

A STUDY ON FOOD SECURITY

AMONG SINGLE PARENTS
AND ELDERLY POPULATION
IN ST. JOHN'S

ATANU SARKAR, MARTHA TRAVERSO-YEPEZ,
VEERESH GADAG & KELLY HUNTER
MEMORIAL UNIVERSITY
DECEMBER 2015

A Study on Food Security among Single Parents and Elderly Population in St. John's

FINAL REPORT



Prepared by
Dr. Atanu Sarkar, Dr. Martha Traverso-Yepez, Prof. Veeresh Gadag and Ms. Kelly Hunter

A Study on Food Security among Single Parents and Elderly Population in St. John's

Dr. Atanu Sarkar¹, Dr. Martha Traverso-Yeppez¹, Prof. Veeresh Gadag¹ and Ms. Kelly Hunter¹

¹Division of Community Health and Humanities, Faculty of Medicine, Memorial University of Newfoundland, St John's, NL, Canada, A1B 3V6

Acknowledgements

We would like to thank the Harris Centre, Memorial University to provide financial support (Applied Research Fund). We express sincere gratitude to the key informants, and all the participants for unconditional support. We also thank Yvette Walton (Executive Director, Single Parents Association of Newfoundland), Kelly Heiz (Seniors Resource Centre), and Kristie Jameson (Executive Director, Food Security Network of Newfoundland and Labrador) for technical support.

Contents may not be reproduced for commercial purposes, but any other reproduction, with acknowledgments, is encouraged. Please credit the source as follows:

Sarkar A, Traverso M, Gadag V, Hunter K (2015). *A Study on Food Security among Single Parents and Elderly Population in St. John's*. Memorial University of Newfoundland, St John's, NL, Canada.

Cover design and photo credit: Dr. Atanu Sarkar (Theme: *Food insecurity – hope and reality*)

For more information contact:

Atanu Sarkar, #2851 Division of Community Health and Humanities, Faculty of Medicine, Health Sciences Centre, Memorial University of Newfoundland, St John's, NL, Canada, A1B 3V6. Tel: (709) 864-4920, Email: atanu.sarkar@med.mun.ca

Table of contents

| | Page |
|----------------------------------|------|
| Executive Summary | 4 |
| Introduction | 5 |
| Objective | 6 |
| Relevance of the study | 6 |
| Regional policy | 7 |
| Methods | 8 |
| Results | 9 |
| <i>KI Interviews</i> | 9 |
| <i>Quantitative</i> | 14 |
| <i>Socio-demographics</i> | 14 |
| <i>Household meal practices</i> | 15 |
| <i>Level of food awareness</i> | 18 |
| <i>Food purchasing practices</i> | 23 |
| Qualitative data | 25 |
| Conclusion | 28 |
| References | 29 |

Executive Summary

According to the Food and Agriculture Organization, food security is defined as “the idea that all people at all times have access (including physical, social, and economic access) to sufficient, safe, and nutritious food necessary to lead active and healthy lives.” While more than one-fifth of NL’s population does not have enough disposable income to buy the necessities like food, one in every twenty uses food banks on a regular basis. Around 60% of people who use food banks in the province are women, and the majority of the recipients are on social assistance. The senior population is another group likely to suffer from food insecurity. Many of these seniors live alone and often face multiple complex challenges in the ability to purchase and prepare healthy food.

Despite this precarious situation, in comparison to other provinces, there is scarce evidence on the complex dynamics of food insecurity affecting these vulnerable populations and hinders the development and implementation of appropriate and efficient strategies. We intended to study the ways, and extent food insecurity affects food-related practices among the elderly population and single parents living in St John’s, NL.

We used the mixed method approach, including the key informant (KI) interviews, followed by face-to-face survey interviews with a representative sample of 50 single parents and 48 seniors (over the age of 65 years). We first conducted KI interviews of government officials and service providers who deal with such vulnerable population. Following this, we conducted a survey. The survey questions were based on the validated questionnaire for the general population, developed by the Statistics Canada, during their latest Canadian Community Health Survey in 2012. In order to reach out to the participants, we partnered with Single Parents Association of Newfoundland and Senior Resource Centre NL and followed convenient sampling.

The KI interviews and the additional comments from the survey respondents reveal that there is a growing trend in the consumption of processed/semi-processed or take-out foods, particularly among the single parents. Cooking skills and practices have markedly decreased, particularly among the single parents and further motivates to buy processed/semi-processed or take-out foods. Single parents use food banks more than the seniors. For seniors, mobility and physical disability are the major issues for a regular visit to groceries and cooking. Quantitative analysis: Income wise single parents are in more disadvantageous position than seniors. While 80% of single parents earn less than \$25,000/year, only 4% of them earn more than \$40,000/year. For seniors, the proportions of these income brackets are 50% and 22% respectively. Single parents mostly (80%) relied upon government sponsored income support and wages/salaries (35%). The majority of the elderly persons depended on old age security and guaranteed income support (71%) and job-related retirement pensions (48%). Regular eating of healthy food was more among the elderly population than single parents.

Our study shows that single parents and seniors are vulnerable to food security, however, the former population group is more vulnerable than the other. The strong association between food insecurity and low educational status (not with income) indicates the importance of awareness generation. Existing food guide can be further improvised with more inputs on quick, easy, affordable but healthy cooking recipe. The study findings strongly advocate the scaling up of social safety nets with more promotion of healthy foods and reaching out to the vulnerable communities with more practical health promotion message.

