrition Assistance Program–Education) increases long-term food security among Indiana households with children in a randomized controlled study.

 The Journal of Nutrition, 146(11), 2375–2382. https://doi.org/10.3945/jn.116.231373
- Rodriguez, R. M., & Grahame, K. M. (2016). Understanding food access in a rural community:

 An ecological perspective. *Food, Culture and Society*, *19*(1), 171–194.

 https://doi.org/10.1080/15528014.2016.1145010

- Ryerson University. (2018). *Guiding principles*. Centre for Studies in Food Security. https://www.ryerson.ca/foodsecurity/
- Sano, Y., Garasky, S., Greder, K. A., Cook, C. C., & Browder, D. E. (2011). Understanding food insecurity among Latino immigrant families in rural America. *Journal of Family and Economic Issues*, 32(1), 111–123. https://doi.org/10.1007/s10834-010-9219-y
- Sano, Y., Routh, B., & Lanigan, J. (2019). Food parenting practices in rural poverty context.

 Appetite, 135, 115–122. https://doi.org/10.1016/j.appet.2018.11.024
- Schoenberg, N. (2000). Patterns, factors, and pathways contributing to nutritional risk among rural African American elders. *Human Organization*, *59*(2), 234–244. https://doi.org/10.17730/humo.59.2.38274118p12043g4
- Skinner, K., Hanning, R. M., Desjardins, E., & Tsuji, L. J. S. (2013). Giving voice to food insecurity in a remote indigenous community in subarctic Ontario, Canada: Traditional ways, ways to cope, ways forward. *BMC Public Health*, *13*(1). https://doi.org/10.1186/1471-2458-13-427
- Smith, C., & Morton, L. W. (2009). Rural food deserts: Low-income perspectives on food access in Minnesota and Iowa. *Journal of Nutrition Education and Behavior*, 41(3), 176–187. https://doi.org/10.1016/j.jneb.2008.06.008
- Socha, T., Zahaf, M., Chambers, L., Abraham, R., & Fiddler, T. (2012). Food security in a northern First Nations community: An exploratory study on food availability and accessibility. *Journal of Aboriginal Health*, 8(2), 5–14.
- Spurway, K., & Soldatic, K. (2016). "Life just keeps throwing lemons": The lived experience of food insecurity among Aboriginal people with disabilities in the West Kimberley. *Local Environment*, 21(9), 1118–1131. https://doi.org/10.1080/13549839.2015.1073235

- Swanson, J. A., Olson, C. M., Miller, E. O., & Lawrence, F. C. (2008). Rural mothers' use of formal programs and informal social supports to meet family food needs: A mixed methods study. *Journal of Family and Economic Issues*, 29(4), 674–690. https://doi.org/10.1007/s10834-008-9127-6
- Tarasuk, V., & Mitchell, A. (2020). *Household Food Insecurity in Canada, 2017-18*. Research to identify policy options to reduce food insecurity (PROOF). https://proof.utoronto.ca/
- Tarasuk, V., Mitchell, A., & Dachner, N. (2016). *Household Food Insecurity in Canada*, 2014.

 Research to identify policy options to reduce food insecurity (PROOF).

 http://proof.utoronto.ca
- Tomayko, E. J., Mosso, K. L., Cronin, K. A., Carmichael, L., Kim, K., Parker, T., Yaroch, A. L., & Adams, A. K. (2017). Household food insecurity and dietary patterns in rural and urban American Indian families with young children. *BMC Public Health*, *17*(1). https://doi.org/10.1186/s12889-017-4498-y
- Vaterlaus, J. M., Cottle, N. M., Patten, E. V., & Gibbons, R. (2018). Understanding customers:

 The jobs to be done theory applied in the context of a rural food pantry. *Journal of the Academy of Nutrition and Dietetics*, *118*(10), 1895–1902.

 https://doi.org/10.1016/j.jand.2018.02.011
- Ward, C., Feinauer, E., Hiwalker, R., & Davis, J. (2000). Implications of welfare reform for community development: A case study comparing tribal and county food assistance programs serving the Northern Cheyenne Nation. *Community Development Society*. *Journal*, 31(2), 254–276. https://doi.org/10.1080/15575330009489706
- Warf, B. (Ed.). (2010). Rural geography. In *Encyclopedia of Geography*. SAGE Publications, Inc. https://doi.org/10.4135/9781412939591.n1004

- Webber, C. B., & Dollahite, J. S. (2008). Attitudes and behaviors of low-income food heads of households toward sustainable food systems concepts. *Journal of Hunger and Environmental Nutrition*, 3(2–3), 186–205. https://doi.org/10.1080/19320240802243266
- Whitaker, R. C., Phillips, S. M., & Orzol, S. M. (2006). Food Insecurity and the risks of depression and anxiety in mothers and behavior problems in their preschool-aged children. *Pediatrics*, 118(3), e859–e868. https://doi.org/10.1542/peds.2006-0239
- Whitley, S. (2013). Changing times in rural america: Food assistance and food insecurity in food deserts. *Journal of Family Social Work*, *16*(1), 36–52. https://doi.org/10.1080/10522158.2012.736080
- Wolfe, W. S., Olson, C. M., Kendall, A., & Frongillo Jr., E. A. (1996). Understanding food insecurity in the elderly: A conceptual framework. *Journal of Nutrition Education*, 28(2), 92–100. https://doi.org/10.1016/S0022-3182(96)70034-1
- Yousefian, A., Leighton, A., Fox, K., & Hartley, D. (2011). Understanding the rural food environment -perspectives of low-income parents. *Rural and Remote Health*, *11*(2). https://www.scopus.com/inward/record.uri?eid=2-s2.0-80051647546&partnerID=40&md5=8c8e6b5a443321d1d4c7991f9c45f04c
- Zekeri, A. A. (2007). Livelihood strategies of food-insecure poor, female-headed families in rural Alabama. *Psychological Reports*, *101*(3 II), 1031–1036. https://doi.org/10.2466/PR0.101.4.1031-1036

Chapter 3

3 Living with household food insecurity in a rural context: a qualitative study of strategies and impacts

3.1 Introduction

Household food insecurity (HFI) occurs when financial limitations diminish an individual's ability to access food. In Canada, latest measures indicate that one in eight households and one in six children have experienced some level of food insecurity. In Ontario, 13.3% of the population (1.7 million people) experienced HFI (Tarasuk & Mitchell, 2020). The problem of HFI persists with minimal governmental response. Food banks and other community food programs provide for the immediate needs of people but fail to fully address the problem (Riches & Tarasuk, 2014). At the individual level, coping with HFI involves a complex set of responses (Piaskoski et al., 2020; Swanson et al., 2008).

In Canada, many studies have considered the experience of food insecurity in urban settings (Engler-Stringer & Berenbaum, 2005; Kirkpatrick & Tarasuk, 2009; Smith-Carrier et al., 2017), yet few focus on rural, non-remote populations (Buck-McFadyen, 2015; Piaskoski et al., 2020) despite the fact that HFI exists at a similar rate in both urban and rural areas (Tarasuk et al., 2016). Therefore, the purpose of this study is to develop a broadened understanding of food insecurity in rural Canada through an examination of the perspectives of individuals who demonstrate HFI by accessing food banks in Huron County, Ontario.

Food security is the ability to obtain enough food to live an active and healthy life (FAO, 2009); at a broad level, food insecurity is the absence of food security. Because food security is a social determinant of health (Mikkonen et al., 2010), those living with HFI are at a greater risk of experiencing negative health outcomes. These outcomes include chronic disease (e.g. diabetes

and hypertension) (Seligman et al., 2010; Tait et al., 2018) and mental health issues (e.g. depression and suicidal ideation) (Davison et al., 2015; Hanson & Olson, 2012), as well as an increased risk of premature mortality (Gundersen et al., 2018; Men et al., 2020). Food insecurity is also related to increased health care costs (Garcia et al., 2018).

Researchers have also identified socio-economic conditions that are related to food insecurity. For example, earning a low-income, as well as the source of that income, are predictors of food insecurity (Tarasuk & Mitchell, 2020). Individuals who receive income from social assistance (i.e. social safety net) have a greater likelihood of experiencing food insecurity (Tarasuk et al., 2014; Tarasuk & Mitchell, 2020; Tarasuk & Vogt, 2009). A recent report based on data from 2017 found that 60.4% of Canadian households and 59.0% of Ontario households that experienced food insecurity were also reliant on social assistance for their income (Tarasuk & Mitchell, 2020). Individuals who rented rather than owned their homes and lone-parent households, especially those that were female- headed, were also more likely to experience food insecurity (Fafard St-Germain & Tarasuk, 2020; Tarasuk & Mitchell, 2020; Tarasuk & Vogt, 2009).

Access to nutritious, affordable food is particularly important for those living with HFI and less is known about accessibility in rural food environments than urban ones (Canada & Health Canada, 2013). A few Canadian studies have indicated that food is typically more expensive in rural areas, and healthy food is not always available (Parker et al., 2018; Tsang et al., 2011). In rural areas there is a greater reliance on vehicular transportation as residents often have to travel further than urban residents in order to access the healthy food available at grocery stores and farmer's markets (Drouin et al., 2009; Sadler et al., 2011). Studies of rural, low-income families in the United States have indicated that transportation, distance to food stores, cost, and quality

of food play a role in food procurement (Rodriguez & Grahame, 2016; Smith & Morton, 2009; Yousefian et al., 2011).

A systematic review of qualitative studies resulted in the creation of a rural food insecurity model that suggests rural HFI is a balancing act influenced by multiple elements (**Figure 2-2**,), including: human capital, social capital, compounding stressors, and complex systems. This model helps to understand HFI, and how each element impacts one another to determine the food security status of the household (Piaskoski et al., 2020). That review found only one qualitative study that addressed food insecurity in rural, non-remote areas within Canada (Buck-McFadyen, 2015). The present study will fill the gap in the literature on rural, non-remote, Canadian voices that was identified by Piaskoski et al. (2020). Specifically, this study will broaden the existing understanding of food insecurity in rural Canada by examining how those living in Huron County, Ontario, Canada manage HFI, as well as the impact HFI has on their lives.

3.2 Methods

3.2.1 Study location & procedures

Data for this study was taken from the Food Tracking Project (FTP) which was implemented in Huron County (population 59,297), a region in Southwestern Ontario known for its rural, small-town life, agriculture, and seasonal tourism. The largest settlement in the county is the Town of Goderich, with a population of 7,628 (**Figure 1-4**) (Statistics Canada, 2017a; 2017b). There are ten food banks in seven communities across Huron County, as well as two mobile food banks which were established after this project was introduced (**Figure 1-5**). The FTP sought to improve the County's food bank system using three key approaches: mapping, surveys, and focus groups. The primary author of this chapter was a volunteer on the FTP and while they did not collect the data, they did observe some portions of it. Recruitment for all portions of the FTP

were done in person at the food banks by local health professionals. Respondents to the survey portion of the FTP who had indicated a willingness to participate in focus groups were recruited via telephone. A total of 41 participants took part in one of eight focus groups conducted across the communities. To allow for openness and comfort, focus groups took place in a variety of community settings away from food banks, such as libraries and community centres. To be eligible for the FTP, participants had to be over 18 years of age and reside in Huron County. Each participant had used one of the county food banks at some point in the two months prior to the focus groups. In order to maintain confidentiality demographic information was not recorded. Semi-structured conversations were facilitated by two local health professionals familiar with the communities and the food banks. The focus group guide created conversations around the experience of using food banks and living with HFI and can be found as Appendix B. Participants received a monetary reimbursement for travel costs.

3.2.2 Data analysis

Transcript data from all focus groups were considered in this analysis. The transcriptions were coded using an inductive thematic analysis (Braun & Clarke, 2006) in NVivo 12.6.0. Using steps defined by Braun & Clarke (2006), the data was coded using an iterative process and eventually grouped into themes which were then verified again with the data. Prior to finalizing and defining the themes, a secondary researcher compared the codebook with 20% of the data (transcripts of two focus groups) to check for agreement, ensure rigour, and reduce bias. Any discrepancies were discussed and resolved so that a cohesive set of themes and subthemes could be finalized. Themes and subthemes were then mapped into two categories: (1) living with food insecurity, and (2) utilizing food banks, the first of which is presented in this chapter and the second which can be found in Chapter 4 of this thesis. Reflexivity was practiced by the primary

researcher throughout the process of data analysis and interpretation, including social identity mapping (Jacobson & Mustafa, 2019) to determine positionality (**Figure 1-2**). Ethics approval for the secondary data analysis was obtained through Western University (#112152).

3.3 Results

Three major themes and nine subthemes were derived from the focus groups and represent the experience of living with HFI in Huron County. The themes and subthemes are: (1) *Strategies for coping with HFI*, which includes: food literacy and budgeting; community members helping one another; and organizational sources of assistance; (2) *physical and emotional impacts of HFI*, which includes: physical health; mental health, stress, and tempered expectations; and fear of stigma within the community; and (3) *living with poverty*, which includes: cost of living; reliance on the social safety net; and cycles of insecurity.

3.3.1 Strategies for coping with household food insecurity

Participants managed HFI in a variety of ways, including employing personal skills, eliciting community support, and turning to organizational provision. Additional representative quotes can be found in **Table 3-1**

3.3.1.1 Food literacy and budgeting

Food literacy has been defined as a scaffolding of inter-related knowledge, behaviour, and skills, including the planning, management, selection, and preparation of foods (Vidgen & Gallegos, 2014). A number of these tools were employed by participants in order to manage HFI.

Participants knew when and how much money they had, which food to buy, and how to obtain free food in order to maximize their money. They spoke of strategically planning trips to grocery stores and food banks to get the most food possible. Visits to food banks were timed based on

when food was delivered by the distribution centre, referred to in one focus group as "truck week". Some individuals did not go grocery shopping until after observing what was already available at food banks, such as this participant who visited a food bank:

[early in the month] when I get money in, see if I can get some like basic needs or whatever. See what I can get from the food bank and then go out [to a store] and get what I can, I've always planned a day like the 4th in the month.

Others purchased groceries at the start of the month when they got paid and visited a food bank once that food ran out, such as this participant who commented: "usually by then it's the 15/16th and then we'll go up to the food bank or whatever". For some, the timing of grocery shopping trips was based on when food was marked down, one participant shared: "I can't afford beef. I go to the 50% off, uh, thing every morning at [local store] and see if there's anything" adding that it is all gone by the afternoon.

Other strategies to obtain enough food with little resources were budgeting and watching for sales, as one participant stated:

Well I had to learn the hard way too, myself. How to stretch the food and keep it healthy. You know, I didn't know that overnight either. I had to learn all my budgeting and everything too. But sometimes you can only stretch what you can. Especially when, you're, it is expensive to eat healthy; it really is.

Another participant shared that they tried to buy in bulk when they could afford it which would save money overall, while another avoided more expensive brands, opting for the cheaper ones. Planning ahead required time, knowledge, and financial literacy.

Once there was food at home, food preparation skills were demonstrated to make it stretch. Participants recounted making the most of what little was available or affordable. Making food from scratch, especially bread products, was seen as cheaper than pre-made, store-bought alternatives. Homemade pizza, for example, was mentioned a few times, as one participant put it:

I make homemade pizzas and I don't buy crust, I make the dough and everything just to conserve some monies, cause if I went to buy that, that pizza crust or, uh, a piece of dough like, uh, some of them are five dollars! Just for the dough, and it's like when you make it, you know it's only a dollar fifty if anything.

Another discussed their strategy when it came to pizza: "It's cheaper to get those pepperettes and get them and slice them into slices and, instead of the pepperonis, two pepperettes will make like two pizzas." Making meals from scratch was often preferred, one woman remarked: "Like I said, I cook a lot of stuff from scratch". However, this was not always possible, as another participant stated, "I like to cook almost every day, at least one meal if I can, if it's there, I mean if I have the right supplies, I guess". Creativity when using the items received from the food bank made food last longer and made ingredients interesting and exciting. One participant shared their creativity with an unlikely item, canned chicken:

Many people don't realize it but with the canned chicken, you can make a dynamite chicken fried rice, that's all in one meal, if you get the right stuff and you know how to do it. You don't need to get the fresh chicken breasts. I've done it like countless times where I've forgotten to take the chicken out of the freezer. Or I didn't have anything, and I wanted a decent meal. Can of chicken. Boom. You got your meal. You got your meat.

You got everything with it. So ya, it's still at the end of the day that can of whatever, but now you've made it into a different dish. And maybe next week you can take the same can and make the other dish, so you're fooling your brain... you know thinking that you're, you're eating [variety].

Supplementing meals with cheaper, readily available ingredients helped to make food stretch.

One participant shared their strategy for combining available ingredients:

I only used to buy it [beef] if it was reduced. And then I had like peas or beans, mixed in with my meat to make meatloaf or stuff like that. The kids don't notice but it still gives them protein. Like I can be creative, but it's still difficult.

Gardening supplemented the fresh vegetable supply during the summer season and methods of preserving, such as freezing, were used when there was an abundance or a sale. One participant shared their preservation trick: "I will buy as many [loaves of bread] as I can for the dollar and put it in my freezer and just take it out. You know and toast it a little bit".

3.3.1.2 Community members helping one another

The role of community and social networks was a common theme within the focus groups. Participants discussed being part of social circles in which sharing rides, food, household supplies, and information was practiced. These circles included family, friends, and neighbours. For example, one participant shared that their, "neighbour's more than willing to help me out with laundry detergent if I need it, but again, she's also a single mom that's used food- the food bank as well". Another mentioned turning to family in times of need:

I've got my mom right across the street and she has given me odds and ends, um but mostly I just hope we can make whatever we have last. I don't like asking my mom for

groceries especially since she's also on the ODSP. She – my mom's health is deteriorating um they don't have a lot to begin with but um and my dad doesn't like to do grocery shopping very much um so we just we'll make meatless spaghetti or you know an easy dinner for my son. Grilled cheese or whatever it is we have we can make, soup whatever um so yeah we just try and make something quick and easy.

Similar to this one, in many examples both the giver and receiver had experienced hardships, but there was a greater need recognized, and they helped each other with what little was available.

One participant reflected on such a reciprocal relationship with a friend: "I've emptied my, what I could out of my cupboard for her, at times and she's done the same for me. Thank goodness I have a few good friends".

There were also accounts of people in the community stepping forward with assistance, such as one faith leader: "my neighbour who lives next door to me, she's got two little ones and I know once a month umm he [minister] brings umm a big flat of fresh stuff for her", and a doctor's office: "they pick stuff [from their garden] and leave them out for the patients to take".