Introduction

According to Health Canada (2007-08), Newfoundland and Labrador ranked 6th in the proportion to household food insecurity and the figure (10%) is above the national average (8%).¹ However, the latest data (2012) show that the proportion of food insecurity has further increased to 13.4%.² Food insecurity is defined as “the inability to acquire or consume an adequate diet quality or sufficient quantity of food in socially acceptable ways, or the uncertainty that one will be able to do so”.³

As food is one of the foundations of sustainable health, food insecure households tend to buy cheaper, high-calorie, low nutrient-dense foods out of necessity (rather than choice) over more expensive healthy food choices, such as fruits and vegetables.^{4,5,6} Consequently, there is a harmful conditioning trend to consume junk food and follow poor eating habits among low-income populations. Higher proportions of children living in low-income families become overweight and obese.^{6,7,8}

According to the federal government's Market Basket Measure, 23% of Newfoundlanders did not have enough disposable income to buy the necessities of food, shelter, clothing, and transportation. In 2001, Statistics Canada reported that people relying on social assistance were at a greater risk of experiencing food insecurity. A national level survey showed that community outreach programs between 1997 and 2007 had little impacts on coping strategies utilized by households facing child hunger and failed to reach those families. Rather there was an increased reliance on reducing household food variety, an internal coping mechanism to manage child hunger.⁸ Food banks tend to be the primary response to food insecurity. Newfoundland and Labrador has the highest percentage of the population (5%) using food banks. Additionally, 38% and 58% of people who use food banks in the province are children and women respectively, and the majority of recipients are on social assistance.⁹ However, food bank statistics is a poor indicator of food insecurity, as not all food insecure households are included.

While more than one-fifth of the province's population does not have enough disposable income to buy the necessities like food, only one in every twenty uses food banks on a regular basis.¹ Such community outreach programs have very limited impact on household coping strategies.

National figures show that almost half of Canadian children living in poverty are from single-parent families, most of which are lone-mother households. Furthermore, one-third of lone-mother households has experienced food insecurity. Within these households, lone mothers often skip meals or eat less when food is scarce. Furthermore, several studies indicate that higher proportions of children living in low-income families are overweight and obese.^{1,7,8}

The senior population is another group likely to suffer poor nutritional outcomes. In Newfoundland and Labrador, approximately one in seven individuals are age 65 and older and by 2026 seniors will be more than one-fourth of the total population. Many of these seniors live alone and often face multiple complex challenges in the ability to purchase and prepare healthy food.¹⁰

A significant portion of this population is struggling to secure regular healthy meals; this is considered a result of people's socio-cultural conditions and limitations in social policies to guarantee the household resources to purchase nutritious food.³ Also, the province faces considerable challenges in maintaining a consistent and reliable food supply, owing to low local production and dependency on imported foods, resulting in higher costs.^{9,11,12}

Despite this precarious situation, in comparison to other provinces, there is scarce evidence on the complex dynamics of food insecurity affecting the vulnerable populations;

particularly single parents and their children and older citizens living alone. This lack of information hinders the development and implementation of appropriate and effective strategies to address this complex issue.

This study explored the ways, and extent food insecurity affects food-related practices among the identified vulnerable populations of seniors and single parents living in St. John's, NL. Furthermore, we looked at how participants and stakeholders feel about the range of potential alternatives designed to ameliorate the impact of household food insecurity.

Participants were limited to those within the city of St. John's, because the city covers more than one-fifth of the province's total population. Despite the fact that the city has been experiencing rapid economic growth over the last decade, the existence of relative poverty and food insecurity in significant pockets of the population is well known.

Objective

- To study the ways and extent food insecurity affects food-related practices among the elderly population and single parents living in St John's, NL.

Relevance of the study

In order to support their family, many single parents have multiple jobs or jobs with long hours, resulting in limited attention to their children's diets. Lack of available free time, in addition to low literacy levels, limit them from accessing information about cheap yet healthy and convenient diet alternatives.^{13,14,15} Apart from low literacy levels and poor living conditions, existing physical disabilities are the major hindrances in promoting healthy living initiatives, especially among seniors. Often, living alone discourages seniors to cook healthy nutritious foods on a regular basis. Many single parents and the elderly hesitate to visit food banks, finding it too humiliating, and instead they rely on cheap, unhealthy food from nearby grocery or convenience stores.^{16,17} As the price of food fluctuates with the season and the local harvesting; the consumption pattern of food among the vulnerable population correspondingly varies.¹¹

For both vulnerable groups, the concept of food insecurity is closely related to these individuals' ill health and their hindered capacity for social integration. For example, the early years of childhood are a crucial time for intellectual and social development, and an appropriate nutritional intake plays a significant role in this process.^{1,5,7,8} Also, food-related habits and preferences developed in early childhood can have a significant impact on eating habits in future years. Malnourished children have decreased alertness and are less able to perform school tasks.⁸ Furthermore, more than one-third of Newfoundland and Labrador children between the ages of 2 and 17 are overweight or obese, and being overweight increases the chances of developing high blood pressure, high blood cholesterol, diabetes and heart disease.⁴ This province is already known to have a population with higher rates of diabetes, heart attacks, and strokes and certain types of cancers than the Canadian average.^{10,12} By the same token, there is a need to understand the extent to which the senior population lacks proper resources to enjoy healthy meals.

A better understanding of food insecurity and food-related practices among these vulnerable populations is essential in the estimation of the health risk in the targeted population.⁶ In the long run, the reduction of disease burden through the improvement of food security will significantly reduce health costs and benefit the province's economy and labor markets.

Regional Policy

In 2011, the Government of Newfoundland and Labrador focused on three primary elements of Poverty Reduction Strategy: (1) the prevention of poverty; (2) the alleviation of poverty; and (3) the liberation from poverty. Part of this strategy is focused on working with single parent households to facilitate the escape from poverty and achievement of personal self-reliance.¹⁸ Furthermore, through the Provincial Wellness Plan, headed by the Department of Health and Community Services, the province has launched *Eating Healthier in Newfoundland & Labrador: A Provincial Food and Nutrition Framework and Action Plan*, which outlines the vision "all residents of Newfoundland and Labrador will have reasonable access to an adequate, nutritious and safe food supply and a supportive, comprehensive network of food and nutrition services." This framework focuses on four key directions: (1) reinforcing healthy eating and physical activity practices; (2) supporting vulnerable populations; (3) enhancing the availability of safe, high quality food, supporting healthy eating; and (4) support food and nutrition research. The action plan also has 3 Priority Areas: (1) Healthy Living for Children and Youth - Schools; (2) Healthy Living for Children aged 1-5 years, and (3) Healthy Living for Seniors. This framework pays particular attention to achieving health equity for vulnerable populations in Newfoundland and Labrador, including lone-parent in low-income households, and seniors.¹⁰

Therefore, we need additional research to get an accurate picture of the extent and determinants of food insufficiency and food insecurity among vulnerable populations, including older citizens living alone and single parent families.