Organized sharing such as potlucks and group shopping trips were also discussed and at times even arranged during the focus groups.

Information sharing was a noteworthy occurrence in these focus groups. Exchanges between participants about opportunities for free food were common. In one emotional exchange a participant shared with another the timing of free community meals available in the town, at which point they got emotional and responded "[name of community meal]? Okay, Ugh my eyes are blurring right now, cause I was getting a bit emotional, sorry."

Sharing rides was another key part of the community. Tasks such as grocery shopping, food bank trips, community meals, and medical appointments were done together, such as this example:

"[Friend] needs a ride into [town]. I will take somebody in, so we try to arrange our appointments for the same time. Some were willing to offer rides to the food bank for free, one participant stated that in their community, "if somebody has to go someplace, they know they can call any of us that have a car."

In addition, volunteering at a food bank was an important practice of the food insecure community, and one participant said they were a "client, a worker, and a food driver". Instances like this made receiving free food seem more like an exchange. During a focus group, one participant expressed, "It [volunteering] makes you productive, give back to the world. And sorta earn, that way you don't feel like you're just getting free food all the time". Other participants mentioned that they considered volunteering but did not know how to get involved. For example, a participant said the following:

I would like to give back at some point, but maybe not in food, but you know I have skills. I worked in the office all my life! So, do they need letters? Do they need posters? Do they need cards done up? Do they need anything? Like use me! Cause, I'd be more than happy to contribute my time and skills.

3.3.1.3 Organizational sources of assistance

Many participants relied upon local food banks. Although there was a range in reliance, as a few participants only visited occasionally, the majority of focus group participants utilized food banks on a monthly basis. While most food banks only allow clients to visit once per month, participants shared that many food banks allowed for additional visits during emergency situations, as this participant described:

Um you can go once a month and like uh like they said they give you a five day supply but then if you need something else um within that same month, they'll give you another milk voucher um and I think they'll give you like bread and eggs or something like that. It's just very basic um just to kind like tide you over but that's what they offer.

In addition to food banks, participants talked about social safety net programs at both the provincial and federal level, such as Ontario Works (OW), Ontario Disability Support Program (ODSP), and Old Age Security (OAS). Some of these governmental programs were said to provide extra support to clients under extenuating circumstances. One participant shared that they were "on a, a, special diet" and that "they [ODSP] give me a diet allowance" in order to afford additional groceries related to a health condition. Another participant discussed gas subsidies for health-related travel. Organizations like the Canadian Mental Health Association (CMHA), Children's Aid Society (CAS), public health entities, and shelters, were also mentioned as providing assistance on a needs-basis in the form of food vouchers, gift cards, money, and clothing.

At the community level, participants were deeply appreciative of small not-for-profit organizations that provided food and meals. Volunteer-based community meals ranged from weekly soup lunches to monthly dinners at local churches. School food programs, such as those that supplied snacks or lunches, were also appreciated by participants with children. During the focus groups, there appeared to be a desire for more interactive food programs such as community kitchens: "There should be some time of uh program that people who visit the food bank, if you're interested... we have a cooking class or cooking edu... or food education". One group even discussed how and where they might go about starting a community kitchen.

Table 3-1 Representative quotes for theme: Strategies for coping with HFI

Strategies for coping with HFI

Food literacy and budgeting

I'll utilize it any way I can. but I know there's people out there that are, are hard set to do stuff that I do, I'm sorta old school, that can take flour and turn it into something.

I grow a lot of my own food. I put in a garden for her. I've put, I've put in a lot of gardens for people.

What I can afford I'll buy in bulk, because I know it'll last a little bit longer and it's just a little bit cheaper.

I do a lot of baking on my own because I run out of stuff like bread but ya know like from pizza dough to bread.

And when you watch pennies, I mean, I can sit there and I'm pretty good, I, I can almost zero in on every time when I go shopping, I'm, I'm mentally calculating.

As soon as I get my, uh, groceries from the food bank, that's when I decide what I need to get over top. So I'll take that eighty dollars and try to make it, uh, stretch.

Community members helping one another

It's a vicious circle because when you're offered something, you, you feel bad that you can't accept it

[Friend] sent over 4 loaves of homemade bread and the kids are just so happy with that.

All of a sudden everybody's couple bucks turns into meals.

If somebody has to go someplace, they know they can call any of us that have a car

I thought that, like what if you had like, I know it's hard in a rural community too, but, like ah, where people they get together and prepare a food that can be portioned out for the, week like, ya know they make it all together, it's fun, they're meeting people, they're interacting and they're learning um and then ya I don't know how that would look or work.

Organizational sources of assistance

Well I do remember at one time years ago when I had my four children young at home and I called the health unit, I was told to call the health unit cause I needed food and yeah they gave me a couple of cards for groceries or whatever, grocery cards, but you can't get them anymore.

They [social agency] said that if there's anything I need help with, you know, like I didn't ask for any but like, two months in a row they were bringing me like fifty-dollar Wal-Mart cards, fifty-dollar Sears cards. You know very helpful.

I guess they're [social agency] giving out gas tickets too if you live out of town.

If someone is really in need, and you can go [to the food bank] twice, once a month, or one month in a year.

When I was living off a hundred dollars, I was offered to go every other week. Cause she knew the circumstances

3.3.2 Physical and emotional impacts of household food insecurity

Not having enough money for food has impacts beyond hunger. Participants openly discussed the fear of stigma from their communities, as well as the negative physical and mental health issues related to their food insecure status. Additional representative quotes can be found in

3.3.2.1 Physical health

Table 3-2.

Participants expressed how their pre-existing health conditions were made worse due to HFI and poor diet. They discussed going without food for a week or getting down to one meal a day because they could not afford food, which are indicators of severe food insecurity (Tarasuk & Mitchell, 2020). Guardians talked about going without food so that their children could eat:

I have to go without sometimes so that I can feed my daughter um and you know, and in that, in that term I don't think that that, that that's enough but on the other hand, I don't mind you know, missing a like meal or something like every couple days or whatever, you know, just so my daughter can, you know, have three meals a day and everything.

Participants also mentioned making nutritional sacrifices, such as not having fruits and vegetables, or enough milk for their kids, because these items were too expensive. At the grocery store, participants chose less healthy options because they were cheaper.

Participants living with certain illnesses that require dietary modifications to manage were not always able to access the food required. Stomach issues and obesity were mentioned however diabetes was the most frequently discussed disease. Its management involves dietary modifications that were challenging to meet without access to nutritious foods, as one participant stated: "I'm a diabetic, I'm a type 2. So, uh, I don't want to be a type 1. And, uh, right now

they've got me on the insulin, because, you know, uh basically, I'm eatin' a lot of carbohydrates."

The difficulty in managing diabetes while food insecure resulted in fear of the potential complications that could arise:

When I see the numbers, I just go phew, you know? Do I just have one meal a day, you know what I mean? And that's and that's what I've done. Take the insulin anyways and then supper time...lunch time take the same thing, just take the insulin, and I find my insulin will be down, but that one stupid carbohydrate type meal, next thing you know I'll, like I'll check even before I go to bed to take, to eat, the long lasting one and it'll be uh say 13 and I'm just not getting it down and then in the morning, I'll take it again and I'm still at 13... uh, those numbers really scare me because, you know, those commercials that came out and you could lose a limb, you could lose a finger, you could... And I'm at an age that I just hope I live a long life, you know?

Children's health issues, such as diminished energy, were perceived to be affected by a lack of nutrients. One participant shared the following about their child: "He is so sick right now from not having proper food... Because all he eats is dry cereal because I don't have the milk. I don't have the bread". Another guardian mentioned their concerns about their son's future health:

I can see him being diabetic before he's 40. But, it's just that there's not enough to go there. His main meal, during the middle of the day, is a ketchup sandwich, or a mayonnaise sandwich, and that's not healthy for him. If I show up, the other day I had some money and I showed up with salad and some cooked chicken, and the first thing he did was pile his plate with salad. And he ate all that, and then he had a couple more

pieces of chicken, and then he had more salad for dessert. You know, but it's not there. It's not readily available anymore. I shouldn't say anymore, I don't think it ever was.

Food needs related to growth and development in children were also a concern. One participant commented, "when you can only get a bag of milk every month, that doesn't go far. And the kids are eating dry cereal before they go to school, if they eat."

3.3.2.2 Mental health, stress and tempered expectations

Mental health issues were related to the type of food consumed by participants, one of which described how eating unhealthy foods put them in "a sad place" and for another this resulted in becoming "more depressed". One participant answered "severe depression" when asked about the impacts of food insecurity on their life.

Guardians were concerned about feeding their children enough safe and nutritious food which added further emotional burden to HFI, one participant shared: "There's times where we still don't have enough food and like my daughter she doesn't eat healthy so she's constantly saying 'oh there's nothing to eat there's nothing to eat.' But if she ate healthy." Another was concerned their children might get sick: "these poor kids are eating it because there's nothing else, and mom's saying you have to I don't have anything else, that kind of thing, and if they're going to eat it, they're going to be sick." The cost of healthy, nutritious food and issues with equity in accessing healthy foods were points of discussion, one participant shared: "I think that a lot of people given the choice would probably change their eating habits but when you don't have that choice you can't afford... I find that everything is good for you cost more."

There is an emotional coping mechanism exhibited throughout the data whereby participants lower their expectations and settle for food that is inadequate, poor quality, or unfavourable.

They expressed the need to not be picky and to be grateful for what they can get through

community food programs, the phrase "beggars can't be choosers" was used multiple times across different groups. This attitude is expressed when food is undesirable, limited in quantity, spoiled, expired, and/or when the experience of obtaining it is negative. One participant shared their experience of food that wasn't frozen properly: "The food is frost bitten when it comes to us. And we don't have a choice, we just have to take it as it goes." Another received food that was close to being spoiled: "A lot of food banks were getting stuff from the grocery stores that they're pretty much almost ready to throw out. By the time we get them, you're lucky if you can salvage anything of it out of it. But hey, beggars can't be choosers." Participants dealt with the reality of their lack of autonomy when forced to choose cheaper, unhealthy foods, or when relying on emergency food aid.

3.3.2.3 Isolation and fear of stigma within the community

Feelings of isolation and experiences of stigma within the community were reflected in the focus groups. The geographic location of some food programs made it difficult to access services discreetly. One participant demonstrated this in saying: "I feel guilty going in there [a food bank] sometimes, like because I think it's because of that because people see me going in there".

Another stopped attending a free meal program at a church because they felt they were being watched. These feelings of isolation and experiences of stigma were expressed as especially difficult in small, rural communities where participants felt they knew everyone. One had an unwelcome encounter with a friend while approaching the food bank, they described: "Ya know, you see that one friend that doesn't understand and you're kinda like yeah I'm just gonna take a walk past half the block and then come back", they did this in order to avoid being seen going into a food bank. Fear of judgement from fellow community members dictated the actions of participants and added stress to their lives. Embarrassment was also mentioned. For example,

grocery store gift cards with small balances were sometimes provided through food programs, resulting in this experience at a store:

Using a small card at [local store] is pretty much like painting a target on yourself, you know. I am going to buy my pasta with this thing or whatever... Broke smells from a mile away, you know like, it's not like it's hard to spot.

Another participant shared this experience:

It's kind of embarrassing you know if you are already broke and have a gift card, to stand in line at [local store] and watch everybody, and you know, you pull out this gift card and make sure it doesn't go over.

Participants often implied that they felt helpless and shameful about their HFI and made comments such as: "not all of us were put into these circumstances because we chose to" (in reference to using a food bank). Not being able to provide for their families and afford healthy food, resulted in sadness and low self-esteem. One participant demonstrated this clearly when recalling a grocery shopping trip with their child:

Going to the stores and having to say to your kid when he says, 'Mommy can we have ribs for dinner?'... It kills me to say that I don't have the money...and then there's other people that are around you, and you know you get that look.

Table 3-2 Representative quotes for theme: Physical and emotional impacts of HFI

Physical and emotional impacts of HFI

Physical health

You make what you have and give to the kids and go without.

If you are diabetic, whether you're type 1 or type 2, you don't get that fullness. It just, it wears you out, because yeah if you're eating the crap foods you get that sugar high, then you crash, then you sleep, you wake up you're hungry. It's just, it's a revolving door, like it never ends.

Like when my girls were younger, they used to get a lot of the solid bunnies for Easter because they're cheaper. Well I just couldn't give it to them like that, I just uhh. So what I learned to do, is like I take banana and sliced apples I'd melt some of their chocolate down, dip half and put it in the freezer. This way they're still enjoying their chocolate, but they're also getting some fruit in with it.

But for me if I see something fresh and green, and whatever, it just brings me up. If I am looking at something that I know I am not supposed to be eating, it, it, I don't know maybe just me. It, it just makes me feel like I don't know, that I am not being the best to myself as I can be. And I think that a lot of people given the choice would probably change their eating habits but when you don't have that choice you can't afford, I find that everything is good for you cost more.

If you're food insecure and you're diabetic it makes it twice as difficult.

He [my child] is so hungry and he's, like he's 18 years old. And he is 265 pounds.

Mental health, stress, and tempered expectations

I don't imagine its healthy to eat pasta every day. Ya know, or well for your mental well-being.

I usually worry about the kids more than I worry about myself.

I know how hard it would be if I had children or something and your always worried about feeding them and proper nutrition and everything.

I have spent all last summer practically sleeping from depression. And there is, um, and it's going to take me a year to get caught up in the housework because the kids actually got a little bit neglected (laugh), the housework definitely got neglected, but it's, it affected me really bad. My blood sugar went up to... in the 20s, and I'm now on Insulin which I wasn't before. And that's from being depressed. When I was awake all I did was eat. And because there's not the proper foods in the house.

It's almost like when you can't afford to eat the way you should be eating. Um, you're putting your health at risk. Uh, So how is that fair?

We take turns and one week she drives 'em to the bus up there, and I pick them up, just to keep them happy, to keep them all together.

It's terrible to feel that way because oh my god I'm getting free food and I'm being picky.

If there were things that were expired and if I ever said anything it was, I kinda got the attitude, well you know, if you're not happy then you don't need to take it you can either have this or have nothing. Beggars can't be choosers

You feel like kinda like an asshole for like complaining cuz its free anyway but, in reality none of it's really enough for the people that don't have enough money to get by.

But when its 2, 3 years, 4 years expired and its tough cookie, so you either take it and be happy with it or you know, nothing at all.

Isolation and fear of stigma within the community

I get looked at, I get looked at differently because I'm on OW

The thing about those things that you just mentioned is... if you are a mother with kids that are in teen years, getting them to go to a place like that, that's not happenin',... I have a hard time getting my kids to even walk into the food bank for fear that, you know, someone will see them from school

You know, at one point I worked four jobs, raising my kids on my own. And I was able to get by and now I just can't and it's- and it does affect our pride and how we feel about ourselves. And I want the people handing out the food to you would realize how much it has affected each and every one of us and be a little bit more thoughtful and not treat us like a number

It doesn't really make you feel too proud of yourself.

3.3.3 Living with poverty

Within the conversations participants also expressed the hardships of living in poverty; their physical, social, and political environment; and the role that social safety nets and food programs play in their lives. Their stories reflected some of the negative cycles that occur when living with HFI. Additional representative quotes can be found in **Table 3-3.**

3.3.3.1 Cost of living

The cost of food and other costs of living were considered by participants to be high. Participants reported living on very little income, having difficulty making regular bill payments, and having additional debt payments. Balancing bill payment and buying food was a common concern:

Ok you're at like \$100 and something for living but you have to spend \$75 of that for your bills, so you- so then you end up with like a hundred for food for the month so it's like, and \$100 for food for the month if you broke that into one meal a day, isn't even- I don't even think it's five bucks even or something like that. I dunno, it's not that much, ya know, so it's not really a really realistic.

Some participants found they were going further into debt in order to pay for necessities. Staple foods, including meat, dairy, fruits, and vegetables, were considered to be the most expensive. For example, two participants remarked about the cost of meat, one said "the [cost of] meat is ridiculous, like unreal" and another "I can't remember the last time I had beef, I can't afford beef. I go to the 50% off uh, thing every morning at [the local store] and see if there's anything." A common experience was the high cost of healthy foods when compared with less healthy foods, one participant shared: "I find that everything is good for you costs more."

Small town grocers, food stands, and convenience stores were relied upon because they were easier to access but were reportedly high-priced compared to larger grocery stores. One participant felt that the local store was overpriced and charging double the larger store.

The cost of transportation was a challenge discussed by participants, sparsity of services and distance between communities made having access to a vehicle important. To get to a food bank, grocery store, or community meal, participants agreed that they either needed a vehicle or gas money. Transportation costs often took precedence over other costs, as one participant commented: "I would have more money if I didn't have a vehicle, but then I would be at home and I'd have to get a cab to get my own groceries". Relying on vehicular transportation in a geographic area without public transit was a challenge. Having a vehicle was at times an unmanageable cost, as one participant shared: "If you don't have transportation and you don't have money for gas. You just have enough to get some groceries, you're pretty much screwed. You'd pretty much have to come here [to the food bank]". Taking a taxi to the grocery store or food bank was another option, but this was reported to be expensive in the study area. There were discussions about ride sharing with comments like this one: "I don't drive, I don't live in [town] either, sooo... I have to pay a neighbor or a friend gas money to bring me to the food

bank". Getting a ride could only get participants so far, and going from their small community to the larger population centre to access services was not easy:

If you don't have money for gas that day but somebody else is going but they live in [larger town], they're not going to drive all the way out to [smaller towns] to get you and go all the way back over that way.

Another participant mentioned needing gas money to get to the food bank when times were hard: "If I don't have that gas money, I feel really bad calling and asking you for a ride so I can go to the food bank."

3.3.3.2 Reliance on the social safety net

Social safety net programs provided income for many of the participants. These programs offered additional support, however, living in a rural community meant that the program workers were usually located in larger population centres outside of the local area. As a result, participants reported that they did not have information about the resources available to them. One participant remarked that information on local food programs should be provided automatically through social safety net programs such as Ontario Works (OW), which was not currently the case for some participants. An example of this was revealed when a participant described being in a desperate situation where they could have used information about food programs: "I was living on 107 dollars a month, cuz I had no shelter, costs, living in a truck in September, October. And, nothing, not told anything".

There was a general consensus that payments from these social safety net programs were not enough to get by. In one example, a participant commented that their "one case worker's exact words were, 'my job is to make you as uncomfortable as possible'", in order to provide incentive for gaining employment. Frustrations were expressed by participants who did not have money

left for necessities after paying their bills. For example, one participant shared that their disability support income was not even enough to cover the cost of rent: "my ODSP transfer is nineteen hundred while my rent is two thousand (pause) a month".

Participants brought up barriers to accessing community (i.e. food banks) and social (i.e. ODSP) services such as access to transportation, difficult paperwork, and a lack of communication. The frustration experiencing these barriers is clearly demonstrated in the following account when trying to receive a social safety net payment:

They said to come in and see them. But the problem is, half the time I don't have the gas to go. Or the depression sets in and I don't leave my room. You know, that's the hardest thing is the motivation to get up and go. Yes, I know I need this money, I don't want to deal with the problems anymore, I don't want to deal with the people, I just, I stay in my house. You know I really only talk to two people and one is sitting in this room. That's my life- my kids, my home, that's it. So that's the hardest thing is, I just don't want to fight them again like I sent you everything how did you not receive it?

3.3.3.3 Cycles of insecurity

Cycles of insecurity are compounding events that keep participants in a position of food insecurity. Examples of this are varied, but the common experience is that participants felt there was no way out of the pattern they were in. Participants mentioned feeling stuck in their situations, relying on a food bank for food, and not being able to increase their income. There are two specific examples which demonstrate cycles of insecurity. In the first instance, a guardian had started using cloth diapers on their child because they were more affordable, but the resulting laundry costs were too much to make a financial difference. A second participant described a situation where a lack of money had worsened their depression. They commented that their

mental health seemed to improve when eating healthy foods, but because those foods are expensive, this resulted in less money available to pay bills, which in turn further worsened their depression. These cycles point to the complexity of living with food insecurity and its reach far beyond food provision.

Table 3-3 Representative quotes for theme: Living with poverty

Living with poverty

Cost of living

I've gone without eating something for a week because I don't have the money to do it and I'm not about to go in debt to pay for something.

Meat and dairy are the most expensive types of things. And meat and dairy are the things that are most nutritious for the older people.

Can't afford that much of a variety.

I'm so luck that they do eat healthy. But it costs a lot of money. Just get a few grapes of the other day almost 6 dollars.

I mean there's certain things you don't get from the food bank, those I can afford maybe sometimes to get them from the grocery store. If I get a ride to the grocery store.

I moved into [the town] in deep, deep debt and I'm working very hard to get out of it, but that means there's not enough money. And I ended up having to buy a new vehicle, so an extra \$300 a month comes out of my money.

Well the sad part is, in spite of everything else, it becomes that you need it more often. At one point my hydro bills were over \$600 a month until we got Hydro One to step in and change things. And that was a hard process.

It [lunch meat] can get expensive at the uh grocery store. Especially here at this grocery store, it can get really overpriced.

I know there are, people that don't have access to vehicles but do need a ride in and, it's, they need to find people coming in from those areas that can actually bring people from the community in.

Reliance on the social safety net

I've worked for 37 years and I got, how you say, bamboozled or rail-roaded into following the proper channels, which unbeknownst to me was the wrong thing to do. You need to lie, you need to be deceitful, to get where you need to get.

If you read my file, you would see I cannot work. That's why I got disability. But now you're trying to push me to go back to work.

I have PTSD as well that's why I'm on ODSP but uhm, I've talked to my worker maybe...four times since I've started almost a year ago, well that's because of, well I'm having issues right now. Um somebody called ODSP on me saying that I had

somebody else living with me and they were gonna cut off my ODSP unless got in a lease in by the nineteenth this, this month and I was supposed to be out this month so I didn't have a lease and yeah.

They [social safety net programs] can let you know what's where in your community as support but they don't really do that.

Cycles of insecurity

I, uh, just you know... I wish the government could live off the disability pension or welfare pension just for one month. Just so they can see once you pay your rent, you pay your bills, you'll be lucky if you have anything left for, for groceries, let alone healthy groceries.

I filled my, uh, a thing out and, and figured out my bills and, and how much I get and at the end of the month I have two hundred dollars to buy groceries, put gas in the car, pay for the kids trips, buy them the clothes they need because they're constantly growing. I've had the, the one boys grown six inches since the last summer.

If you come you know from ah place where, you know, someone, you know didn't learn how to cook properly. They only cook certain things so, you know, how do you break that cycle? You educate them and say gee, do you know you can make many things with this banana. You can make bread, you can make shakes, you can freeze it, you can make chocolate, um with bananas so... um its its educating people to say you know you're on a limited budget, you can only buy these many items.

It's a vicious cycle right.

I was informed about that one right, as an option because I called victim's services and asked if they could help me with groceries at one time. And umm she said well you can go uh to the shelter if you need to. But then I didn't have gas to get there, right? and they couldn't even help me with that. Like man, just so many little gaps. Without really kinda knowing the whole structure of it all. I don't know a whole lot to offer suggestion for how, but that is a big issue for the accessibility.

3.4 Discussion

This study considered data from focus groups with individuals experiencing HFI in Huron County and fills the identified gap in rural research on HFI in Canada (Piaskoski et al., 2020). Providing first-hand examples, the findings reveal information about the management of food insecurity status, the impacts of HFI and some of the factors that play a role in its continuation. Themes that emerged from the data included: strategies for coping with food insecurity, physical and emotional impacts of food insecurity, and living with poverty. These findings also reflect an

ecological perspective in that individual behaviours and community support, as well as the social, political and economic environments, all have influence on rural HFI (Bronfenbrenner, 1979; Story et al., 2008).

Findings build on existing literature and demonstrate that managing HFI requires the implementation of multiple strategies that work together (Daly et al., 2018; Piaskoski et al., 2020). Approaches such as accessing multiple programs and using food and financial literacy skills were practiced by participants to ensure that food was obtained and lasted as long as possible. A small study of rural mothers found that skills such as cooking from scratch, preserving food, and resourcefulness with money were commonly used (Buck-McFadyen, 2015). This highlights the need for more holistic programming within the food aid system that would equip people with these skills and information.

Focus group participants highlighted the importance of community. The importance of social capital as a moderating factor for well-being in times of financial strain has been demonstrated elsewhere (Frank et al., 2014) and is a key component in Piaskoski et al.'s (2020) model of rural HFI. Social skills and supports have been shown in a previous study to be protective against food insecurity (Swanson et al., 2008). Sharing of food, information, and transportation were key practices for the participants of this study which is similar to the culture of trust and sharing practices of family, friends, and neighbours that was discussed in previous research in rural Southwestern Ontario (Buck-McFadyen, 2015). Connecting with others who were in a similar situation had a positive impact on the participants of this study. Previous research has also demonstrated the unifying ability of common experience when talking to youth (Mott et al., 2018).

Food is a requirement for a healthy life (Mikkonen et al., 2010). Participants in this study revealed concern over potential nutritional deficiencies in themselves and their children. Much of the research in this area is on mothers and families, and similarly, what children eat was a common topic of discussion in this study. Tsang et al. (2011) found that for their participants, having enough food meant that children had enough food. In other research, the emotional impact of not having enough money for food and relying upon charitable food aid to put food on the table was highlighted (Middleton et al., 2018). The impacts of HFI on both physical and mental health were clearly demonstrated in this study, are supported in the literature (Davison et al., 2015; Hanson & Olson, 2012; Seligman et al., 2010; Tait et al., 2018; Vozoris & Tarasuk, 2003); and highlight the urgency of this topic. Participants also experienced the fear of shame, embarrassment, or stigmatization in the community due to their food insecure status, which was also seen in previous research (Middleton et al., 2018). The negative experiences within the community exacerbate and further stigmatize this already vulnerable group.

This research has shown a lack of autonomy over food choice due to a lack of money to buy desired food, with many respondents lowering their expectations and taking on the 'beggars can't be choosers' attitude. This attitude makes individuals feel less than others and should be a motive for eliminating HFI. Consistently not having enough money to buy food while relying on income through a social safety net (Berner et al., 2008; Tarasuk & Vogt, 2009) means that those payments are not enough to live on. Concerns regarding the cost of living, including food and other bills, were a highlight in this research in combination with the inadequacy of social income assistance, expressed by many participants. The myriad of support that these participants' access and spend time working with in order to make a life for themselves is a reflection of the

brokenness of the system at large and lines up with the complexity of HFI demonstrated in past research (Daly et al., 2018; Piaskoski et al., 2020).

The idea that HFI is the result of a governmental failure has been expressed (Mendly-Zambo & Raphael, 2019). Data from this study adds to the evidence that the social safety net in Canada does not provide households with enough money for sufficient food. This requires that the social safety net be re-evaluated based on the actual cost of living without food insecurity. The government must work towards a policy which would provide individuals, in all regions, with access to enough healthy food to meet Canada's dietary guidelines, or a sufficient basic income to those living in poverty. Currently, the policy responses have been varied (Martorell, 2017) and considering the current prevalence of HFI, they are not working. There is also a need for more research on food insecurity in rural Canada (Piaskoski et al., 2020) and rural food environments in order to better understand the context in which these households live (Canada & Health Canada, 2013).

3.5 Limitations

The researchers have attempted to reduce bias during analysis of this data; however, it is impossible to avoid it entirely. The focus groups used in this study were moderated not by the researchers but by local community health professionals and therefore analysis is based on secondary data and some context may be lost. Focus group recruitment took place at the food bank and thus, those living with food insecurity who did not use the food bank would not have been considered. Additionally, because the data came from a specific rural Ontario county, caution must be taken in generalizing the findings to other areas.

3.6 Conclusion

The present study broadens the understanding of food insecurity in Canada through the three themes by (1) exemplifying the management strategies of rural households which can be strengthened through creative, community level programming; (2) highlighting the physical and emotional challenges for those with HFI; and (3) demonstrating the commonly expressed notion that the problem of HFI is truly a problem of poverty, and one that is in dire need of being solved. This study fills a gap in Canadian literature on HFI by highlighting rural voices. The ecological nature of the problem requires a twofold response, the implementation of innovative community food programming, and advocacy towards a serious and practical approach to the broad issue of poverty. These are key steps towards ending HFI in all areas of Canada.

3.7 References

- Berner, M., Ozer, T., & Paynter, S. (2008). A portrait of hunger, the social safety net, and the working poor. *Policy Studies Journal*, *36*(3), 403–420. https://doi.org/10.1111/j.1541-0072.2008.00274.x
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. https://doi.org/10.1191/1478088706qp063oa
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.
- Buck-McFadyen, E. V. (2015). Rural food insecurity: When cooking skills, homegrown food, and perseverance aren't enough to feed a family. *Canadian Journal of Public Health*, 106(3), e140–e146. https://doi.org/10.17269/CJPH.106.4837
- Canada, & Health Canada. (2013). *Measuring the food environment in Canada*.

 https://www.canada.ca/en/health-canada/services/food-nutrition/healthy-eating/nutrition-policy-reports/measuring-food-environment-canada.html
- Daly, A., Pollard, C. M., Kerr, D. A., Binns, C. W., Caraher, M., & Phillips, M. (2018). Using cross-sectional data to identify and quantify the relative importance of factors associated with and leading to food insecurity. *International Journal of Environmental Research and Public Health*, *15*(12), 2620. https://doi.org/10.3390/ijerph15122620
- Davison, K. M., Marshall-Fabien, G. L., & Tecson, A. (2015). Association of moderate and severe food insecurity with suicidal ideation in adults: National survey data from three Canadian provinces. *Social Psychiatry and Psychiatric Epidemiology*, *50*(6), 963–972. https://doi.org/10.1007/s00127-015-1018-1

- Drouin, S., Hamelin, A.-M., & Ouellet, D. (2009). Economic access to fruits and vegetables in the greater Quebec City: Do disparities exist? *Canadian Journal of Public Health*, 100(5), 361–364. https://doi.org/10.1007/BF03405271
- Engler-Stringer, R., & Berenbaum, S. (2005). Collective kitchens in Canada: A review of the literature. Canadian Journal of Dietetic Practice and Research, 66(4), 246–251. https://doi.org/10.3148/66.4.2005.246
- Fafard St-Germain, A.-A., & Tarasuk, V. (2020). Homeownership status and risk of food insecurity: Examining the role of housing debt, housing expenditure and housing asset using a cross-sectional population-based survey of Canadian households. *International Journal for Equity in Health*, 19(1), 5. https://doi.org/10.1186/s12939-019-1114-z
- FAO. (2009). Draft declaration of the World Summit on Food Security. World Summit on Food

 Security, 1–10.

 http://www.fao.org/fileadmin/templates/wsfs/Summit/Docs/Declaration/WSFS09_Draft_

 Declaration.pdf
- Frank, C., Davis, C. G., & Elgar, F. J. (2014). Financial strain, social capital, and perceived health during economic recession: A longitudinal survey in rural Canada. *Anxiety, Stress*, & *Coping*, 27(4), 422–438. https://doi.org/10.1080/10615806.2013.864389
- Garcia, S. P., Haddix, A., & Barnett, K. (2018). Incremental health care costs associated with food insecurity and chronic conditions among older adults. *Preventing Chronic Disease*, 15, 180058. https://doi.org/10.5888/pcd15.180058
- Gundersen, C., Tarasuk, V., Cheng, J., de Oliveira, C., & Kurdyak, P. (2018). Food insecurity status and mortality among adults in Ontario, Canada. *PLOS ONE*, *13*(8), e0202642. https://doi.org/10.1371/journal.pone.0202642

- Hanson, K. L., & Olson, C. M. (2012). Chronic health conditions and depressive symptoms strongly predict persistent food insecurity among rural low-income families. *Journal of Health Care for the Poor and Underserved*, 23(3), 1174–1188. Scopus. https://doi.org/10.1353/hpu.2012.0116
- Jacobson, D., & Mustafa, N. (2019). Social identity map: A reflexivity tool for practicing explicit positionality in critical qualitative research. *International Journal of Qualitative Methods*, 18, 160940691987007. https://doi.org/10.1177/1609406919870075
- Kirkpatrick, S. I., & Tarasuk, V. (2009). Food insecurity and participation in community food programs among low-income Toronto families. *Canadian Journal of Public Health*, 100(2), 135–139. https://doi.org/10.1007/BF03405523
- Martorell, H. (2017). *Policy responses to food insecurity in Canada*. FLEdGE (Food: Locally Embedded Globally Engaged) and Food Secure Canada.

 https://fledgeresearch.files.wordpress.com/2017/08/discussion_paper_policy_responses_t o_food_insecurity_in_canada_2017.pdf
- Men, F., Gundersen, C., Urquia, M. L., & Tarasuk, V. (2020). Association between household food insecurity and mortality in Canada: A population-based retrospective cohort study. *Canadian Medical Association Journal*, 192(3), E53–E60. https://doi.org/10.1503/cmaj.190385
- Mendly-Zambo, Z., & Raphael, D. (2019). Competing discourses of household food insecurity in Canada. *Social Policy and Society*, *18*(4), 535–554. https://doi.org/10.1017/S1474746418000428

- Middleton, G., Mehta, K., McNaughton, D., & Booth, S. (2018). The experiences and perceptions of food banks amongst users in high-income countries: An international scoping review. *Appetite*, *120*, 698–708. https://doi.org/10.1016/j.appet.2017.10.029
- Mikkonen, J., Raphael, D., York University (Toronto, Ont.), & School of Health Policy and Management. (2010). Social determinants of health: The Canadian facts. York University School of Health Policy and Management.
 http://books.scholarsportal.info/viewdoc.html?id=/ebooks/ebooks0/gibson_cppc/2010-08-06/6/10390848
- Mott, R., Keller, K., Britt-Rankin, J., & Ball, A. (2018). 'Out of Place around other people':

 Experiences of young people who live with food insecurity. *Children and Society*, *32*(3), 207–218. https://doi.org/10.1111/chso.12270
- Parker, B., Burnett, K., Hay, T., & Skinner, K. (2018). The Community Food Environment and Food Insecurity in Sioux Lookout, Ontario: Understanding the Relationships between Food, Health, and Place. *Journal of Hunger & Environmental Nutrition*, 1–18. https://doi.org/10.1080/19320248.2018.1537867
- Piaskoski, A., Reilly, K., & Gilliland, J. (2020). A conceptual model of rural household food insecurity: A qualitative systematic review and content analysis. *Family & Community Health, In Press*.
- Riches, G., & Tarasuk, V. (2014). Canada: Thirty years of food charity and public policy neglect.

 In G. Riches & T. Silvasti (Eds.), *First world hunger revisited: Food charity or the right to food?* (2nd ed., pp. 42–56). Palgrave Macmillan Limited.

 https://doi.org/10.1057/9781137298737_4

- Rodriguez, R. M., & Grahame, K. M. (2016). Understanding food access in a rural community:

 An ecological perspective. *Food, Culture and Society*, *19*(1), 171–194.

 https://doi.org/10.1080/15528014.2016.1145010
- Sadler, R. C., Gilliland, J. A., & Arku, G. (2011). An application of the edge effect in measuring accessibility to multiple food retailer types in Southwestern Ontario, Canada.

 *International Journal of Health Geographics, 10(1), 34. https://doi.org/10.1186/1476-072X-10-34
- Seligman, H. K., Laraia, B. A., & Kushel, M. B. (2010). Food insecurity Is associated with chronic disease among low-Income NHANES participants. *The Journal of Nutrition*, *140*, 7.
- Smith, C., & Morton, L. W. (2009). Rural food deserts: Low-income perspectives on food access in Minnesota and Iowa. *Journal of Nutrition Education and Behavior*, 41(3), 176–187. https://doi.org/10.1016/j.jneb.2008.06.008
- Smith-Carrier, T., Ross, K., Kirkham, J., & Decker Pierce, B. (2017). 'Food is a right ... nobody should be starving on our streets': Perceptions of food bank usage in a mid-sized city in Ontario, Canada. *Journal of Human Rights Practice*, 9(1), 29–49. https://doi.org/10.1093/jhuman/huw021
- Statistics Canada. (2017a, February 8). *Census profile, Huron, County, 2016 Census*. Statistics

 Canada. https://www12.statcan.gc.ca/census-recensement/2016/dppd/prof/details/page.cfm?Lang=E&Geo1=CD&Code1=3540&Geo2=PR&Code2=35&Da
 ta
- Statistics Canada. (2017b, February 8). *Census profiles*, 2016 Census. Statistics Canada. https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E

- Story, M., Kaphingst, K. M., Robinson-O'Brien, R., & Glanz, K. (2008). Creating healthy food and eating environments: Policy and environmental approaches. *Annual Review of Public Health*, 29(1), 253–272. https://doi.org/10.1146/annurev.publhealth.29.020907.090926
- Swanson, J. A., Olson, C. M., Miller, E. O., & Lawrence, F. C. (2008). Rural mothers' use of formal programs and informal social supports to meet family food needs: A mixed methods study. *Journal of Family and Economic Issues*, 29(4), 674–690. https://doi.org/10.1007/s10834-008-9127-6
- Tait, C. A., L'Abbé, M. R., Smith, P. M., & Rosella, L. C. (2018). The association between food insecurity and incident type 2 diabetes in Canada: A population-based cohort study.
 PLOS ONE, 13(5), e0195962. https://doi.org/10.1371/journal.pone.0195962
- Tarasuk, V., Dachner, N., & Loopstra, R. (2014). Food banks, welfare, and food insecurity in Canada. *British Food Journal*, 116(9), 1405–1417. https://doi.org/10.1108/BFJ-02-2014-0077
- Tarasuk, V., & Mitchell, A. (2020). *Household food insecurity in Canada, 2017-18*. Research to identify policy options to reduce food insecurity (PROOF). https://proof.utoronto.ca/
- Tarasuk, V., Mitchell, A., & Dachner, N. (2016). *Household Food Insecurity in Canada*, 2014.