In 2000, 26% of NL children were living in poverty, up from 21% in 1991. National level figures show that almost half of the Canadian children living in poverty were from single parent families. Single-parent families are primarily headed by women, and 32% of lone-mother households have experienced food insecurity. National Population Health Survey (NPHS) shows that males are less food insecure than females.⁴ A recent study of low-income single mothers in Atlantic Canada found that 34% of lone mothers skipped meals or ate less when food was scarce.¹⁴ Data from the National Longitudinal Survey of Children and Youth indicated that higher proportions of children living in low-income families were overweight and obese and that the proportion of overweight and obese children decreased as family income increased. Being overweight increases the chances of developing high blood pressure, high blood cholesterol, diabetes and heart disease. In Newfoundland and Labrador 36% of children between the ages of 2 and 17 are overweight or obese.¹² Furthermore, Newfoundlanders and Labradorians are already known to have higher rates of diabetes, heart attacks, and strokes and some forms of cancer than the Canadian average.

In Newfoundland and Labrador, adults aged 65 and older make up around 15% of the population, and it is predicted that this will increase to 26% by 2026. Many of these seniors live alone and face considerable challenges regularly accessing healthy food. Various national level data show that these vulnerable seniors have educational challenges, such as low literacy level, visual limitation and hearing impairment, which need to be considered when developing and promoting healthy living initiatives. Also, financial barriers create food insecurity for many seniors, resulting in poor nutritional intake.

Additionally, Newfoundland and Labrador faces considerable challenges in maintaining a consistent and reliable food supply. A lack of locally produced food has resulted in the province's dependence on imported foods and their high cost. Health Canada's National Nutritious Food Basket (NNFB) 2010 report shows the weekly cost of food in St John's is \$171.04 for a family of 4, which is higher than several major Canadian cities. However, NNFB

cost is lower than that purchased by the average person and may not adequately reflect individual eating patterns, or factors such as special diets, snacks, or other cultural foods. Moreover, an NNFB does not constitute a recommended diet but is a list of foods, which can be priced to estimate the cost of healthy eating for different age and gender groups. A research project supported by the Harris Centre showed that, in the province, community food security is in serious jeopardy, as 90% of its fresh fruits and vegetables are currently imported. Eventually, with such a limited supply of indigenous foods, people of the province often turn to other more readily available options, often unhealthy, and are more likely to develop diet-related chronic diseases, such as cancer, cardiovascular disease, and diabetes, all of which have rates well above the national average.¹¹

Aligned with the above concerns, the proposed research project aimed to collect primary data on the status of food security among seniors and lone-parent, low-income households in St. John's that could inform the enhancement and successful implementation of these provincial policies. The study addresses the existing knowledge gap and can help inform the NL government on the development and implementation of preventive practices and targeted interventions towards the vulnerable population. The research process will facilitate the meaningful transfer of the findings to the appropriate government departments and agencies by integrating knowledge mobilization in the proposed project activities. Our research also fits with Memorial University's vision of being a leader and an engaged partner in finding solutions for community issues.

Methods

Ethics approval for this project was obtained from the Health Research Ethics Board of Newfoundland and Labrador.

Firstly, we carried out four Key Informant (KI) interviews with persons working within government institutions and community-based organizations who actively work with the target populations or within the realm of food security (Interview guideline – Annex A. KI interviews helped to understand the perspectives of service providers and policy makers.

Secondly, primary data was collected by conducting face-to-face survey interviews with seniors (above 65 years of age) and single parents (both male and female) living in St. John's, NL. We had support from Food Security Network, Single Parents Association of NL, and Seniors Resource Centre in the recruitment of the target population. Flyers and recruitment letters were distributed among their clients. We also advertised the study through informative flyers that were posted at soup kitchens, food banks, and community centers around the city.

Considering the sensitivity of the topic, we depended on the goodwill and availability of participants. Consequently, we interviewed anyone self-identified as a single parent or senior and willing to participate in the study. In token of appreciation, we presented each participant with a \$20 Sobeys Gift Card. We defined a sample of 100 participants, based on the following assumption. According to Statistics Canada, the total population of the city of St. John's (2011 census) is 106,000. As previously mentioned, around 10% of the people in the province suffers from food insecurity.¹ Therefore, approximately 10,000 persons living in the city belong to this category. Although we did not have an accurate breakdown of the food insecure population (such as single parents, seniors, homeless, and others), we assumed that the majority of them fall into the categories of single parents and elderly citizens living alone. Hence, our planned 100 participants covered more than 1% of the vulnerable population. Considering our financial capacity, we believed that our extensive survey of even 1% of the vulnerable population would

provide an adequate insight of the issue and fulfill our objective. Our final sample size was 97, including 50 single parents and 47 seniors.

The questionnaire used in the interview was comprised of *standardized* questions from the Canadian Community Health Survey. These structured questions offered the participants a set of responses from which to choose. There were a few open questions for participants to express their opinions about the specific topic in the survey questionnaire. Further, because the surveys were conducted face-to-face, the research assistant wrote down any additional comments made by the participants, which was logged as qualitative data. The main explored topics were; a) household practices related to food preferences, meals per day, and meal preparation; b) level of food awareness and consumption practices; and c) food purchasing practices, where food sufficiency is explored. Socio-demographic variables included gender, age range, education, ethnicity, and major sources of income.

Results

Key Informant Interviews

Four key informant interviews were conducted before the data collection process to better frame the survey questions and to ensure that the area of focus was appropriate to the local context. The key informants were professionals working in the realm of food security, either working directly with the public or in managerial positions in community organizations. These professionals were well aware of the specific challenges being faced by seniors and single parents regarding accessing quality, nutritious foods; thus, they were able to provide feedback on current issues within the community.