 Research to identify policy options to reduce food insecurity (PROOF).

 http://proof.utoronto.ca
- Tarasuk, V., & Vogt, J. (2009). Household food insecurity in Ontario. *Canadian Journal of Public Health*, 100(3), 184–188. https://doi.org/10.1007/BF03405537

- Tsang, S., Holt, A. M., & Azevedo, E. (2011). An assessment of the barriers to accessing food among food-insecure people in Cobourg, Ontario. *Chronic Diseases and Injuries in Canada*, 31(3), 9.
- Vidgen, H. A., & Gallegos, D. (2014). Defining food literacy and its components. *Appetite*, 76, 50–59. https://doi.org/10.1016/j.appet.2014.01.010
- Vozoris, N., & Tarasuk, V. (2003). Household food insufficiency is associated with poorer health. *The Journal of Nutrition*, *133*(1), 120–126.
- Yousefian, A., Leighton, A., Fox, K., & Hartley, D. (2011). Understanding the rural food environment -perspectives of low-income parents. *Rural and Remote Health*, *11*(2). https://www.scopus.com/inward/record.uri?eid=2-s2.0-80051647546&partnerID=40&md5=8c8e6b5a443321d1d4c7991f9c45f04c

Chapter 4

4 Experiences of food bank patrons: Unpacking emergency food aid in rural Huron County

4.1 Introduction

Food security occurs when all people have access (i.e. physical, social, economic) to sufficient food that is adequate to meet their dietary needs for a healthy life (FAO, 2009). In every country there are pockets of the population where this is not the reality (FAO et al., 2018). In Canada, household food insecurity (HFI) is experienced by one in every eight households (Tarasuk & Mitchell, 2020). Local food programs such as food banks, food pantries, and community kitchens, provide those in need with access to free food. In developed countries food banks provide emergency food relief for those in need and have been established for decades. The United States saw its first in 1967 (Riches, 2011), Canada in 1981 (Riches, 1985) and they were formalized in Australia in 1990s (Lindberg et al., 2015) They have since become entrenched as a primary relief effort in Canada and other countries (Riches, 2011). Rural and remote communities account for over one-third of the food banks served by Food Banks Canada, a national charitable organization that supports the work of a network of food banks and food agencies across the country (Matern et al., 2019). Though food insecurity exists in rural areas, little is known about the experience of food bank users in rural Canada. Therefore, this study aims to deepen our understanding of food banks in rural Canada through the examination of the first-hand experiences of food bank patrons in rural Huron County, Ontario, Canada. Living with HFI means not having enough money to regularly access enough food (Tarasuk &

Mitchell, 2020). Households that rely on the social safety net for their income are also more

likely to use a food bank (Goldberg & Green, 2009). In 2019 it was reported that in Food Banks Canada affiliated food banks, 40.1% of food bank patrons relied on social assistance and 17.3% on disability-related income support (Matern et al., 2019). Increased food bank use is also affected by changes to social programs; for example, when welfare support decreases, use of food banks increases (Goldberg & Green, 2009). Recent studies have found that food banks represent one, among many, coping strategies used when facing HFI (Piaskoski et al., 2020; Tarasuk et al., 2019). An increasing number of vulnerable households rely on services such as the food bank when the social safety net fails to prevent HFI (Riches & Tarasuk, 2014). Though food banks meet some needs, they do not supply enough food for an adequate diet (Bazerghi et al., 2016; Simmet et al., 2017). A study of a large Southwestern Ontario food bank found that the three-day food supply provided to clients was inadequate in terms of energy and nutrient requirements, 99.0% of the time (Irwin et al., 2007). In addition, research has shown that for many reasons, food banks only reach a small portion of the food insecure population (Kirkpatrick & Tarasuk, 2009; Loopstra, 2018; Loopstra & Tarasuk, 2013). More specifically, Vozoris and Tarasuk (2003) found that less than 1/3 of food-insufficient households had used the food bank in Canada. Users of food banks have reported feeling shame and embarrassment in accessing them (Loopstra & Tarasuk, 2012; Tarasuk & Beaton, 1999), which could deter them from going.

In spite of the pitfalls mentioned, food banks should not be discounted, as research suggests that they reach those who are in most urgent need and have positive results in the short term (Roncarolo et al., 2015; 2016). In the absence of a broad solution to poverty, food banks are meeting some of the needs of the people they serve (Bazerghi et al., 2016; Roncarolo et al., 2016) while also providing a rallying point for volunteerism and care in many communities.

Cloke et al. (2017) presents the idea of food banks as liminal spaces that have a place and a purpose, providing care for those in need, while advocating for broader change. Thus, food banks could be considered spaces of care (Conradson, 2003; Milligan & Wiles, 2010), which require consideration and have the potential to contribute to more robust, effective programming (Kurtz et al., 2019).

To gain a better understanding of the food bank system, it is imperative that researchers use qualitative methods of inquiry. One systematic review of qualitative studies of food bank users found that few researchers have considered voices of rural Canadians (Middleton et al., 2018) and the same could be said of HFI in general (Piaskoski et al., 2020). Through the examination of first-hand experiences of those who access food banks in Huron County, Ontario, Canada, the purpose of this study is to reveal what is happening in these liminal spaces and what more can be done to ensure food security in the communities they serve.

4.2 Methods

4.2.1 Study location & procedures

Huron County is located in Southwestern Ontario, Canada and has a population of just under 60,000 people spread out over 3,400 km². Ten food banks in seven communities serve the food insecure population with the Huron County Food Bank Distribution Centre (HCFBDC) procuring and distributing food to them. In addition, there are many community meal programs in churches and other organizations across the county as well as 15 aid agencies which also provide food to their clients. In Huron County, 13.7% of the population is considered low-income and 15.4% of total income received by those aged 15 and over was through government transfers (Statistics Canada, 2017).

Secondary data used in this study come from the Food Tracking Project (FTP) which was spear-headed by the HCFBDC involving community and research collaborators. The data was collected in 2017 and engagement with the food bank community through the collection of surveys, and focus groups with food bank patrons as well as service provider interviews. The secondary data utilized in this study are the transcripts of the eight focus groups which include41 food bank patrons over the age of 18. Participants were recruited directly through food banks which were attended by two local health professionals on multiple days for survey administration and recruitment. The focus groups were carried out in community settings by those same local health professionals. Participants received a monetary incentive in order to offset cost of participating (i.e., travel). Topics for these semi-structured discussions included food security and notions of the accessibility, availability, adequacy, acceptability, and agency involved in obtaining food (Ryerson University, 2018), both in the community and from the food bank (focus group guide can be found in Appendix B).

4.2.2 Data analysis

Focus group transcripts from the FTP imported into NVivo 12.6.0 for an inductive thematic analysis involving six phases (Braun & Clarke, 2006). In phase one, the primary researcher familiarized themselves with the data. Phase two involved the creation of codes whereby every data point was coded regardless of topic. The third phase involved an iterative process, where codes were grouped into meaningful themes and subthemes. During phase four the themes were reviewed and checked by both the primary researcher (A. Piaskoski) and a secondary researcher who was experienced with qualitative research to reduce risk of bias and increase rigour. The secondary researcher reviewed two of the transcripts (20% of data) along with the themes and subthemes and any coding discrepancies were discussed and resolved. In stage five, the final set

of themes and subthemes were defined, they were then divided into two categories for reporting (stage 6): (1) living with food insecurity, and (2) utilizing food banks, the latter of which is presented in this chapter and the first which can be found in Chapter 3 of this thesis. In addition, the primary researcher (A. Piaskoski) created a social identity map to guide in the process and further reduce the risk of bias in the analysis and interpretation of the data (Jacobson & Mustafa, 2019) (**Figure 1-2**). Ethics approval was obtained through Western University Non-Medical Research Ethics Board (#112152).

4.3 Results

Utilizing food banks to combat food insecurity and ensure livelihoods for oneself and others is a complex activity. Participants in this study spoke about their experience using this alternative food system from a pragmatic perspective. They shared ideas to improve the system and the challenges they face when accessing it. The analysis resulted in three themes which focused on the experience of food banks in the rural area. Each of the following themes are also represented by subthemes as follows: (1) *Food bank practices*; inconsistencies, lack of communication, food quality and food handling, and treatment of patrons and privacy; (2) *items provided at the food bank*; not enough food, nutrient content of food, types of food, and needs beyond food; (3) *ideas for improvement*; education, improved physical access, and sustainability and standardization. Quotes which exemplify each theme are included in the following text and tables.

4.3.1 Food bank practices

The day-to-day practices, procedures, and policies of food banks can impact the way they are experienced by the participant. Areas identified in the data include: the inconsistency of service between and within the food banks, the sharing of important information, as well as how food is handled and its quality. Participants were not able to control these aspects of the experience but

were able to talk about it during the focus group discussion. Additional exemplary quotes can be found in **Table 4-1**.

4.3.1.1 Inconsistencies

There are no common guidelines for the way that food banks operate or to determine what food is provided. As a result, participant experiences differed from one centre to another. The amount of food, quality of foods, and how long the food lasted varied. For example, the meat provided at two food banks in the same community is described by one participant as "similar but they tend to get less... they tend to get a pizza and a meat versus where we get often two meats".

Regarding the amount of food in general, one participant replied, "it's still more than what [town] is giving us". Participants also noted a lack of consistency between return visits to the same food bank, particularly in how the rules were carried out:

One time a volunteer will say, 'oh you can have as many as you want'. And the next time you go mmm you think, 'oh I can take whatever you want', and then you feel stupid cause then they're going 'hey, you can only have one of those'.

Each rural community is different in the level and type of need, this was acknowledged by some participants; for example, one expressed that they, "lived in [town] for 18 months and need there is um probably more, um, acute, than the need here... and they are younger, much younger people". One important difference discussed across the focus groups was whether or not patrons were able to choose the food they were provided. The reported practices ranged from a lot of choice to no choice. One participant said, "you stand behind the counter you tell them who's in your family and that's it you get what you get", while another described having some choice, "you might get a choice between soup types or whatever you get like two beans or whatever two cans of beans or two cans of soup or peanut butter or jam or something else". By far, the most

preferred method was the most choice in a shopping-style experience, one participant remarked, "It felt just more like shopping right, so I just take X amount of stuff from this section and that section... it was nice. And then I didn't take anything that I wouldn't eat right? It was workable." One food bank in the county offered a hamper style program, which catered to the elderly where there was no choice and the food was delivered.

Rules were deemed limiting and unclear, but there were also concerns that others had broken them. The phrase "abusing the system" was often used by participants to describe actions taken by others. Examples of these actions include multiple people from one household visiting the food bank, people not disclosing parts of their income, and families storing up food bank food. There was also a concern that some people didn't need to use the food bank, which was intensified by worries that the food bank would run out of food for those in need:

We have to know, is it going to be available for us so we can go to all of them, or are we going to be told no? Like she just said, one of her girlfriends goes to every single one of these on the list except for [Town], and all of her children. Now that's an abuse of it.

4.3.1.2 Lack of communication

Receiving mixed-messages, lack of clarity on the rules, and not knowing where to find information were other problems identified with food bank operations. The most frequent piece of information that eluded the participants was not knowing which food banks they were allowed to go to, a rule often based on home address. In one situation participants were discussing their experience with jurisdiction rules at a food bank, they felt the restrictions exist in order to ensure everyone in the community was able to access enough food. During that conversation one participant shared their experience:

I went to the [Town 1] once when I lived over on [Named] road there, and they refused me and told me to go to [Town 2]. Well, I lived in the middle, I was like, I'm literally in the middle...they told me I had to go to the [Town 2], and that was like in the middle of the week and [Town 2] is only open, I forget, week Tuesday, or Wednesday, or Tuesday, or Thursday. But it was on a day when I had to wait.

In vast rural areas it was not clear which town they should go to, or whether or not they were allowed to go to more than one:

Like even [Town 1], the one time I went there, the [Town 2] one was closed so it's a different day or time, and at that time I just needed stuff right away. So I was advised to go to the [Town 1] one and when I went in there, I was from [Town 2] and they kind of said 'we'll do it this time, 'cuz it's probably like, just a one-time thing', but because I was from [Town 2] I was supposed to go to the [Town 2] one

There was a call for better advertisement of food programs, many had "never seen it" when asked about the food bank brochure which was produced by the local health authority.

Additional unclear information regarding hours of operation and additional services offered was mentioned. One particularly important service was emergency food bank visits, where patrons in dire need could access food outside of their regularly scheduled hours and appointment times.

This service was available in some food banks, however one participant expressed a lack of consistency in the practice:

I even know people that have appointments... and they've come to a point where it's become an emergency situation where they're needing stuff in the house before their appointment, and they've turned them away. And I'm like, sometimes it's just like, I

don't know, because they're trying to make sure they're meeting everybody's needs in the community, which shows there's not enough coming in.

4.3.1.3 Food quality and food handling

The quality of food received from the food bank was discussed at length. Participants were grateful to receive food, however being given food that would be unacceptable in any other setting, had a negative impact. This included food that was past the best before date. One participant described that they had received "a bag of Crispers... a little stale, and you turn it around and it's like two years old or something, and like, oh yeah, that's why". Participants felt that workers at the food bank should pay closer attention to expiry dates so that situations like this one could be avoided:

I once got, um, a couple cans of um beans, brown beans, and uh wasn't paying attention to that. Just opened it umm, was sick for three days, with just uh, yeah really nasty. And at the time I though oh boy um, if they're giving this stuff out to families with little kids. These poor kids are eating it because there's nothing else, and mom's saying you have to I don't have anything else, that kind of thing, and if they're going to eat it, they're going to be sick. Seriously. 2-3 days. So that's a very very important detail, you know

Many participants used food regardless of expiry date, one participant commented, "I mean the expiry dates are only there, uh for sales. But it's actually good product for another year." The participants also talked about feeding their children foods past their best before dates: (1) "If you need it bad enough, I just pick the mold off and feed it to the kids. As long as they don't see it, they're good"; and "I tell my daughter, 'Don't look at it just eat it! Don't read the numbers'."

Food banks were reported to freeze products that were not appropriate for freezing in order to keep them. Examples discussed included: sour cream, yogurt, and ready to bake pastries, which

one participant remarked, are "not supposed to be frozen, it says right on them do not freeze". The result was that some products changed to an unpleasant texture or taste. Participants also expressed issues with meat products which were freezer burnt, poorly packaged, or unlabelled and dubbed as "mystery meats". One participant shared their experience: "I get freezer burnt meat all the time and you can't eat freezer burnt food. So, it goes, it ends up in the garbage." Another thought that the food bank should be more vigilant in checking foods as they had this experience:

They should really check their best before dates because, I got meat the other day and we took it out to put in our crockpot and it was green and it had a spot of mold on it and it was just in a Ziploc bag wrapped up in Saran wrap

4.3.1.4 Treatment of patrons and privacy

The treatment received by participants was important and the experience varied, while some were made to feel welcome and cared for, others felt their dignity was left at the door in exchange for food. Some interactions at the food bank resulted in participants experiencing negative feelings, they used words and terms such as, "ashamed", "overwhelmed", "awkward", "uncomfortable", "like garbage" and "helpless" to describe these feelings. One participant made a plea for more understanding:

I think if they realize half of us who go in there, really are doing it because we have to. And it's really on the verge of there's a little part of you it's you wanna to cry. It's not where you want to be in life. You know, at one point I worked four jobs, raising my kids on my own. And I was able to get by and now I just can't and it's- and it does affect our pride and how we feel about ourselves. And I want the people handing out the food to

you would realize how much it has affected each and every one of us and be a little bit more thoughtful and not treat us like a number

Most food banks in this region have limited public hours and thus there is an inherent lack of privacy, especially when coupled with the rural, small town dynamic where participants were more likely to be known by others. This is demonstrated in this conversation between participants regarding the food bank's location on a main street with large windows so that, "everybody sees you go in and everybody sees you come out." Another participant shared that they had witnessed judgement from community members:

Yep, when I worked at the store, people were like we sit here and watch who comes in and out, I won't go in there... I don't need to be judged by people saying she doesn't need this or that, I'm not gonna explain my story to all of town.

When talking about feeling stigmatized in the community one respondent expressed a sense of helplessness in saying: "I didn't wanna be where I am in life where I am right now, but I mean, this is what it is."

Many participants felt they were made to justify their situation in order to get food by being asked personal questions during intake. One participant stated that "some of the food banks actually require you to bring your financial everything" and another replied that they "had to-to provide a rent receipt, a hydro bill, and proof of income". Another had experienced going to a food bank and discovering a home inspection was required before they could use it. These interactions produced negative feelings towards going to the food bank:

The main reason why I won't go back, I was made to feel this small and umm for recording purposes very tiny, umm the way that they, or I should say she talked to me

like the first intake was horrible. I felt like it was the worst game of 21-questions of my life like she wanted to know everything umm, I can understand umm for statistics and wanting to know like you know, how much your household income is and how many people are in your family and stuff like that cause then it will help them know you know if they need to get more food in and, how many people use it how much do you need for your household based on how many people that are in your household and stuff but I just mean she just wanted to know everything down to the nitty gritty, she wanted a copy of all my bills not just my utilities and stuff like but like my phone bill stuff, and was I using internet? and if I had internet, how did I have money for internet but didn't have money for food?

Participants also had positive interactions with staff and volunteers. Where accommodations were made in extenuating circumstances or when they felt heard and acknowledged. There were stories of workers being kind and going above and beyond. One participant mentioned, "pretty well most of the food banks that I've been to, they all have been on the up, you know? And when they were lower on stuff... they were apologizing to you or me, where I'm just thankful".

Another participant expressed, "my kids say he [volunteer] works for Santa Claus just because give them that special bag of treats all the time and if it's close to holiday he will give them a little extra... um he knows when my kids' birthday are".

Table 4-1 Representative quotes for theme: Food bank practices

Food bank practices

Inconsistencies

They actually give you a choice whether you want umm, cheese wiz or peanut butter, so you can, if you're not a peanut butter person you can choose the other one, or you know you can still decline food too, if there's something you don't want.

I wonder why they... like they... we get baggies of sugar and baggies of coffee rather than, you know, a bag of coffee, like an actual bag of coffee [comparing two food banks].

I was like wow this is really different from the last one.

They actually don't have a location, so they um, and they actually only really serve the people in [town] because they actually deliver the food hampers to people, cause there's no actual room.

Yeah but they can't do that, they don't have the room at the church to be able to set up like that. He means like it's set up like a grocery store where you can go in and you can pick what you want but they just don't have that room.

It's different every time, sometimes it's good, sometimes it's not.

I did enjoy like the one time that I went to [Town], and that was, not bad at all, really... they took me to umm, a room, and they had certain things sectioned out in different sections, and she basically, almost left, she left me in there, for a few moments... then she said you can pick two items from this section, and three from that one.

Lack of communication

I've showed up before when it was closed and I had to go online to check to see when it was open and I was like-ugh!

If you're new to the facility they ask your name, address, blah blah blah, and soon they see oh, [Town], well you're not supposed to be here.

I've noticed, depending on who takes you around, sometimes they'll skip one of the sections, and I'll get around and be like oh I think we forgot to hit the cereal, and they'll look at you funny.

Yup. They turn you away. Because everybody is limited, so they're trying to keep everybody in their own community so that they can service their own people.

There's not a whole lot of advertisement

The food bank here in [town 1] and the one's in [town 2] are only open early on Tuesdays and Thursdays, so I ended up having to call [town 3] to see if I could go there and they told me that if I went there I would not be allowed to come back to [town 1 or town 2]

How is it accessible then, if you're telling me that it's not?

One thing I noticed last time, well I was at the food bank a week ago, umm I know for a fact that bread table is always take as much as you want cause they want it gone... And I grabbed a half of loaf of light rye or something you know cause they come small, and there was a box I think there was box of 4 croissants in it or something. And I thought, oh okay I'll take those. And I was going to put them in my bag, and she goes 'Oh you can only take one!' and I, I didn't think she was talking to me. And... but she goes, 'you can only take one', and I go 'You talking to me?' and she goes 'ya!' and I thought, well that's weird, okay so I put one back.

Food quality and food handling

If you wouldn't eat it, don't put it out [at the food bank].

When you open a package of macaroni and cheese and the cheese is black you know it's been around for a while.

We were given some Greek yogurt one time and another time we got sour cream and it all had to be thrown out.

If you won't eat it, don't put it out.

I think they should date their stuff. If they're like.... I know they gotta get large quantities or whatever and package them out but, label them better and label them to know what it is that you're getting. That you can read it because half the time you don't know.

I sometimes find that the, the food is frost bitten when it comes to us. And we don't have any choice, we just have to take it as it goes.

I wish they would label better cause they don't, they don't label at all. They're supposed to label with um, they're supposed to have a log of what they did and we've never seen it and they never put on the bags what it is.

I think a lot of their freezer stuff has been thawed and then refrozen again and that's not, that's not healthy for anybody to eat stuff like that.

I don't know whether this is but, they should really check their best before dates because, I got meat the other day and we took it out to put in our crockpot and it was green and it had a spot of mold on it and it was just in a Ziploc bag wrapped up in saran wrap.

And was a lot of food banks were getting stuff from the grocery stores that they're pretty much almost ready to throw out. By the time we get them, you're lucky if you can salvage anything of it out of it. But hey beggars can't be choosers.

Treatment of patrons and privacy

And there's big open windows right out front on main street. If you're sitting waiting, then anybody passing can see in there

I've thought of it before too, I come walking out with my grocery bags and people are walking by...

Oh yeah and there's people who keep tabs.

I don't have to explain myself, it's like go away schooch, go away from me.

I was telling them earlier I feel guilty going in there sometimes, like because I think it's because of that because people see me going in there.

I think if someone is actually there like asking can you just not trust that they're in a place that they need... you know.

Even if they have a good job, everyone has a bad month... every once in a while.

I have a hard time getting my kids to even walk into the food bank for fear that, you know, someone will see them from school.

I was there, at the front counter, filling out my paperwork, to, ya know, to be able to access... and they need to know, where [is] my source of income.

They kind of look you up and down like you don't need this. Well you don't know my situation sorry.

Other people that are there in the line-up or, and wanting in to look at it [free food shelf], and you're standing there and you don't know where to stand waiting for your... so to me, its just kinda like lemme outta here!

I find that [at food bank] we're welcomed there, we're not judged there. I also know a lot of people who go there and that work there um whereas if I go to the other one...I don't feel as welcomed.

I walked in there with tears the one day cause I was just so tired of being stuck at home alone and everything, and so she sent me on errands just so I would get out of that freak out. She said 'OK well go and deliver some food for me' and I'm like alright, sweet, you know. And that's just the way they are. And they all should be like that, like you're in a position looking down at people. They're telling you their story and they should not be, be judging you on it.

That's, that's the way I see him, he cares, you know? Uh just for that simple reason like that day, that day, it's, one out of a, out of a year that that happened and he's stopping me and not letting me go home without that, you know?

If it's close to holiday he will give them a little extra... um he knows when my kids birthday are and he will come out for a cake with them

4.3.2 Items provided at the food bank

There is a disconnect between what participants would buy for themselves if they had the means to shop and what is provided at the food bank. It is not enough for a nutritious diet and portions were said to be unbalanced, so that participants were not able to create meals or to maintain a healthy diet for themselves or their families. In addition to food, there were other items that participants could not afford and that could be provided by the food bank. Additional exemplary quotes can be found in **Table 4-2.**

4.3.2.1 Not enough food

As an emergency response, food banks generally intend for the amount of food provided to last three to five days, but there was a consensus from participants that this was not the case. When asked how long the food lasted, one participant answered: "Well it depends how often you eat a day. If it's one, like I said, 3 days maybe, you could stretch it, you might get 5. But I mean if you only eat once a day, such as myself, it's pathetic." Another participant shared this sentiment, that the food might last but towards the end of the days it would be minimal:

I feel like it is for about two days and like it's a four-day supply or a five-day supply but only two days of nutrition needs are met like and then the rest of it, it's like a can of beans. It's hard to make the whole day a nutritious day after the first two days.

There was a once per month cap on visits in all but one food bank, which was deemed insufficient. When asked about this, one individual responded, "It's definitely not enough. Umm I've been... I got two kids uhh, one's a teenager, who likes to eat, 16-year-old boy, and most the stuff is gone in a day".

The participants came from different household sizes and only those living alone responded that they were happy with the amount of food they received. For families, there was a disconnect between family size and the number of staple (i.e., meat, milk) servings provided. Older children and teens were not considered differently than younger children even though they have different energy and nutrient requirements. This can be emphasized in the following quote: "I think they need to be more aware of the age of the children in the families... my sixteen-year-old is going to eat more than my four-year-old". Multigenerational families living in the same home were also not fully considered, as heard here:

My family size is almost double what a normal family size is. And my mother in law still lives with us, who's got dementia. So put that on with my kids, and my husband and I... that's not giving me enough.

It was felt that food banks should change their practice and consider differences in the ages of family members and their needs, rather than just saying, as one participant recounted, "this is what a family gets".

4.3.2.2 Nutrient content of food

Health conditions (i.e. diabetes, heart disease, depression) and food allergies (gluten allergies, celiac disease, lactose intolerance) among participants were hard to navigate while living with food insecurity. One participant shared, "I'm a diabetic, I'm a type 2. So, uh, I don't want to be a type 1. And, uh, right now they've got me on the insulin, because, you know, uh basically, I'm eatin' a lot of carbohydrates." Diet is very important for health, whether a condition was present or not. Getting a balanced diet with food from the food bank was a concern shared by many:

They don't regulate, um, within the four food groups, they don't give you like the same amount of meat and the same amount of like dairy products or ya know, or like um vegetables, like it'll be like, you'll get like a lot of vegetables and then like you'll get a little bit of meat.

Participants suggested that the food banks set an example and follow dietary guidelines set out by the government. For example, one stated that, "if you looked at like what the health guide says can make a meal... and actually have a proper portion there." Participants also expressed that a healthy diet was desirable but not obtainable while using the food bank, for example:

I think for me I mean I'm at an age now where I really, need to start thinking of about what goes into my body. I am kind of caught between a rock and a hard place because my husband can eat anything that he doesn't gain a pound, and, I think I gain it for him. I would like to see more fresh produce. I don't like to eat a lot out of a can, or out of a box.

Because I am not working, I do a lot of home-made stuff, so [I want] anything that I can use to make that home-made meal.

There were concerns about eating too much canned and packaged food, with a high sodium and sugar content. Concerns were heightened when it came to younger children who could not eat most of what was provided from the food banks. One guardian described: "I've got a one-and-a-half-year-old baby at home who – he can't have a lot of cookies and stuff like that so how is that helping him?". Another shared the following experience:

I try to plan ahead on that but there are times... I do run low, and I try not to go back and forth. You know, and it may not lead to obvious problems but could be in a long run with his stomach. On both sides of the fence there with the nurses everything, so that's the only thing that I've come in problems with is like consistency of the certain brand [of formula] for a baby.

4.3.2.3 Types of food

When asked what foods they wanted to receive more of from the food bank, fruits and vegetables, meat, milk, and other staples were often mentioned. The supply of fruits and vegetables was presented as precarious. One participant said, "this month you might get some and not next month you might not get any". The supply of these fresh foods was also dictated by the local season and what farmers donate, so for example one participant shared that "in the summertime you get tomatoes and peppers and sometimes bags of potatoes". These were locally sourced and not available in the winter. One participant shared that they had rationed apples in their family, "the last time when we were given two large sized apples, which – two apples is not near enough for a family of three [children], um, however those two apples we did make last for the five of us".

Meat was provided inconsistently and often not portioned based on family size, for example one participant stated that "you'll get some pork chops and there's like 3 of them in the package and there's 5 of you". Milk was given out by the individual sleeve (1.3 litres) rather than by the bag (4 litres). One participant noted that they were only given six eggs and four cheese slices for a family of three, which was not sufficient for their family.

Items used to bake and cook food from scratch were also in short supply. Participants had the desire to make things at home. They agreed that baking ingredients would be welcome, for example when asked what was missing from the food bank one participant answered:

Yeah. Flour, baking soda, baking powder, uhmm sugars. Yeah sugar they give you enough for a coffee. Like maybe a cup, and then you're like that's gonna go far, I want to make one batch of cookies. Like I understand it, and I'm not complaining, I'm just... I'm grateful for whatever we do get that helps out. But just things like that are, yeah, the minor things that benefit.

Participants recounted receiving the ingredients to make only a portion of a meal, for example getting pasta without sauce. One participant remarked, "thanks for the hamburger helper, but could I have some hamburger to go with it? Or, thanks for the tuna, can I have mayonnaise to make it".

The food received by the participants is often non-perishable, canned, and lacks the freshness or variety the participants desired. Some found that they disliked the food received, were unable to eat it, it lacked variety and sometimes they ended up throwing it out. One participant stated that, "most of the food they give us is stuff I don't want." Another commented that, "we can only eat so much pasta." Turnips, which are abundant in the area, were talked about across the focus groups, some participants did not know how to cook with them, one participant lamented:

I feel bad I don't want to say I'm not taking that, so like I was given a turnip, I didn't know what the hell to do with a turnip. I was like, I never cooked this before what do I do with this? Went in the garbage.

Turning away or throwing out food that was received from the food bank was not easy; often participants had negative feelings about this as they did not want to appear ungrateful.

For families with school-aged children, appropriate school foods were needed but often not provided. School policies dictate what students are allowed to bring to school, this was a concern for some guardians who were trying to follow the rules while using food provided from the food bank, for example: "We can't take peanut butter to school... too many allergies, so what the heck are we supposed to feed our kids, right? bread and water? It's not enough." Another guardian shared their experience: "I'm packing how many lunches every night, I need to make sure that what goes in there [Lunches], especially, like the youngest is still in JK, you have to make sure it's nutritionally sound." A negative response was received by a few participants from their children's schools because they were not able to send the right food. One guardian shared that "the teachers love to send those lovely notes home if it's not good enough, 'well I can't afford everything that you consider, good enough"."

4.3.2.4 Needs beyond food

Household and personal items that were mentioned in the focus groups as needs included: furniture, appliances, cleaning products, toiletries, diapers, over-the-counter medication such as cold remedies, vitamin supplements, cooking utensils, and pet supplies. Toilet paper and tissue were given out at food banks, but not enough, for example: "Usually they'd give you like one roll of toilet paper and a thing of Kleenex" which was determined to be not enough. There are

consequences to not having access to them, such as this example regarding diapers as one guardian discussed:

My biggest issue with getting diapers from the food bank is my son can only use Huggies or Pampers and they never know what brand it is that they're giving you. They never know...And I would have to personally take a closer look and be like 'kay there's no name brand on this, I can't have this.' My son needs diapers, I've got two left at home, but I can't use these because he's gonna get a rash. And when-when my son gets a rash it's normally bleeding.

Another guardian noted that diapers didn't last, saying "I'm not expecting to get a lot of diapers. But when she hands you two diapers and that's it, and I have two kids in diapers. Two diapers is not even half a day when you have a child in diapers". Items for food storage and preservation were needed such as plastic bags and containers. Others discussed the need for more freezer space so they could purchase food when it is on sale and freeze it.

Table 4-2 Representative quotes for theme: Items provided at the food bank

Items provided at the food bank

Not enough food

It's a week's worth of one meal a day or something.

What they give us for a week is barely enough for one person, let alone two.

Yeah because then that 1 L of milk is like, well, okay...do you use that in your coffee, or do you have cereal... for the next three days.

No you need to chase out all the resources and if you don't there's not enough.

I know there's are a lot of people that are accessing more than one food banks, because they have to and there's, there's no choice but they are not supposed to.

When that runs out. You can't go back there.

I mean, it gets you up to a certain point, right? And that's meaning if you eat three meals a day...And you know we're going from two to one, uh, every day because we are trying to ration it, uh, to make the full month.

For a - day supply of food, with 6 eggs for a family of three.

Especially when you have kids, cause like if you get five apples and you have two kids, they're gunna eat those in two days for sure.

I have to go without sometimes so that I can feed my daughter um and you know, and in that, in that term I don't think that that, that that's enough but on the other hand, I don't mind you know, missing a like meal or something like every couple days or whatever ya know just so my daughter can ya know have three meals a day and everything.

Nutrient content of food

Just thought, you know, that Ontario is like all health guarded or whatever. They would be like no perish, non-perishable food... If you are going ask for our help, we are going to make sure it's proper help.

You get quite a bit of canned stuff and hmm so I just don't feel like I have a choice... to try and make a healthier ya know diet for us.

But I find they don't always have the same formulas. Like they always have Good Start and really good stuff. But it's not always at the same.

They're not really hitting that part [nutritious foods], and they're hitting a lot of um you know high, um, high calorie things you know.

That's what, that's the one thing we try to do, but we don't get a lot of it is, you know, low sodium, low sugar, for things.

Well, a lot of things that they get are the same, they're like fillers...Fill you up, like the rice and stuff

I think food has a lot to do with your outlook too. So if you're eating a lot of non-nutritious food I find that my moods really get, uh, I go into a, into a sad place.

The food bank area usually only has like cookies, pudding ... well that's not healthy enough, I don't think it is at least.

I think the children are the ones that are gonna suffer in the long run, because if we don't have a good eating habits. They're not gonna get good eating habits either.

It's hard to make the whole day a nutritious day after the first two days.

I think when it comes to nutrition for kids that a little bit more thought needs to be put into school lunches. 'Cause the kids have to go to school- we have to send them.

Types of food

Kids aren't gonna eat soup 7 days a week right?

Well some of the stuff is actually too much. Turnips...They can't get rid of turnips

I'm pretty handy, I was raised on a farm and have always lived that life. So generally, I'll make anything I need. So baked stuff I find like to do baking with, so I can make more of what I have. That's something that the food banks don't often have.

It's been usually noodles or beans. Noodles or beans or cookies which nobody can live off that.

Eventually instead of just like a straight pea or straight carrot, a mixed vegetable would be, uh, an awesome.

Well I guess it's either one or the other, and you never know what the other person's gonna eat, so one person either eats more meat or the other person eats more vegetables, but you feel like if you ask for both you're not gonna get both, It's one or the other.

They don't get a lot of meat.

I try to stay away from canned stuff as much as possible but that's majority of what you're getting, right?

Don't get a lot of milk though.

Like the turnips and stuff...A lot of people, like, don't eat that and they-they still hand it out. Or the butter squash or whatever.

You don't get bread.

It would be nice to have little bit more of the option.

The margarine helps when they have it...And the bread that's another big thing, being able to have the bread, or you know, or kaisers whatever. Just so the kids have stuff for lunch.

But it'd be nice if like...you could get more produce out of food banks.

I ate cheese when I was vegetarian and it's like the most common think you put in the meal you know...you don't get the cheese.

Needs beyond food

It could be a gallon bag or small bag, and I'd take 'em all [for food storage]

But when you're out [of toilet paper] and you go on the 10th and you're like who am I going to bum 5 bucks from to get Kleenex?

[Would like] a voucher for a cough medicine- you know ten dollars at Zehrs for medicine, like for pharmacy

I've been thinking like diaper creams for people who need it are expensive.

I know [food bank] has cat and pet food, that was brought up out of a need that, I don't know if it came from my, and my friend, who was accessing the food bank, cause we had animals and its like we're just at that time of month where money wasn't coming in and we always made sure we took the food and the animal food and we got out of the money that came in, but we just were low that time and we just asked if there was any place get and we got, kinda like, 'Why do you have pets if you can't...' and no it's not that it's the fact that she just happened to be more hungry at that point in time and it's it's nice but who know what the pet food, that, what I got for my dog cause she was running low, lasted her one, one trip to the bowl and that was it. And it's like really? So.

I like to cook. I cook almost every day. At least one meal if I can. If it's there. I mean if I have the right supplies, I guess.

They [another food bank] got a clothing room. That you can go there every day, and with the size of your family you can walk out, you get five items, five items, like doesn't matter if it's five winter coats.