When asked about the challenges that seniors and single parents face in accessing quality, nutritious foods, all key informants referenced the high price of food in Newfoundland, which can be difficult to afford particularly for those on fixed incomes, who have competing budget priorities. Talking about single parents, one KI expressed:

“A major issue for single parents is insufficient money to buy quality food and lack of transportation. Many of the single parents, as single income earners, don’t maintain a car. And therefore, it is difficult for them to get beyond the corner store sometimes. And the lack of money is because when you are working poor or if you’re on welfare – as many single parents are – the only flexible part of your income is your food budget. The rent has to be paid, the heat and light has to be paid, the phone has to be paid.”

This participant mentioned that the only alternative for these parents was to buy cheaper, calorie-dense, processed food. They sacrifice quality food, such as fruits, vegetables, and better quality meats, “because it’s the only flexible part of their income.” In addition to transportation, which was mentioned by all four participants as being a significant barrier faced by both single parents and seniors, the key informants discussed the lack of cooking skills, awareness about nutrition information and healthy eating, and/or sticking to the traditional NL cooking that is not especially healthy:

“Many of them do not have a great deal of knowledge about how to get best nutritional value for the food dollar. And quite often, perhaps [they’ll have] a limited traditional background in cooking. So they’ll tend to cook fats or things like that that aren’t

recommended. They rely on traditional recipes that they learned in their homes that could involve more salt and more sugar than is deemed to be healthy.”

“[it’s] lack of education for cooking, for using a variety of foods, for introducing healthy things like herbs and so on, which can affect your health. Many of them, they don’t have the education. And the Newfoundland diet, traditionally, as you know, is quite often heavy on salt and sugars and fats. And so that can be a problem for proper food consumption. These things are also fattening and we’re all aware that in Newfoundland we’re literally the heaviest province in the country. So there’s a great deal of weight problems, which could be directly related to not having both education in what is healthy food and also the money to buy quality food, because cheaper foods tend to be heavier in things like fat, salt, and sugar.”

In addition to the lack of cooking skills, time constraints were specifically mentioned concerning single parents. One participant emphasized that “foods that are quicker to make tend to be unhealthy and heavily processed – these are the types of foods that single parents may gravitate toward because of time constraints...” A participant commented how parents end up buying processed food or consuming from fast-food restaurants:

“I think with single parents... time... might be more of an issue. I mean money is obviously an issue [...] [the] ideal would be what we would consider basic cooking or cooking from minimally processed ingredients, but the limitation would be [skills and] the time. So therefore the option would be either to buy things that don’t quite meet those [healthy] criteria – high processed type things – or to eat out a lot, which is talking really high end restaurants or not, even fast-food restaurants...”

A couple of KIs who spoke about the traditional diet in NL, also spoke about how hard it is to change eating habits and the relevance of exposing people to healthier alternatives:

“So [it’s] lack of exposure, lack of education, lack of information. And it’s the motivation to make change. Because we know that health habits are difficult to change once people are adults. So when we teach here – with our food bank, for example – we frequently gather recipes that we hand out with the food hampers. Because we will get donations of say eggplant. And we’ll get people say, ‘What’s that purple thing, I don’t want that.’ Well it’s [an] eggplant it’s very healthy. ‘What do you do, how do you cook it?’ So over the years we find recipes for things like that to put it in to help them know how to broaden their choice of food and the preparation. So it’s traditional cooking, traditional knowledge of foods, it’s very difficult to change.”

Concerning embedded habits, a couple of participants spoke about the fact that once people get habituated to a specific food, i.e. junk food; they may have more money, but they will not bother on buying the healthy alternative. Although having more money, some people would spend on healthy food, some others will not.

With regard to seniors, KIs considered that in some cases there may be money issues, but there are other limitations, such as mobility and fine motor skills at old age to prepare food and have proper food consumption. They also mentioned the possibility of physiological issues

(being unable to swallow) and of psychological issues (preparing food just for them or not having the motivation to eat for health issues):

“As far as seniors go, I know there’s this sort of common experience among seniors where because you’re typically living alone, you do not have the desire or drive to be preparing healthy meals, which then lead you to being more dependent on heavier processed foods and also again coming back to affordability, you end up eating more probably cheaper and again processed foods.”

This KI reported that although there are seniors living alone that are healthy and able to take care of themselves, for others the case is that they cannot afford to move to a home:

“I think you’re getting a bigger group of seniors now who just cannot afford that next stage. So they’re forcing themselves to stay at home, because they can’t afford anything more. And if that’s the case, then I think you’re going to get those people more and more and more are going to be less able to handle it. Because there’s such a jump before you go to that institutionalized stage nowadays because you’ve got to pay for it yourself. [...] I don’t think people realize [it]. I lived through it with my father; my friends are living through it with their parents right now.”

“In regards to seniors, regarding proper food consumption, I think sometimes for seniors their lack of independence is an issue too - lack of independence and mobility. So I don’t think it’s as clear cut. I think yes they have limited money and therefore I’d say they can’t always buy what they want, they may not have the skills – fine-motor skills sometimes at that age to actually prepare [food]. But I think it’s complicated with seniors. I think sometimes it would be too – depending on whether they’re institutionalized or not – whether they are motivated to eat. Those types of things I think would be a practical issue in terms of dietary intake of seniors. I didn’t mention physiological issue... And being able to swallow and being on limited diets and those types of things. And meds – they’re on so many meds [and] that interacts so much. So yes, I think cost is an issue, accessibility is an issue, but I think it gets really, really complicated with these other factors as well.”