Like there's times where I can't wash clothes cuz I don't even have laundry detergent. I've used shampoo! Like so maybe if stuff like that was available, you know I'm not saying give everybody huge things. But if they could be able to at least give some.

Maybe they could get like, when you go there you get a 20 dollar gift card to go get your fresh fruit and vegetables.

4.3.3 Ideas for improving the food bank system

Participants were keen to discuss ideas that would improve the food banks and the alternative food system for themselves and others. Additional exemplary quotes can be found in **Table 4-**3.

4.3.3.1 Education

At the local food bank level there was a suggestion to create instructions on how to prepare certain abundant, but difficult food products (e.g., turnips), including recipes that could be made from the available ingredients. Participants also desired information on how to freeze and prepare food for storage, one stating that this was "so a lot of the fresh produce...won't go to waste either". It was also noted that using the items obtained at the food bank in creative ways could reduce food waste:

With a lot of vegetables like that maybe they can get some sort of a system on there, like the basic, 'cook it like this there you go", and they can just go from there this way it's not getting wasted and it's getting eaten maybe the people feel more easy about cooking that stuff for their families finding little ways that the kids will eat it, stuff like that, this way it's already there they don't have to worry about it, it's there, okay this is

easy enough I can do that, and try it out and then start using your imagination after. It doesn't hurt

Educating the public on how the food banks operate, why people use it, and what constitutes a suitable donation was also discussed. One participant shared their experience trying to advocate for more effective donations to the food bank:

They should probably have the schools know too to tell the kids, like, even when I was a kid, when you gave to the food bank there was always a canned good right? They never said that you could donate anything else. So, I grew up thinking, that's all you can give to the food bank was in a can...Then when I got older I thought, oh you can donate boxed food too? But that was it. They never knew you could donate anything fresh. And I think if they started bringing that to school and letting kids know, you know, sure you can bring it into school maybe bring in a canned good, but if you want to go with your parents or whatever, when you have time, and you can also donate fresh things, even maybe a list or whatever... Even sports teams. Like, my nephew's team, there, they donate to the food bank and all of them, we got into a little kid argument, uh, when I said, 'well you can bring a bag of apples', cause he loves apples, 'no I can bring my can'. I said, 'well you can bring a bag of apples', 'no I can't because you can't give that to the food bank'. 'Yes you can honey, you can donate any food'. 'No you have to give a can. That's what the coach said, you give a can', so, it was a losing child argument.

The public should be notified on what is acceptable and what is needed, one participant reflected, "I think people that are donating, are picking up on whatever's on sale at a Walmart".

4.3.3.2 Improved physical access

For those living in this rural study area there was a reliance on vehicular transportation. It was recognized by participants that some people may be homebound and unable to get to the food bank, indicating the need for a delivery service. Participants mentioned a few food banks that currently offered delivery and others allowed for the food to be picked up on someone else's behalf.

In the winter it was more difficult to get food, especially for participants who walked. Parts of their route to the food bank included highways and lacked sidewalks making them unsafe. For those living inside a town, walking or navigating a bike, wagon, or stroller while carrying food was an expressed challenge, such as this example:

Well before I had my vehicle on the road, we walked. But then I had to take my young ones, we had to borrow a wagon from somebody or figure out how I'm going to get back in the stroller and that's never do-able... And pushing my stroller which is a pain in the ass and carrying bags of groceries is not fun at all.

Depending on the location, at times participants mentioned a lack of space in the food banks.

One participant pointed out that, "It would be very difficult for somebody in a wheelchair to get around...maneuvering around the space...Cause even in a, a waiting room it's pretty tight."

4.3.3.3 Sustainability & standardization

Some participants were concerned about the increase in food bank use and the possibility that they might run out of food. Food banks are meant to be an emergency service; however, they were being used on a regular basis by many of the participants. Recognizing this, the participants discussed ideas for the increased sustainability of the system. Relying on donations was not perceived as sustainable, especially in communities that received the most donations during the summer from temporary cottagers as one participant explained that they are, "very generous in this town but as well, we don't, is that sustainable? I don't know because everyone leaves in the winter". Other ideas put forth were encouraging restaurants to divert good food that would be wasted to the food banks and organizing donations better in order to stop food from expiring before it gets to them. The standardization of food bank services was also called for, one participant remarked that "[food banks] could be better if they were all connected or something".

Within the community there were ideas such as informal potlucks or formal collective kitchens as a way to pool resources. Having people donate a small amount of money regularly was one exceptional idea presented by a participant:

They [grocery stores] charge you 5 cents for a bag at the grocery store what if they charge me an extra 25 cent towards food bank. I would love that because I go there. So, and just it would make me feel like I am at least giving something to the community. Helping myself and helping everyone else, you know, or even a nickel. Like how many times you go and you just buy you know, I go in to buy a loaf of bread so I have to pay an extra nickel. I don't care.

Table 4-3 Representative quotes for theme: Ideas for improving the food bank system

Ideas for improving the food bank system

Education

I learned how to like umm just get the vegetables ready and then just freeze them because I've been around that before so a lot of fresh stuff like that I know what to with them. I don't have to put them right in the freezer if I do it's like they are still healthy and by the time you unthaw them and cook them up there not overdone... but a lot of people don't know how to do that.

I didn't know what the hell to do with a turnip. I was like I never cooked this before what do I do with this?

I think I found I had someone, a friend of mine who was just not very good in the kitchen and because she was never taught, and I guess didn't bother to ask. You know, make homemade soup? Oh, how do you do that? What do you mean stock? What's stock? What, what... And I'm going oh my god okay...you know where do you start with someone like that? And it really is just maybe you know her mother had passed away so now she's like kinda become like an only child who is going to teach her. So who's going to teach her?

And I think that it's very important that maybe there should be some type of uh program that people who visit the food bank, if you're interested... we have a cooking class or cooking edu.. or food education.

I don't think that they can control the quality of food. Um that is given. Um, they go it's a food bank, so they go by donations so whatever they get is what they give.

Improved physical access

In the winter you can't walk.

Well you're tall enough [to walk in the winter] so that if the snow filled ditch and you and you went in at least your head would be sticking out to get help.

A lot of people don't drive.

Is there a delivery Service? For people, like, not myself, but for people who can't physically go and access the food bank?

I'm one of the fortunate ones that have a car, but that's not cheap to run on gas now either... when you're coming from a different town right?

I also know of other family. another family that she would access, but she's at work at the time that they're open, right? So she can't get to one.

Sustainability and standardization

There is enough people that if they are chipping their money together there's no reason that food shouldn't be affordable.

Maybe see if you can work a deal with grocery stores umm where or they can just order just a little bit of extra produce bags every week... that way they can donate them to put the produce right in there slap a sticker on their.

I know there are some food banks out there across Canada, that they are getting fresh food, fruits and vegetables. I'm not sure where, I know it's, they're getting it. But it's like, I'm not sure where now I know, I heard it in the news somewhere but like there's, there's other food bank communities in other provinces that are, each one's got their own different model, it's matter of at least trying to, like I said, you gotta cater to each province but, like almost some type of standardization, where I, I look at other models throughout in other provinces to see how they're doing, cause it, cause some, some have got it, some don't, some lacking, some are over. It's just, you gotta find the happy medium.

They could be better if they were all connected or something, where everybody can pay a fee a month to get a grocery voucher and get a deal because you're buying so many of the same thing all at once.

We hear it in the news all the time, there's an increase in people using the food banks and it's like, I think they just said it's up by 30% this year from 2016. I heard on the news.

4.4 Discussion

Many consider food banks to be a major provider of emergency food for those in need. Literature on both food banks and food insecurity have shown that this solution is not sustainable or absolute (Bazerghi et al., 2016; Tarasuk et al., 2019). For the participants in this study food banks were found to be lacking in the quantity, quality and choice of food provided as well as the timing and delivery of the programs. They also had practical issues with inconsistency between and within food banks, lack of respectful treatment, and problems with food quality. These findings are consistent with previous research that found similar frustrations in access to food programs, amount and types of food provided, and the lack of choice given (Tsang et al., 2011). Previous research has also demonstrated that food banks were unable to provide healthy, balanced options to clients who called for more fruits, vegetables, dairy, and meats (Bazerghi et al., 2016), sentiments that were echoed in the experiences of the participants in this study. Further, Simmet et. al. (2017) found that milk products, as well as items with vitamins A and C, and calcium were provided in particularly low amounts across the pantries studied. In this study, participants drew attention to the striking contrast between what participants were eating and

what Health Canada deems to be a healthy diet as found in Canada's Dietary Guidelines (2019); they felt they were unable to meet these guidelines while using the food bank. Before public health interventions to improve the nutritional quality of diets are done, people need to have the means to access adequate foods (Ricciuto et al., 2006)

In earlier ethnographic research at food banks in Toronto, Ontario, Tarasuk & Eakin found expired, substandard foods being given out and concluded that this was a reflection on the combination of the needs of food bank clients and their lack of rights in the system (2005). These findings are consistent with previous research that found flexibility to be a key feature when the choice was given between multiple food bank locations (Byker Shanks et al., 2017). Previous research suggests that a needs-driven model should be considered where food banks communicate with their patrons about their need and with the communities from which they receive donations, which could help ensure patrons get the food they need (Bazerghi et al., 2016). Donated foods make up a large portion of what foods are available and this should be monitored more closely to decrease issues with the type, variety, and quality of foods.

Food banks have long been institutionalized (Riches, 1985) and have become further entrenched, and normalized, which is one of the key critiques they face (McIntyre et al., 2016). However, they are meeting the needs of the people they serve (Roncarolo et al., 2016), for many on a regular basis. Though the findings of this study show room for improvement, it is evident that from the level of engagement, users of the food bank are invested in their success. There is a level of care provided by these often volunteer-led community organizations that is supplementing food when the income provided by the social safety net is not enough (Riches & Tarasuk, 2014). Food banks can be viewed through the human geography perspective as landscapes of care (Conradson, 2003; Milligan & Wiles, 2010) that are simultaneously fraught

with barriers, adversity, and stigma while also providing security, charity, community, livelihood and personal fulfillment.

The ideas shared on how to improve the emergency food system demonstrated that food insecure people are, or desire to be, active in their situations, rather than just passive users of the system. This was an inspiring result from this study, however the ideas put forth are a reflection of further insufficiencies in the food bank system. For example, education in the community is required to help increase the quality of food being donated and combat potential stigma from the community; whereas education for the food bank patrons on food literacy skills is meant to teach them how to make the inadequate food they have stretch. Improved physical access would allow for more frequent visits and for the patrons to save money on transportation to the food bank; this money could then be used to buy food. Food insecurity includes worrying about food, so the ideas around sustainability would bring peace of mind. Finally, the standardization that is called for, will help ensure equity in the food bank system, something that our findings show is lacking. Practically, some of the ideas put forth are simple, and some require systemic change, but all are worth considering.

4.5 Implications for Research & Practice

At the food bank level there is a need for immediate change in practices. These practices should first and foremost reflect a culture of respect towards the patrons. Improvements needed based on these findings include: the clarification of policies and procedures, improved communication, better care in food handling and quality control, increased privacy, and specialized training for volunteers and staff on working with vulnerable populations. Food banks are put into place to help those most in need, but they fall short of solving the problem of food insecurity. In practice, ease and regularity of access is key to making food banks successful in both urban and rural

locations (Bazerghi et al., 2016). It was clear from this study that there were issues with the food that was being provided. Previous research has found that while increasing autonomy of food choice ensures dignity it does not ensure a nutritious diet (Mukoya et al., 2017). Recent research shows a need for nutrition professionals who are trained to work with food banks and food insecure populations (Handu et al., 2016). There is an opportunity for dietitians to help create guidelines for sufficient food bank offerings based on family size and composition. Ensuring pathways for a steady supply of fresh foods, particularly fruits and vegetables, is an additional requirement based on these findings and supported by previous research on food banks (Bazerghi et al., 2016; Simmet et al., 2017). Food waste could also be reduced if unfamiliar items were accompanied by instructions and recipes. It is also clear from the findings of this study that a lack of oversight has allowed for inconsistencies, and while large organizations exist federally (Food Banks Canada) and provincially (Feed Ontario) which provide guidance, only a few food banks in the study area took part in these organizations.

The findings of this study support the development and promotion of community food programs that fully engage and understand the need of communities served. Food banks should allow for increased autonomy over food choice, nutritional considerations, and ensuring dignity is preserved. Food banks which already have some capacity can look to other program models for creative ways to improve. An example of another program model is the Good Food Box (GFB), a delivery system which allows patrons to pay a nominal fee and have food delivered to them. A recent study found that respondents preferred the GFB program to the regular food bank model because it provided a spatial distance from the source and paying for the food promoted dignity (Bedore, 2018). Another example to consider are collective (or community) kitchens, which are found to provide education, have social benefits, promote health, and increase community

resilience (Engler-Stringer & Berenbaum, 2005; Fridman & Lenters, 2013). Any community food program will have difficulty reaching everyone in need, and a localized approach may be required (Loopstra & Tarasuk, 2013). This study has revealed that in rural communities it is important to encourage mutual support, create transportation solutions, and provide education for the public about the food banks and food insecurity in their community.

Future research is needed to determine the direction of food banks, especially in rural areas where they may have less capacity. Challenges to access that may be deterring those with HFI from using charitable sources of food (Tarasuk et al., 2019) need to be further understood and overcome. At the same time, there must be an acknowledgement of the positive role that food banks play in the lives of people that use them, and therefore steps taken to improve them. Future research should consider food banks as landscapes of care, providing an essential human service and therefore requiring guidance and support.

4.6 Limitations

The findings of this study line up with those of previous reviews (Middleton et al., 2018; Piaskoski et al., 2020) and similar studies (Buck-McFadyen, 2015), however caution should be practiced in applying them elsewhere. Rural communities are unique, and more research is needed in diverse communities to confirm these results. Group dynamics are not considered in this analysis and focus group recruitment took place during a specific time period at the county food banks, individuals living with HFI who did not attend the food banks were not included.

4.7 Conclusion

Through the experiences of food bank patrons, this study uncovers what is happening in rural food banks and reveals what can be done to improve this space for those who rely on them. This

study fills a gap in the predominantly urban-focused literature, by deepening our understanding of food bank use in rural areas. This understanding is reflected through the three themes by (1) demonstrating the effect of food bank practices on the patrons and the importance of consistency, communication, care, and respect in the act of obtaining food; (2) exemplifying needs that are not being met in reference to what is provided at the food bank; and (3) highlighting the desire for an improved food aid system through ideas for change such as increased access and education. Food banks play a vital role for their patrons and as liminal spaces they must be as effective and efficient as possible. For the local food bank, this means taking steps to ensure physical and temporal access, privacy, dignity, and the provision of nutritious, safe, and acceptable food. Increased oversight and standardized guidelines will increase consistency and equity within and between food banks. As the charitable food system improves, it is also important that governments recognize its limitations and that there be a continued push for broad policy change that would guarantee those living with HFI access to the food they need for a healthy life.

4.8 References

- Bazerghi, C., McKay, F. H., & Dunn, M. (2016). The role of food banks in addressing food insecurity: A systematic review. *Journal of Community Health*, *41*(4), 732–740. https://doi.org/10.1007/s10900-015-0147-5
- Bedore, M. (2018). "I was purchasing it; it wasn't given to me": Food project patronage and the geography of dignity work. *The Geographical Journal*, 184(3), 218–228. https://doi.org/10.1111/geoj.12251
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. https://doi.org/10.1191/1478088706qp063oa
- Buck-McFadyen, E. V. (2015). Rural food insecurity: When cooking skills, homegrown food, and perseverance aren't enough to feed a family. *Canadian Journal of Public Health*, 106(3), e140–e146. https://doi.org/10.17269/CJPH.106.4837
- Byker Shanks, C., Haack, S., Tarabochia, D., Bates, K., & Christenson, L. (2017). Factors influencing food choices among older adults in the rural western USA. *Journal of Community Health*, 42(3), 511–521. https://doi.org/10.1007/s10900-016-0283-6
- Canada, & Health Canada. (2019). Canada's dietary guidelines for health professionals and policy makers. http://epe.lac-bac.gc.ca/100/201/301/weekly_acquisitions_list-ef/2019/19-04/publications.gc.ca/collections/collection_2019/sc-hc/H164-231-2019-eng.pdf
- Cloke, P., May, J., & Williams, A. (2017). The geographies of food banks in the meantime.

 *Progress in Human Geography, 41(6), 703–726.

 https://doi.org/10.1177/0309132516655881
- Conradson, D. (2003). Geographies of care: Spaces, practices, experiences. *Social & Cultural Geography*, *4*(4), 451–454. https://doi.org/10.1080/1464936032000137894

- Engler-Stringer, R., & Berenbaum, S. (2005). Collective kitchens in Canada: A review of the literature. *Canadian Journal of Dietetic Practice and Research*, 66(4), 246–251. https://doi.org/10.3148/66.4.2005.246
- FAO. (2009). Draft declaration of the World Summit on Food Security. World Summit on Food

 Security, 1–10.

 http://www.fao.org/fileadmin/templates/wsfs/Summit/Docs/Declaration/WSFS09_Draft_

 Declaration.pdf
- FAO, IFAD, UNICEF, WFP, & WHO. (2018). The state of food security and nutrition in the world 2018: Building climate resilience for food security and nutrition (pp. 8–9). FAO. http://www.fao.org/3/i9553en/i9553en.pdf
- Fridman, J., & Lenters, L. (2013). Kitchen as food hub: Adaptive food systems governance in the City of Toronto. *Local Environment*, 18(5), 543–556.

 https://doi.org/10.1080/13549839.2013.788487
- Goldberg, M., & Green, D. A. (2009). *Understanding the link between welfare policy and the use of food banks*. Canadian Centre for Policy Alternatives.
- Handu, D., Medrow, L., & Brown, K. (2016). Preparing future registered dietitian nutritionists for working with populations with food insecurity: A new food insecurity/food banking supervised practice concentration piloted with dietetic interns. *Journal of the Academy of Nutrition and Dietetics*, 116(7), 1193–1198. https://doi.org/10.1016/j.jand.2016.01.020
- Irwin, J. D., Ng, V. K., Rush, T. J., Nguyen, C., & He, M. (2007). Can food banks sustain nutrient requirements? A case study in Southwestern Ontario. *Canadian Journal of Public Health*, 98(1), 17.