Concerning how single parents or seniors cope with these situations, food banks were indicated as being one of the main ways that seniors and single parents deal with issues around food insecurity. However, as a couple of KIs point out, food banks are very limited in the extent to which they can ameliorate the situation. They only provide temporary relief from food insecurity, without getting at underlying issues of poverty and inequalities. Further, food banks rely on donations from the public and from corporations, thus, the majority of the food available is non-perishable, highly processed goods:

“Our food bank has over 575 families registered. And they’re eligible at any food bank in the region for one hamper a month. So that’s how they extend their low food dollar. However, the food bank does not have control over the quality of food, other than making sure we don’t give out outdated foods and poison people. But we can only give out what we get from Community Food Sharing or anyone who does a food drive. So again, it

tends to be canned goods, boxed goods, tinned goods, rich in sugary syrups and salty – vegetables like tinned peas and that sort of stuff. But the way they cope, because of the lack of money, they need to put food on the table and fill bellies.... And we're a measure of that. We have over 575 people registered. We probably give out around 225-250 hampers a month, because people who are registered don't always use it every month, especially when they're working."

It is clear in the KI's interviews that for them the food bank is usually an emergency measure, which they are willing to spare if they could, as users do not have any control of what they would receive. Many people do not use food banks regularly as their sole source of food; they use them in times of need and to supplement what they can get for themselves, so they would not necessarily have to live off only Kraft Dinner for a month. Another important consideration is that shame and stigma attached to the use of food banks and, for that reason, some parents – a participant explained – would prefer to go hungry than go to the food bank.

"There is a certain amount of shame and stigma that people associate with receiving subsidies of this nature....Need to focus on improving inequities and alleviating poverty. Providing people with greater incomes will not only give them more resources to access healthy foods, but it will help diminish stress and mental health issues, allowing them to make healthier choices."

Other community-based initiatives were discussed by most of the key informants, particularly regarding their ability to educate the public on nutrition information and healthy eating. Examples of community-based programs include nutrition support groups, community kitchens, bulk buying programs, etc.

"I mean there's many programs that are happening in places across the province and throughout St. John's as well. Like community kitchen programs are a great way to build those skills, both the cooking skills and the budgeting skills. And we've seen some pretty good success from those types of programs. So I think coping with that and building those skills would be reaching out to and participating in programming, whether it's through a community centre or a family resource centre. But really [it's about] reaching out to those programs that do offer those kinds of skill building opportunities. And I think the same can be said for affordability of food as well. Like reaching out and becoming a part of programs like bulk buy clubs. That's another initiative that can increase access to healthy foods for families."

Although the KIs recognized the potential that these programs have in improving food security in the community, they are aware of the challenges of implementing such initiatives, such as attracting participants: "in every community the approach for promoting a particular initiative – in order to do it effectively – it's always different depending on the target that you're trying to reach and where those people go and what they read and what they listen to." The reliance on limited government funding was also mentioned: "it depends on what you mean by 'sustainable.' They are programs where for them to continue they would need to continue receiving funding from the province. Alternatively, other business partners to sponsor those programs."

Finally, when asked what further steps should be taken by the government and civil society, two of the key informants spoke to focusing on addressing the underlying issues of inequalities by promoting poverty reduction policies and campaigns: “People need to have an adequate level of income to be able to afford healthy foods. This is especially important because of the rising costs of living and rising food costs.” Another participant asserted that there is an ongoing need to explore policy issues that relate to food insecurity:

“...there’s definitely ongoing need for us to be exploring the policy issues that relate to food insecurity in order to develop policies and programming that will ensure – to try to prevent people from being in the situations that they are currently in now. Yeah, the Poverty Reduction Strategy – and in this province we have seen some success from that. So Poverty Reduction Strategy is one – to ensure that continues on and continues to explore other policy or program needs in order to address the underlying issues.”

This contrasted with the responses of the other two key informants, who answered in a more short-term context, with alternatives, such as promoting more local hunting/fishing that has often solved food insecurity issues in rural areas (make it smaller pls):

“I think you see it more in Newfoundland than in other places – is the use of indigenous foods. And you do see that much more here than you do in other places. [...] Yeah, like moose and caribou – you still see lots of that. It saves us a fortune. And seniors really like that, because that’s what they were born and raised with. But sometimes it’s harder to get it than it was twenty years ago. [...] I think that’s what they’d want to do, I think I would love to see it, it would be cheaper for them, it would be better for them. And in rural Newfoundland they can still get [it] – now lots of local families still supply it – I mean we have lots of moose, lots of caribou, whatever. And I’m sure lots of Newfoundlanders do, but when it comes to seniors, if they don’t have the family connections, and I don’t think they have that as much – well I’m sure lots of people do, but it’s harder to access those things, like good family connections.”

Another alternative mentioned to enhance food security was to promote more accurate nutritional information, to improve awareness about these issues, for both seniors and single parents:

“there’s so much nutrition misinformation. There’s so many people giving them pieces of information and most of these stories, these things that they should be buying, like gluten diets, people [believe] this. It’s costing them a lot of money. And you can’t blame people who are sending the messages, because they’re not that educated themselves; they don’t know. I don’t think anyone intentionally tries to tell a senior or a senior person or a single parent bad information about what you should eat. I just don’t think people understand these things.”

It was especially encouraged to raise awareness about healthy eating among food bank donors, so people would donate healthier options at food banks. Additionally important is to promote community programs that build cooking and gardening skills and promote local food production and local food bulk buying programs.

Quantitative

These data are essentially based on survey questionnaire. In the following tables, the percentages are mentioned in parentheses.

Socio-demographics

Of the 98 participants, 50 were single parents, while the remaining 48 were classified as seniors. The overwhelming majority of respondents were female, with only 11 participants being male (three single parents and six seniors). Out of 48 seniors, 25 lived alone. Age and ethnicity backgrounds of the participants are shown in Tables 1 and 2.