- Jacobson, D., & Mustafa, N. (2019). Social identity map: A reflexivity tool for practicing explicit positionality in critical qualitative research. *International Journal of Qualitative Methods*, 18, 160940691987007. https://doi.org/10.1177/1609406919870075
- Kirkpatrick, S. I., & Tarasuk, V. (2009). Food insecurity and participation in community food programs among low-income Toronto families. *Canadian Journal of Public Health*, 100(2), 135–139. https://doi.org/10.1007/BF03405523
- Kurtz, H., Borron, A., Shannon, J., & Weaver, A. (2019). Community food assistance, informal social networks, and the labor of care. *Agriculture and Human Values*, *36*(3), 495–505. https://doi.org/10.1007/s10460-019-09943-0
- Lindberg, R., Whelan, J., Lawrence, M., Gold, L., & Friel, S. (2015). Still serving hot soup? Two hundred years of a charitable food sector in Australia: a narrative review. *Australian and New Zealand Journal of Public Health*, *39*(4), 358–365. https://doi.org/10.1111/1753-6405.12311
- Loopstra, R. (2018). Interventions to address household food insecurity in high-income countries. *Proceedings of the Nutrition Society*, 77(3), 270–281. https://doi.org/10.1017/S002966511800006X
- Loopstra, R., & Tarasuk, V. (2012). The relationship between food banks and household food insecurity among low-income Toronto families. *Canadian Public Policy*, *38*(4), 497–514. https://doi.org/10.3138/CPP.38.4.497
- Loopstra, R., & Tarasuk, V. (2013). Perspectives on community gardens, community kitchens and the good food box program in a community-based sample of low-income Families.

 Canadian Journal of Public Health, 104(1), e55–e59.

 https://doi.org/10.1007/BF03405655

- Matern, R., Seer, S., Ozga, P., & Lalani, N. (2019). *Hunger count 2019*. Food Banks Canada. https://hungercount.foodbankscanada.ca/
- McIntyre, L., Tougas, D., Rondeau, K., & Mah, C. L. (2016). "In"-sights about food banks from a critical interpretive synthesis of the academic literature. *Agriculture and Human Values*, 33(4), 843–859. https://doi.org/10.1007/s10460-015-9674-z
- Middleton, G., Mehta, K., McNaughton, D., & Booth, S. (2018). The experiences and perceptions of food banks amongst users in high-income countries: An international scoping review. *Appetite*, *120*, 698–708. https://doi.org/10.1016/j.appet.2017.10.029
- Milligan, C., & Wiles, J. (2010). Landscapes of care. *Progress in Human Geography*, *34*(6), 736–754. https://doi.org/10.1177/0309132510364556
- Mukoya, M. N., McKay, F. H., & Dunn, M. (2017). Can giving clients a choice in food selection help to meet their nutritional needs?: Investigating a novel food bank approach for asylum seekers. *Journal of International Migration and Integration*, *18*(4), 981–991. https://doi.org/10.1007/s12134-017-0515-3
- Piaskoski, A., Reilly, K., & Gilliland, J. (2020). A conceptual model of rural household food insecurity: A qualitative systematic review and content analysis. *Family & Community Health, In Press*.
- Ricciuto, L., Tarasuk, V., & Yatchew, A. (2006). Socio-demographic influences on food purchasing among Canadian households. *European Journal of Clinical Nutrition*, 60, 14.
- Riches, G. (2011). Thinking and acting outside the charitable food box: Hunger and the right to food in rich societies. *Development in Practice*, 21(4–5), 768–775. http://dx.doi.org/10.1080/09614524.2011.561295

- Riches, G. (1985). Feeding Canada's poor: The rise of food banks and the collapse of the public safety net. *2nd Conference on Provincial Social Welfare Policy*, 1–20.
- Riches, G., & Tarasuk, V. (2014). Canada: Thirty years of food charity and public policy neglect.

 In G. Riches & T. Silvasti (Eds.), *First world hunger revisited: Food charity or the right to food?* (2nd ed., pp. 42–56). Palgrave Macmillan Limited.

 https://doi.org/10.1057/9781137298737_4
- Roncarolo, F., Adam, C., Bisset, S., & Potvin, L. (2015). Traditional and alternative community food security interventions in Montréal, Québec: Different practices, different people.

 **Journal of Community Health, 40(2), 199–207. https://doi.org/10.1007/s10900-014-9917-8
- Roncarolo, F., Bisset, S., & Potvin, L. (2016). Short-Term effects of traditional and alternative community interventions to address food insecurity. *PLOS ONE*, *11*(3), e0150250. https://doi.org/10.1371/journal.pone.0150250
- Ryerson University. (2018). *Guiding principles*. Centre for Studies in Food Security. https://www.ryerson.ca/foodsecurity/
- Simmet, A., Depa, J., Tinnemann, P., & Stroebele-Benschop, N. (2017). The nutritional quality of food provided from food pantries: A systematic review of existing literature. *Journal of the Academy of Nutrition and Dietetics*, 117(4), 577–588. https://doi.org/10.1016/j.jand.2016.08.015
- Statistics Canada. (2017, February 8). *Census profile, Huron, County, 2016 Census*. Statistics

 Canada. https://www12.statcan.gc.ca/census-recensement/2016/dppd/prof/details/page.cfm?Lang=E&Geo1=CD&Code1=3540&Geo2=PR&Code2=35&Da
 ta

- Tarasuk, V., & Beaton, G. (1999). Household food insecurity and hunger among families using food banks. *Canadian Journal of Public Health*, 90(2), 109–113. https://doi.org/10.1007/BF03404112
- Tarasuk, V., & Eakin, J. M. (2005). Food assistance through "surplus" food: Insights from an ethnographic study of food bank work. *Agriculture and Human Values*, 22(2), 177–186. https://doi.org/10.1007/s10460-004-8277-x
- Tarasuk, V., Fafard St-Germain, A.-A., & Loopstra, R. (2019). The relationship between food banks and food insecurity: Insights from Canada. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*. https://doi.org/10.1007/s11266-019-00092-w
- Tarasuk, V., & Mitchell, A. (2020). *Household food insecurity in Canada*, 2017-18. Research to identify policy options to reduce food insecurity (PROOF). https://proof.utoronto.ca/
- Tsang, S., Holt, A. M., & Azevedo, E. (2011). An assessment of the barriers to accessing food among food-insecure people in Cobourg, Ontario. *Chronic Diseases and Injuries in Canada*, 31(3), 9.
- Vozoris, N., & Tarasuk, V. (2003). Household food insufficiency is associated with poorer health. *The Journal of Nutrition*, *133*(1), 120–126.

Chapter 5

5 Synthesis

5.1 Summary of Studies

The systematic review and two empirical studies included in this thesis revealed the complex factors associated with experiences of rural household food insecurity (HFI), and the rural food bank system. The overall aim of this research was to examine the first-hand experiences and perspectives of those living with HFI, to broaden our understanding of food insecurity and the use of food banks in rural Canada. Through qualitative methods of analysis these perspectives were synthesized into themes and subthemes.

Chapter 2 provides a conceptual model for rural food insecurity which includes elements that

influence the achievement of food security, including: human capital, social capital, compounding stressors, and complex systems. Food security is represented by the achievement of the five A's (availability, accessibility, adequacy, acceptability, and agency) (Ryerson University, 2018). This conceptual model can be found in Chapter 2 (Figure 2-2) and 3 (Figure 3-1) of the thesis. Findings from Chapter 2 revealed a gap in qualitative literature on rural HFI in Canada. This gap, along with the call to compare the conceptual model to additional rural, non-remote Canadian examples, provides justification for studies described in chapters 3 and 4.

The in-depth, five step, thematic analysis (Braun & Clarke, 2006) of focus group data resulted in robust themes and detailed subthemes which were categorized into two groups for discussion and dissemination. Focus group data for study 1 (Chapter 3) and study 2 (Chapter 4) were acquired from the Food Tracking Project (FTP) in Huron County which sought to improve the food bank system. As part of the FTP, focus groups took place in seven communities across the county with a total of 41 food bank patrons. The first resultant study (Chapter 3) examined how those living

in Huron County manage HFI, as well as the impact HFI has on their lives. The findings from this study demonstrate the aspects of living with poverty that drive HFI, strategies for coping with it, and the physical and emotional impacts it has on their lives. Through this research, organizations can target existing management and coping mechanisms in order to support food security through local programs. At a broad level, understanding the negative impacts of HFI, and the role of poverty, provides impetus for movement towards anti-poverty policies that would ensure equitable access to food for all. Visualizing the results of Study 1 in comparison with the conceptual model from Chapter 2 (**Table 5-1**) suggests that the compounding stressors which contribute to HFI, and the complex systems that keep the household out of balance were more present in the data than the mitigating factors of human capital and social capital.

Table 5-1 Comparing the conceptual model for rural food insecurity to study 1 themes

Conceptual Model Component

Related theme(s) from Study 1

Human Capital

Food literacy & budgeting

Social Capital

Community members helping one another

Organizational sources of assistance

Compounding Stressors

Physical health

Mental health

Isolation and fear of stigma within the community

Cost of living

Cycles of insecurity

Complex Systems

Organizational sources of assistance

Reliance on the social safety net

Cycles of insecurity

The findings from study 1 provide the context for the in-depth analysis of the experience of food banks in Huron County presented in study 2 (Chapter 4). Organizational sources of assistance are touched upon in study 1 as sources of provision in times of need. Food banks were a critical food source for many of the focus group participants and thus the perspectives and stories shared in regard to them were abundant. The second study examined the experience of accessing the food banks in Huron County and what improvements needed to be made to ensure food security in the communities they serve. The findings from this study demonstrate expressed concerns with food bank practices, and what is provided, as well as patron-driven ideas for improvement to the food bank system. It was found that though food banks are meeting needs in the communities, they do not provide food security. Food banks as provisional spaces of care can be improved and this research can be applied to practice at the local, food bank level. It also highlights the need for guidelines and oversight across the food bank system in Canada.

The integration of the works presented in this thesis meets the aim set out by broadening our understanding of rural HFI and the use of food banks. The systematic synthesis of food insecure voices across the literature provides an internationally based conceptual model of rural food insecurity which can be applied regionally, as demonstrated in Table 5-1. In addition, the thematic analysis of first-hand experiences regarding household food insecurity (Study 1) and the use of food banks (Study 2) in Huron County provides a uniquely rural case study which can be considered in further research, policy and practice.

5.2 Research Contributions

Chapter 2 presents a novel approach to qualitative systematic reviews. Using content analysis methods to summarize the first-hand examples in the literature goes beyond the typical narrative synthesis of themes and conclusions. Utilizing the five A's (availability, accessibility, adequacy,

acceptability, and agency) (Ryerson University, 2018) in the first stage of the directed content analysis in Chapter 2 demonstrates their application in research, where they have predominantly been used in practice (Food Policy Council for Kingston, Frontenac and Lennox & Addington, 2015; Toronto Food Policy Council, n.d.). The second stage of analysis in Chapter 2 goes beyond the five A's to discover new themes and a conceptual model for rural food insecurity (Figure 2-2, Figure 3-1). This is a key contribution of this thesis to food insecurity research, bolstered by its application in the case of Huron County. The model highlights the complexity of food security status, and the dynamic nature of its experience, notions which have been expressed in previous research, but until now had not been summarized and presented as a conceptual model.

The thesis findings align with and expand upon previous HFI research, particularly by filling the gap identified in Chapter 2 of rural, food insecurity research in Canada. The experiences of living with HFI and using food banks in Huron County echo those in similar qualitative studies. Studies 1 and 2 (Chapters 3 and 4) improve upon the literature outlined in the systematic review by providing rural, non-remote, Canadian perspectives. Rural research in the United States provides valuable insight; however, differences in economy, geography, society, and culture prevent anything beyond broad concepts from transferring to Canada. The uniqueness of rural communities in Canada requires more research to capture and understand the diversity of experiences and how HFI differs from community to community.

The findings of this thesis research align with previous ethnographic research in rural Southwestern Ontario which demonstrated that individual action in response to external stressors was not enough to combat food insecurity (Buck-McFadyen, 2015). Many of the details of that research is echoed in Study 1 (e.g., community support, stress, budgeting), suggesting that,

though rural communities are unique (Lauzon et al., 2015), the experience of HFI has similarities across geographies. Study 1 expands upon the existing understanding of rural HFI by providing rich examples of previously known phenomena. For example, the challenges faced (i.e., physical health and mental well-being) are commonly delineated in food insecurity research (Gundersen & Ziliak, 2015). Study 1 provides first-hand examples of these challenges, including, how they are exacerbated by HFI and the emotional impact they have. Specific examples of individual strategies to combat food insecurity can be supported through community-level interventions. Finally, a contribution is made by validating the general view that poverty lies at the root of HFI and must be solved. Study 2 specifically explores the experience of using the food bank in a rural setting. Qualitative research on food banks use in Canada have focused on urban locations (Middleton et al., 2018), despite their prevalence in use (Matern et al., 2019).

Study 2 further supports the idea of food banks as therapeutic landscapes of care with the capability to heal and harm (Milligan & Wiles, 2010). Whether receiving positive or negative treatment the participants' satisfaction with their experience was dictated by interactions with the workers at the food bank. This work supports the argument that food banks need to be considered as liminal spaces (Cloke et al., 2017), where care takes place within the community, and that are worth supporting and improving in the short term (Roncarolo et al., 2016).

This thesis further contributes to the field of geography as it supports the use of an ecological framework in food security and food environment work. Returning to the framework for eating behaviour (**Figure 1-1**) (Story et al., 2008), the thesis presents considerations at each level of environmental influence. At the individual level there are skills, behaviours and demographic characteristics that mitigate the experience of HFI. Support and potential stigma from family, friends, and neighbours are concerns of importance at the social level. The settings significant to

HFI are grocery stores, food banks, and other community food programs. Lastly, elements at the macro-level such as food distribution systems, food assistance programs, transportation, and government policies impact the experiences of rural HFI. The use of this framework to consider the eating behaviour of those with HFI builds upon the idea that there are many elements impacting food choice, and sometimes for those with HFI there is no choice at all.

In the field of food security research there exists a number of important discourses. The explanations of HFI in Canada are wide-ranging (Mendly-Zambo & Raphael, 2019). Utilizing qualitative methods and a thematic analysis methodology in this research allows the discourse to be chosen by the individuals who experience HFI first-hand. The findings in study 1 and study 2 reveal links to all five common ways of seeing HFI in Canada, as: (1) a nutrition and dietetics issue; (2) requiring charitable responses; (3) a community development issue; (4) as a social determinant of health; and (5) an imbalance of power and influence in society (Mendly-Zambo & Raphael, 2019). The latter three discourses are highlighted in study 1 and the first two are highlighted in study 2. Each discourse supports specific responses to HFI, and while researchers must often choose the discourse they align with, the reality reflects that responses are needed to all of them. The findings from these studies and the conceptual model presented in Chapter 2 support the need for future research on rural HFI, especially responses to it. The complexity of the experience dictates many opportunities for future research in rural communities and across the country.

5.3 Limitations

The two studies in this thesis rely on data that was not directly collected by the thesis author, and thus the main area where limitations could be mitigated was during analysis and interpretation. Fundamentally, the use of qualitative methods comes with its limitations and strengths. The

strength of this work was reinforced by a number of efforts: (1) the use of NVivo (12.5.0) software to code, organize, and interpret data; (2) a clear methodology for analysis based on scholarly literature, directed content analysis in Chapter 2 (Hsieh & Shannon, 2005) and thematic analysis in study 1 and study 2 (Braun & Clarke, 2006); (3) the use of secondary researchers to check for bias in the early stages of analysis; and (4) the use of social identity mapping (Figure 1-2) to provide reflexivity (Jacobson & Mustafa, 2019). An example of the use of social identity mapping was in identifying the thesis researcher's position as an outsider in terms of food security status. Despite these efforts it is important to understand the limitations that exist within the research.

Chapter 2 provides a systematic review which was performed with a broad, but clear research question and well-defined inclusion/exclusion criteria; however, even with a thorough and systematic search of five bibliographic databases, some relevant work may have been missed. In addition, grey literature (i.e. non-refereed sources such as government reports) were not considered. The conceptual model presented in the review is specific to rural settings, restraint should be taken when applying it elsewhere. Adults were the focus of this thesis; while elderly were not excluded, their voices are not distinctly mentioned, and youth were left out entirely. Study 1 and study 2 used focus group data which presents the potential for the group effect, or 'groupthink' to influence the results. Study 1 focuses on rural HFI, however households that do not participate in the food bank were not included in the FTP from which the data was obtained.

5.4 Implications for Policy & Practice

The primary aim of this thesis is purposefully broad and due to the richness of the data the findings are comprehensive. Therefore, the implications for policy and practice are reflected across the whole system in which the participants live, interact, and obtain food. Implications

based on this research include the need for: (1) Improved food bank operations and other community level responses; (2) community building and system navigation for those in need; and (3) provincial and federal policy change towards the end of poverty and food insecurity. In their summary of contemporary critiques of food banks McIntyre et al. (2016), argue that two actions are often suggested to combat their failings, either improve the food bank or alleviate poverty. This thesis supports both of these actions. It is complicated to suggest that food banks are failing, considering the goal of the original food banks was to provide emergency relief in times of economic struggle (Riches, 1985). It is clear that if the goal is to end food insecurity, they are set up to fail (Riches & Tarasuk, 2014). This research has made clear the necessity of food banks in the lives of the participants and thus a summary of ways to improve upon the current system is warranted. Findings from study 2 support changes in food bank practices that would create a more favorable experience for those in need. A few of the way's operations could be improved include safe food handling, communication of rules, respectful treatment, consistency of service, and improved physical access. The addition of an educational component such as including recipes and cooking instructions alongside allotted foods would help to increase food literacy, and this could be done in partnership with a local public health dietitian. Issues with the items provided at the food bank may require increased communication between the organizations and their patrons; for example, study 2 found that fruits, vegetables, meat, dairy, and other staples were most needed, and this has been found in other food bank studies (Middleton et al., 2018). In Huron County, the HCFBDC partially determines the type and frequency of food that the food banks receive. Since conducting the FTP, they have improved their fresh fruit and vegetable distribution, as this was seen as an immediate need that could be fulfilled. Increased autonomy over food choice is another significant goal for food banks to

consider. In rural communities food banks may have limited operations, with limited hours, and they may also run on narrow budgets. Many of the improvements needed require training for staff and volunteers and additional funding, which may be beyond what is possible for these small charitable organizations.