Table 1: Age distribution

| Age group | Single Parent | Elderly person |
|-----------|---------------|----------------|
| <25 | 3 (6) | 0 (0) |
| 26-35 | 22 (45) | 0 (0) |
| 36-45 | 15 (31) | 0 (0) |
| 46-55 | 7 (14) | 0 (0) |
| 56-65 | 2 (4) | 0 (0) |
| 66-75 | 0 (0) | 19 (41) |
| 76-85 | 0 (0) | 24 (53) |
| >86 | 0 (0) | 3 (7) |

Table 2: Ethnic background

| Ethnicity | Single Parent | Elderly person |
|------------------|---------------|----------------|
| Caucasian | 43 (94) | 43 (98) |
| Aboriginal | 2 (4) | 0 (0) |
| South Asian | 0 (0) | 1 (2) |
| African Canadian | 1 (2) | 0 (0) |

Within this sample of participants, the single parents were evidently in more stressful financial situations compared to the group of seniors. 80% of single parents had household incomes of less than \$25,000, compared to 50% of the seniors (Table 3). This difference in income levels is reflected throughout the survey responses, where the single parents stressed the impact that the high cost of food and limited budgets has on their food practices, while seniors discussed a wider range of issues, including mobility, lack of transportation, lack of awareness, and limited access to locally grown goods.

Table 3: Range of total income received by all household members

| | Single Parent | Elderly person | Total |
|-----------------------|---------------|----------------|----------|
| Less than \$25,000 | 39 (80) | 23 (50) | 62 (65) |
| \$25,000 - \$40,000 | 7 (14) | 13 (28) | 20 (21) |
| Greater than \$40,000 | 2 (4) | 10 (22) | 12 (13) |
| Don't know | 1 (2) | 0 (0) | 1 (1) |
| Total | 49 (100) | 46 (100) | 95 (100) |

When looking at the sources of income, the single parents received their household income through income support (e.g. social assistance, child support, employment insurance, etc.) than they did through wages and salaries (Table 4). Meanwhile, seniors were more likely to gain

income from Guaranteed Income Supplement and Old Age Security, compared to income support or through wages or salaries. When answering the questions on income, both single parent and elderly participants discussed their discomfort with being on a fixed income, particularly when the cost of living has been increasingly dramatically in the province over the past several years.

Table 4: Major sources of total income in the past 12 months

| | Single Parent | Elderly person | Total |
|---|---------------|----------------|---------|
| Wages and salaries | 17 (35) | 10 (21) | 27 (28) |
| Income from self-employment | 4 (8) | 4 (8) | 8 (8) |
| Job-related retirement pensions | 0 (0) | 23 (48) | 23 (24) |
| Old Age Security and Guaranteed Income Supplement | 0 (0) | 34 (71) | 34 (35) |
| Income support (social assistance, child support, employment insurance) | 39 (80) | 10 (21) | 49 (51) |

29% of single parents had not completed their high school education, with 20% having graduated from high school, and the remaining 51% are either university or trade school graduates or have completed some university (Table 5). On the other hand, 19% of seniors had not completed high school, 14% had high school education, and the remaining 67% had, at least, some post-secondary education. The higher education levels among the seniors may account for the higher income levels within this group compared to the single parents.

Table 5: Highest educational qualification (certificate, diploma, or degree) of the participants

| | Single Parent | Elderly person | Total |
|------------------------|---------------|----------------|----------|
| None | 1 (2) | 0 (0) | 1 (1) |
| Elementary/Junior high | 1 (2) | 5 (10) | 6 (6) |
| Some high school | 12 (25) | 4 (8) | 16 (17) |
| High school graduate | 10 (20) | 7 (15) | 17 (18) |
| Some university | 5 (10) | 3 (6) | 8 (8) |
| University graduate | 5 (10) | 11 (23) | 16 (17) |
| Trade school graduate | 15 (31) | 18 (38) | 33 (34) |
| | 49 (100) | 48 (100) | 97 (100) |

Household meal practices

The main meal for single parents and elderly persons were supper (evening meal) (Table 6).

Table 6: Main meal (percentage in parentheses)

| Meal | Single parent | Elderly person |
|------------------|---------------|----------------|
| Lunch (noon) | 2 (4) | 5 (10) |
| Supper (evening) | 47 (96) | 42 (88) |
| Breakfast | 0 (0) | 1 (2) |

The majority (62%) of the single parents had a regular main meal at home, however, for the elderly persons it was less than half (Table 7 & 8). Single parents often skipped breakfast (40%).

Table 7: Frequency of eating at home for the main meal (M) and breakfast (B)

| | Single Parent | | Elderly person | |
|---------------------------|---------------|----------|----------------|----------|
| | B | M | B | M |
| Every day | 17 (34) | 31 (62) | 36 (75) | 23 (48) |
| Almost every day | 14 (28) | 16 (32) | 6 (13) | 20 (42) |
| About 2 or 3 times a week | 8 (16) | 2 (4) | 3 (6) | 5 (10) |
| About once a week | 4 (8) | 1 (2) | 0 (0) | 0 (0) |
| Never | 7 (14) | 0 (0) | 3 (6) | 0 (0) |
| Total | 50 (100) | 50 (100) | 48 (100) | 48 (100) |

Table 8: Eating the main meal with family sitting at the table together

| | Single Parent | Elderly person |
|---------------------------|---------------|----------------|
| Every day | 10 (22) | 10 (22) |
| Almost every day | 19 (41) | 5 (11) |
| About 2 or 3 times a week | 10 (22) | 2 (4) |
| About once a week | 2 (4) | 1 (2) |
| Never | 5 (11) | 4 (9) |
| Not applicable | | 23 |
| Total | 46 | 45 |

There is a combination of various practices of the main meal (Table 9). One-third of the single-parents and two-thirds of elderly persons use whole, basic food for preparing meals. Elderly persons prefer to go out for fast food and ordering take out.