Previous research suggests that those most urgently in need of food are more likely to access a food bank over other community food programs (Roncarolo et al., 2015). For those who experience ongoing food insecurity in rural areas there may be a benefit in enhancing existing services or providing alternative responses to food insecurity. One idea is to take a Culture Centered Approach where client perspectives are actively considered and incorporated into programming (Kurtz et al., 2019). Another is to build on a Food Systems Approach using collective kitchens to build community and enable food security (Engler-Stringer & Berenbaum, 2005). Other types of food programs such as Good Food Boxes or Community Gardens could be considered depending on the needs of the specific community (Loopstra & Tarasuk, 2013). In urban centres there may be multiple program options available, such as food banks for emergency needs, and community gardens and collective kitchens for longer term needs. In small rural areas where there are small pockets of patrons, volunteers, and funding opportunities, there may only be need and room for one program.

Chapter 2 revealed, and Study 1 (Chapter 3) confirmed, the role of community in the lives of those with HFI in rural areas. There is deep value in social capital and organizational support, and these need to be supported by municipalities and health authorities. Challenges related to community involve fear of stigma, judgement, and isolation from others because of HFI, as well as transportation barriers. This research also revealed issues that require a response outside of the food system. Navigating the complex systems raised in the literature also necessitates providing

help with social assistance programs and requiring access to mental health and physical health care. Though these are adjacent to food insecurity, they are key to a holistic system, which includes food security. A healthy rural community requires inclusivity so that an individual in need who is accessing one service is referred to other applicable services, a gap that was identified in this research.

A solution for rural areas like Huron County, may be in multicomponent programming. For example, there exists a coalition in the county called Poverty 2 Prosperity which is community-based and service-driven. They are a collection of professionals across sectors who work together on initiatives that would improve the lives of those who live with poverty in the area. This coalition is linked to the food banks and the HCFBDC and with the information provided in this thesis and through the FTP, targeted action has, and will continue, to be taken. For example, the HCFBDC started mobile food banks in two areas that were underserved, as people were consistently travelling long distances from these locations to access the food bank in other communities.

There will be no end to household food insecurity until all are able to afford food through traditional pathways. The mechanisms in place to help individuals survive while experiencing food insecurity do not solve it. Governments should consider a more robust social safety net that would allow everyone to participate in the traditional food system. Without an end to poverty, the balancing act demonstrated in Chapter 2 will continue. Participants in study 1 and study 2 expressed the desire for greater change, to participate in the traditional food system, and not rely on the food bank. The right to food is entrenched in international law but it is not being treated as such in Canada (Ad Hoc Working Group on the Right to Food, 2017). This is a long standing crisis that will not be resolved without major policy implementation. While there are healthy

eating guidelines for Canadians (Canada & Health Canada, 2019), there is no policy-driven support for individuals to purchase the food needed to meet those guidelines. The experience of negative health implications related to food insecurity are highlighted in this research, from difficulty managing chronic illness like diabetes, to stress and skipping meals to ensure children have enough to eat. The consultation and subsequent recommendations made during the Food Policy for Canada campaign put food security as a priority (Government of Canada, 2018; House of Commons, 2017). The resultant policy and action neglect to include the right to food, taking a food systems approach (Agriculture and Agri-Food Canada, 2019; Food Secure Canada, 2019). Rural areas are an important and diverse part of this country (Jordan, 2019; Lauzon et al., 2015) and as implementation begins on the Food Policy for Canada, this thesis demonstrates that rural communities must be considered.

It has been argued that a social system is needed in Canada that provides support based on an actual assessment of how much it would cost to live without food insecurity (De Schutter, 2014); the findings of this thesis supports that argument. Until real policy action is seen, a spectrum of solutions down to local charity food banks, will continue to pick up the slack, and provide for those most vulnerable of our society.

5.5 Future Research

Research on HFI in rural Canada is important. The results of this thesis underscore the need for more research with rural, food insecure populations to ensure that they have access to enough food for a healthy life.

Chapter 2 provides a conceptual model for rural HFI which can be used to guide future research.

There is a need to apply the model to different rural communities using qualitative, quantitative and spatial exploration. The interaction between different elements of the model and the extent to

which they interfere with food security status must be tested in future studies. When applied to the results of study 1, compounding stressors appear to outweigh individual and community efforts to combat food insecurity, but it is not clear to what extent each of those categories impacts HFI. Future research could use multivariate statistical analysis to determine the strength of different factors (e.g., employment, isolation, transportation, social supports) against measures of HFI. While it is known that receiving income through the social safety net is related to HFI, more could be discovered about this phenomenon in rural areas. The model and results from study 1 also encourage the development of interventions that increase resilience through human capital and social capital. Interventions that would mediate across multiple areas of the food insecurity experience should also be tested. Findings from study 1 suggest a need for more research on food environments in rural areas in Canada, this would provide context for future work, and insight into the cost of living in rural areas. Findings from study 2 reveal the need for food banks to operate, but it also highlights their shortcomings. More research is needed to determine the future of food banks, particularly in rural areas where unique, multi-use solutions work best. This study was done with patrons of the food bank who presented barriers and challenges to accessing the food bank, but more research should be done on those living with HFI in rural areas who do not access the food bank. Additional research on the concept of food banks as landscapes of care would help to improve their image as a temporary band-aid and provide impetus for their improvement until a broader solution to HFI can be found. Rural communities in Canada are diverse in their histories and culture (Jordan, 2019; Lauzon et

Rural communities in Canada are diverse in their histories and culture (Jordan, 2019; Lauzon et al., 2015) and additional case studies from unique communities across the country would reinforce and expand upon the conceptual model presented in Chapter 2. Community-based,

mixed-methods research carried out in a specified, representative sampling of rural spaces in Canada would provide a complete picture of HFI across rural Canada.

The Huron County Food Tracking Project also consisted of surveys with food bank patrons regarding food behaviour and food insecurity measures. An additional quantitative study considering the impact of vehicle ownership and family size on food insecurity in Huron County is ongoing, currently in the analysis stage. This study will provide further understanding on this topic.

Policy implications from this research included the need for an expanded social safety net that ensures food security for all. As this thesis was being completed, during the first half of 2020, the world was – and still is at the time of submitting this thesis – experiencing a global pandemic (COVID-19) which has affected all facets of life. In their COVID-19 Economic Response Plan, the Government of Canada included, for some people, access to a guaranteed income (i.e., the Canada Emergency Response Benefit (CERB)). This could be considered an inadvertent case study on the implementation of a basic income in Canada. In addition, the issue of food insecurity in Canada has been highlighted by the pandemic. Challenges with the food system threaten an already vulnerable group and the important role that emergency food support (e.g., food banks) plays in lives across the country (Government of Canada, 2020). Understanding the impact of the CERB, and the response of the emergency food system will be central in future research on food security and food banks in Canada.

5.6 Conclusion

The purpose of this research was to investigate the first-hand experiences and perspectives of those living with household food insecurity (HFI) in a rural setting. Observing the perspectives of those living with HFI is an initial step in understanding their experience and discovering ways

to mitigate HFI. This thesis provides a model for understanding the mechanisms of rural HFI. When exploring the individual stories, findings show the skills and community connection required for coping with HFI as well as it's negative impacts on physical, mental and social wellbeing. When examining the perspectives on the use of food banks in a rural area, findings provide impetus for change around practices, food provision, and the food bank system as a whole. The issue of poverty as a main driver for HFI and food bank use is highlighted across the studies. This research reveals the need for action in all levels of the socio-ecological framework, there is a need for: more individual autonomy, skills and resources for those living with HFI; communities that are inclusive, and supportive of those living with HFI; improved food banks, and other holistic, community-based responses to HFI; enhanced communication and better physical access to HFI supports; and for policy responses that result in actions with the goal of ending poverty in Canada. Through the rural stories presented in this research, we gain a heightened urgency towards ending the problem of food insecurity. It is unacceptable that anyone should have to go without food or worry where their next meal will come from. Work is already being done to put food on tables, but it is not enough.

5.7 References

- Ad Hoc Working Group on the Right to Food. (2017). Ensuring the Human Right to Food Through A Food Policy for Canada. 1–21.
- Agriculture and Agri-Food Canada. (2019). Food policy for Canada: Everyone at the table.

 Government of Canada. https://www.canada.ca/content/dam/aafcaac/documents/20200311-en.pdf
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. https://doi.org/10.1191/1478088706qp063oa
- Buck-McFadyen, E. V. (2015). Rural food insecurity: When cooking skills, homegrown food, and perseverance aren't enough to feed a family. *Canadian Journal of Public Health*, 106(3), e140–e146. https://doi.org/10.17269/CJPH.106.4837
- Canada, & Health Canada. (2019). Canada's dietary guidelines for health professionals and policy makers. http://epe.lac-bac.gc.ca/100/201/301/weekly_acquisitions_list-ef/2019/19-04/publications.gc.ca/collections/collection_2019/sc-hc/H164-231-2019-eng.pdf
- Cloke, P., May, J., & Williams, A. (2017). The geographies of food banks in the meantime.

 *Progress in Human Geography, 41(6), 703–726.

 https://doi.org/10.1177/0309132516655881
- De Schutter, O. (2014). Foreward. In G. Riches & T. Silvasti (Eds.), *First world hunger revisited: Food charity or the right to food?* (2nd ed., pp. 2012–2014). Palgrave Macmillan Limited.
- Engler-Stringer, R., & Berenbaum, S. (2005). Collective kitchens in Canada: A review of the literature. *Canadian Journal of Dietetic Practice and Research*, 66(4), 246–251. https://doi.org/10.3148/66.4.2005.246

- Food Policy Council for Kingston, Frontenac and Lennox & Addington. (2015). *A Primer on Food Security in Kingston, Frontenac, Lennox and Addington*.

 https://lennoxandaddington.civicweb.net/document/19333/Food%20Security%20White%20Paper.pdf?handle=5A79699210B54826B03BA2B116DE6CB6
- Food Secure Canada. (2019). *Policy analysis*. The Launch of the First "Food Policy for Canada Everyone at the Table." https://foodsecurecanada.org/first-national-food-policy-for-canada#analysis
- Government of Canada. (2018). What we heard: A food policy for Canada consultations. https://www.deslibris.ca/ID/10098014
- Government of Canada. (2020). *Canada Emergency Response Benefit (CERB)*. Government of Canada. https://www.canada.ca/en/services/benefits/ei/cerb-application.html
- Gundersen, C., & Ziliak, J. P. (2015). Food insecurity and health outcomes. *Health Affairs*, 34(11), 1830–1839. https://doi.org/10.1377/hlthaff.2015.0645
- House of Commons. (2017). A Food Policy for Canada: Report of the Standing Committee on Agriculture and Agri-Food (December: 42nd Parliament, 1st Session; pp. 1–52). House of Commons.
 - http://www.ourcommons.ca/content/Committee/421/AGRI/Reports/RP9324012/421_AGRI_Rpt10_PDF/421_AGRI_Rpt10-e.pdf
- Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis.

 *Qualitative Health Research, 15(9), 1277–1288.

 https://doi.org/10.1177/1049732305276687

- Jacobson, D., & Mustafa, N. (2019). Social identity map: A reflexivity tool for practicing explicit positionality in critical qualitative research. *International Journal of Qualitative Methods*, 18, 160940691987007. https://doi.org/10.1177/1609406919870075
- Jordan, B. (2019). Rural Opportunity, National Prosperity: An Economic Development Strategy for Rural Canada. Consumer Policy Research Database.

 https://www.deslibris.ca/ID/10101125
- Kurtz, H., Borron, A., Shannon, J., & Weaver, A. (2019). Community food assistance, informal social networks, and the labor of care. *Agriculture and Human Values*, *36*(3), 495–505. https://doi.org/10.1007/s10460-019-09943-0
- Lauzon, A., Bollman, R., & Ashton, B. (2015). *State of Rural Canada Report: Introduction*.

 Canadian Rural Revitalization Foundation.
- Loopstra, R., & Tarasuk, V. (2013). Perspectives on community gardens, community kitchens and the good food box program in a community-based sample of low-income Families.

 Canadian Journal of Public Health, 104(1), e55–e59.

 https://doi.org/10.1007/BF03405655
- Matern, R., Seer, S., Ozga, P., & Lalani, N. (2019). *Hunger count 2019*. Food Banks Canada. https://hungercount.foodbankscanda.ca/
- McIntyre, L., Tougas, D., Rondeau, K., & Mah, C. L. (2016). "In"-sights about food banks from a critical interpretive synthesis of the academic literature. *Agriculture and Human Values*, 33(4), 843–859. https://doi.org/10.1007/s10460-015-9674-z
- Mendly-Zambo, Z., & Raphael, D. (2019). Competing discourses of household food insecurity in Canada. *Social Policy and Society*, *18*(4), 535–554. https://doi.org/10.1017/S1474746418000428

- Middleton, G., Mehta, K., McNaughton, D., & Booth, S. (2018). The experiences and perceptions of food banks amongst users in high-income countries: An international scoping review. *Appetite*, *120*, 698–708. https://doi.org/10.1016/j.appet.2017.10.029
- Milligan, C., & Wiles, J. (2010). Landscapes of care. *Progress in Human Geography*, *34*(6), 736–754. https://doi.org/10.1177/0309132510364556
- Riches, G. (1985). Feeding Canada's poor: The rise of food banks and the collapse of the public safety net. *2nd Conference on Provincial Social Welfare Policy*, 1–20.
- Riches, G., & Tarasuk, V. (2014). Canada: Thirty years of food charity and public policy neglect.

 In G. Riches & T. Silvasti (Eds.), *First world hunger revisited: Food charity or the right to food?* (2nd ed., pp. 42–56). Palgrave Macmillan Limited.

 https://doi.org/10.1057/9781137298737_4
- Roncarolo, F., Adam, C., Bisset, S., & Potvin, L. (2015). Traditional and alternative community food security interventions in Montréal, Québec: Different practices, different people.

 **Journal of Community Health, 40(2), 199–207. https://doi.org/10.1007/s10900-014-9917-8
- Roncarolo, F., Bisset, S., & Potvin, L. (2016). Short-Term effects of traditional and alternative community interventions to address food insecurity. *PLOS ONE*, *11*(3), e0150250. https://doi.org/10.1371/journal.pone.0150250
- Ryerson University. (2018). *Guiding principles*. Centre for Studies in Food Security. https://www.ryerson.ca/foodsecurity/
- Story, M., Kaphingst, K. M., Robinson-O'Brien, R., & Glanz, K. (2008). Creating healthy food and eating environments: Policy and environmental approaches. *Annual Review of Public Health*, 29(1), 253–272. https://doi.org/10.1146/annurev.publhealth.29.020907.090926

Toronto Food Policy Council. (n.d.). Changing Toronto's Foodscape. http://tfpc.to/to-food-research

Appendices

Appendix A Research ethics approval form for use of secondary data



Date: 14 January 2020To: Dr. Jason GillilandProject ID: 112152

Study Title: Tracking, Assessing and Improving the Distribution of Food Aid in Rural Huron County

Application Type: Continuing Ethics Review (CER) Form

Review Type: Delegated

Meeting Date: 28/Jan/2020

Date Approval Issued: 14/Jan/2020

REB Approval Expiry Date: 21/Jan/2021

Dear Dr. Jason Gilliland,

The Western University Non-Medical Research Ethics Board has reviewed this application. This study, including all currently approved documents, has been reapproved until the expiry date noted above.

REB members involved in the research project do not participate in the review, discussion or decision.

The Western University NMREB operates in compliance with the Tri-Council Policy Statement Ethical Conduct for Research Involving Humans (TCPS2), the Ontario Personal Health Information Protection Act (PHIPA, 2004), and the applicable laws and regulations of Ontario. Members of the NMREB who are named as Investigators in research studies do not participate in discussions related to, nor vote on such studies when they are presented to the REB. The NMREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 00000941.

Please do not hesitate to contact us if you have any questions.

Sincerely.

Daniel Wyzynski, Research Ethics Coordinator, on behalf of Prof. Randal Graham, NMREB Chair

Note: This correspondence includes an electronic signature (validation and approval via an online system that is compliant with all regulations).

Appendix B Food Tracking Project Focus Group Guide

Set up:

- Food available before and during
- Sitting at a table (kitchen table approach)

Focus Group Outline (60 minutes):

- Introduction: Review LOI, thank you, and confidentiality statement (right to not answer or back at out at any time...)
- Round table introductions: First Name & how often do you use a food banks
- Definition of Food Security
- Major themes described (the 5 A's)

Questions:

- 1. How are you meeting your needs in relation to food security (or not)?
 - o Enough, nutritious/healthy, things you like, appropriate (culturally appropriate)?
- 2. How does food insecurity impact your life?
 - o Health?
 - o Social life and family relationships (how you connect)?
- 3. What is the role played by the food bank and other agencies in meeting your food security needs?
 - o How long have you been going to food banks?
- 4. What other things could the Food Bank do to help meet your needs?
 - o What kind of changes have you seen since you've been using food banks?
 - o What kind of changes would you like to see?
- 5. Is there anything else you would like to tell us?
 - Prompt based on rest of responses
 - o Poverty, larger food system...
 - What do you think we should be asking you? What are you not currently being asked (by us or others)?

Curriculum Vitae

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Post- Laurentian University, Algoma College

Secondary Sault Ste. Marie, Ontario, Canada Education and B.A., Geography with honors

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Conference

Poster Presentation

Presentations:

Wilson, K., Piaskoski, A., & Gilliland, J.A. Understanding Barriers and Enablers Influencing Children's Active School

Travel.

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Western University, June 26, 2017

Oral Presentation

Wilson, K., Coen, S., Piaskoski, A., & Gilliland, J.A. Mapping Children's Perspectives on Neighbourhood Barriers and Enablers to Active School Travel.

GIS in Education and Research Conference University of Toronto, October 11, 2017

Oral Presentation

Piaskoski, A., Zielman, M. E., Deichert, M., Dunbar, J., Hanington, P., Clark, A.F., & Gilliland, J.A.. Food Aid and Food Security in a Rural Setting: Does Geography Matter?

Canadian Assocation of Geographers/International Geographers Union Quebece City, QE, August 2018

Oral Presentation

Piaskoski, A., Zielman, M. E., Deichert, M., Dunbar, J., Hanington, P., Clark, A.F., & Gilliland, J.A. Tracking, Assessing, and Improving the Distribution of Food Aid in a Rural County.

Knowledge Transfer & Exchange Day with the Huron, Perth & Southwest Health Unit

Stratford, ON, October 2018

Publications:

:

Wilson, K., Coen, S.E., Piaskoski, A. and Gilliland, J.A. (2019), Children's perspectives on neighbourhood barriers and enablers to active school travel: A participatory mapping study. The Canadian Geographer / Le Géographe canadien, 63: 112-128. doi:10.1111/cag.12488

Piaskoski, A., Reilly, K., & Gilliland, J. (2020). A conceptual model of rural household food insecurity: A qualitative systematic review and content analysis. Family & Community Health, In Press.