Table 9: Practices for the main meal

| | Single Parent | | | | Elderly person | | | |
|---|---------------|-----------|---------|-------|----------------|-----------|---------|-------|
| | Always | Sometimes | Rarely | Never | Always | Sometimes | Rarely | Never |
| Use whole, basic foods such as vegetables, fruits, pasta, legumes (e.g. dried beans and lentils) and meat | 18 (36) | 26 (52) | 5 (10) | 1 (2) | 31 (65) | 12 (25) | 5 (10) | 0 (0) |
| Use easy to prepare foods such as canned or frozen prepared food | 6 (12) | 28 (56) | 15 (30) | 1 (2) | 6 (13) | 20 (42) | 18 (38) | 4 (8) |
| Buy food where no preparation is required or order takeout or delivery | 1 (2) | 31 (65) | 16 (33) | 0 (0) | 12 (25) | 24 (50) | 9 (19) | 3 (6) |
| Go out for the main meal at a fast food restaurant | 5 (10) | 34 (68) | 11 (22) | 0 (0) | 17 (36) | 19 (40) | 10 (21) | 1 (1) |

The large difference between the percentages of seniors cooking from scratch compared to single parents may be accounted to their familiarity with traditional cooking skills. Another possible explanation could be because of the significant time constraints that many single parents face, particularly those who are working. In an open discussion with the research assistant, one single mother mentioned that when she is on social assistance, she has ample time to cook homemade meals and make all of her family's meals from scratch. However, when she got employment, it

has been difficult to devote the time needed for the extra preparation. She rather prefers to stay on social assistance and sacrifice the extra money from employment to be able to cook healthy meals from scratch.

The overwhelming majority of the participants described their ability to cook as being either “very good” or “good,” indicating that lack of cooking skills may not be a major issue in food preparation (Table 10).

Table 10: Personal ability to cook

| | Single Parent | Elderly person |
|----------------|---------------|----------------|
| Very good | 29 (58) | 14 (29) |
| Good | 19 (38) | 29 (60) |
| Little ability | 2 (4) | 3 (6) |
| No ability | 0 (0) | 2 (4) |

There were few participants, who did not prepare food on a regular basis (Table 11).

Table 11: Reasons for not preparing food at home regularly

| | Single Parent | Elderly person |
|---|---------------|----------------|
| Lack of time | 8 | 0 |
| Not interested | 0 | 2 |
| No skills/insufficient skills | 1 | 1 |
| Not confident in cooking ability | 1 | 1 |
| Too much effort | 1 | 3 |
| Don't have appropriate cookware or appliances | 1 | 0 |
| Any kind of disability | 0 | 3 |
| More expensive | 2 | 0 |

For single parents, the children often participate in food choice and meal preparation (Table 12).

Table 12: Children, participating in food choice/meal preparation (for single parents)

| | Always | Often | Sometimes | Rarely | Never |
|---------------------------------------|---------|---------|-----------|---------|---------|
| Make suggestions for family meals | 13 (27) | 16(33) | 14 (29) | 3 (6) | 3 (6) |
| Participate in shopping for groceries | 13 (27) | 9 (18) | 17 (35) | 5 (10) | 5 (10) |
| Help prepare meals or help cook foods | 4 (8) | 10 (21) | 20 (42) | 8 (17) | 6 (13) |
| Prepare or cook foods by themselves | 2 (4) | 5 (10) | 11 (22) | 18 (37) | 13 (27) |

However, in several households, their participation in helping in cooking or preparing meals was minimum or nil (Table 13).

Table 13: The reasons for children never helping in cooking or preparing meals (for single parents)

| | Single Parent |
|--|---------------|
| Lack of time | 5 |
| Children are not interested | 5 |
| Children lack skills | 4 |
| Too much effort | 1 |
| Cooking is not children’s responsibility | 5 |
| Cooking is harmful to children | 10 |
| Children are too young | 16 |
| Other reasons | 5 |

Level of food awareness

96% of single parents and 93.8% of seniors indicated that they were “somewhat” or “very much” concerned about what they eat regarding quality, quantity, and nutritional value (Table 14). 6% of seniors said that they were “not at all” concerned about their eating practices. One of the participants who answered this way explained that he had given up on worrying about his health because of his old age.

Table 14: Concerned about quality, quantity, and nutritional value

| | Single Parent | Elderly person |
|-----------------|---------------|----------------|
| Very much | 32 (64%) | 39 (81%) |
| Somewhat/little | 16 (32%) | 6 (13%) |
| Not at all | 2 (4%) | 3 (6%) |
| Total | 50 (100%) | 48 (100%) |

42% of single parents and 21% of seniors described their eating habits as being either “fair” or “poor,” indicating that people are not always able to address their concerns about nutrition (Table 15). The disconnect between the percentages of participants who were concerned about nutrition (95%) and how the participants rated their eating habits demonstrated the presence of barriers and challenges that these people face in their ability to maintain healthy eating practices.

Table 15: In general, the participants’ opinion about eating habits

| | Single Parent | Elderly person |
|-----------|---------------|----------------|
| Excellent | 2 (4) | 5 (10) |
| Very good | 10 (20) | 19 (40) |
| Good | 17 (34) | 14 (29) |
| Fair | 14 (28) | 4 (8) |
| Poor | 7 (14) | 6 (13) |
| Total | 50 (50) | 48 (100) |

72% of single parents and 79% of seniors said that they either follow or try to follow a recommended food guide, 46% of these people specified Canada’s Food Guide as being one of their primary nutrition information sources (Table 16 and 17).

Table 16: Use of recommended food guide/diet

| | Single Parent | Elderly person |
|-----------------|---------------|----------------|
| No | 14 (28) | 10 (21) |
| Yes | 13 (26) | 13 (28) |
| Tries to follow | 23 (46) | 24 (51) |
| Total | 50 (100) | 47 (100) |

Table 17: Kinds of food guides used

| | Single parents | Elderly person |
|---|----------------|----------------|
| Health professionals (family physicians/dietician) | 17 | 12 |
| Health organizations (heart & stroke, Can Diabetes soc) | 8 | 13 |
| Fitness programs | 1 | 4 |
| Weight lose program | 1 | 3 |
| Advice from family, friends, neighbors | 6 | 6 |
| Canada's food guide | 19 | 28 |
| TV program about healthy eating | 3 | 5 |
| General research in internet | 10 | 5 |
| Other sources | 7 | 3 |

However, in an open-ended question on the challenges that were involved in trying to follow a food guide, most participants indicated that the high cost of fresh foods and produce, as well as limited financial resources are the major reasons for their inability to follow (Table 18).

Table 18: Barriers to following a food guide/diet

| Barriers | Single parents | Elderly person |
|--|----------------|----------------|
| Cost of foods, limited budget, high price of fruits and vegetables, nutritious food is expensive | 20 | 16 |
| Getting to the store, don't have foods on hand, food is hard to find, lack of transportation | 1 | 4 |
| Not enough food, hard to get enough fruits and vegetables, hard to control portion sizes | 5 | 1 |
| Picky eaters, hard to get kids to eat healthy foods, can't stick to diets | 3 | 1 |
| Hard to avoid certain foods (e.g. gluten), hard to reduce salt/fat | | 3 |
| Too much trouble, too busy to prepare food | | 2 |
| NL has limited produce | | 1 |
| Pretty good at following it | | 1 |

Only 2 participants (elderly person) indicated that they are not at all familiar with eating from the four major food groups, both of these respondents were seniors (Table 19). The remainder of participants was at least somewhat familiar with eating from the food groups. When answering this question, few participants remarked that it did not matter whether they were knowledgeable

about healthy eating or not because they could not afford to eat proper quantities of food from a range of food groups regardless.

Table 19: Familiarity with the four major food groups

| | Single Parent | Elderly person |
|-----------------|---------------|----------------|
| Very much | 35 (71) | 36 (77) |
| Somewhat/Little | 14 (29) | 9 (19) |
| Not at all | 0 (0) | 2 (4) |
| Total | 49 (100) | 47 (100) |

Eating healthy food was more among the elderly persons (Table 20).

Table 20: Frequency (weekly) of eating food

| | Single Parent | | | | | Elderly person | | | | |
|--|---------------|--------------|------------|------------|------------|----------------|--------------|------------|------------|------------|
| | Every day | 3d or >/week | 2d or >/m | rarely | never | Every day | 3d or >/week | 2d or >/m | rarely | never |
| Grain products (wheat - bread, pasta, pizza; oats, barley, corn, rice) | 29 (59) | 15 (31) | 3 (6) | 2 (4) | 0 (0) | 35 (73) | 9 (19) | 1 (2) | 2 (4) | 1 (1) |
| Chicken | 2 (4) | 25 (52) | 19 (40) | 1 (2) | 1 (2) | 1 (2) | 25 (52) | 19 (40) | 2 (4) | 1 (2) |
| Eggs | 6 (12) | 23 (47) | 13 (27) | 5 (10) | 2 (4) | 11 (23) | 19 (40) | 11 (23) | 4 (9) | 2 (4) |
| Fish or seafood | 0 (0) | 5 (10) | 13 (27) | 24 (50) | 6 (13) | 1 (2) | 13 (29) | 16 (36) | 11 (24) | 4 (9) |
| Legumes (lentils/beans), nuts, or soya bean/ tofu | 5 (10) | 6 (13) | 14 (29) | 13 (27) | 10 (21) | 4 (9) | 14 (31) | 12 (27) | 5 (11) | 10 (22) |
| Fruits | 14 (28) | 16 (32) | 11 (22) | 5 (10) | 3 (6) | 23 (48) | 10 (21) | 6 (13) | 5 (10) | 3 (6) |
| Potato (as vegetable) | 1 (2) | 23 (47) | 20 (41) | 4 (8) | 1 (2) | 7 (15) | 19 (40) | 13 (27) | 6 (13) | 3 (6) |
| Green salads or leafy greens | 4 (8) | 23 (47) | 11 (22) | 8 (16) | 3 (6) | 11 (23) | 12 (26) | 14 (30) | 8 (17) | 2 (4) |
| Colored vegetables (carrots, tomatoes etc.) | 7 (14) | 20 (41) | 17 (35) | 4 (8) | 1 (2) | 14 (29) | 19 (40) | 11 (23) | 4 (8) | 0 (0) |
| Other vegetables (broccoli, cauliflower etc.) | 6 (12) | 14 (29) | 17 (35) | 6 (12) | 6 (12) | 9 (19) | 19 (40) | 7 (15) | 9 (19) | 4 (8) |
| Dairy products | 27 (55) | 11 (22) | 8 (16) | 2 (4) | 1 (2) | 27 (57) | 9 (19) | 5 (11) | 4 (9) | 2 (4) |
| Fruit juices | 21 (43) | 16 (33) | 6 (12) | 4 (8) | 2 (4) | 14 (30) | 5 (11) | 2 (4) | 14 (30) | 12 (26) |
| French fries or potato chips | 4 (8) | 17 (35) | 14 (29) | 13 (27) | 0 (0) | 3 (6) | 2 (4) | 15 (31) | 22 (46) | 6 (13) |
| Red meat (beef, pork, lamb) | 1 (2) | 3 (6) | 20 (42) | 22 (46) | 2 (4) | 4 (9) | 9 (19) | 19 (40) | 15 (32) | 0 (0) |
| Pop or energy drinks | 11 (22) | 12 (25) | 5 (10) | 15 (31) | 6 (12) | 9 (19) | 4 (8) | 4 (8) | 12 (25) | 19 (40) |

Regarding the health-related reasons for choosing certain foods over others, body weight, the nutritional content of foods, fiber content, sugar content, salt content, fat content, cholesterol, and general nutrition content were the major concerns (Table 21).

Table 21: Health/disease reasons for choosing/avoiding certain food

| | Single Parent | Elderly person |
|-------------------------------|---------------|----------------|
| Body weight | 24 (49) | 31 (67) |
| Heart Diseases | 14 (29) | 31 (66) |
| Diabetes | 15 (30) | 21 (44) |
| Cancer | 11 (23) | 20 (44) |
| Osteoporosis | 12 (26) | 30 (64) |
| Calcium content | 18 (38) | 26 (57) |
| Fiber content | 19 (41) | 37 (80) |
| Nutritional content (general) | 29 (66) | 35 (78) |
| Fat | 28 (57) | 31 (70) |
| Trans fat | 21 (45) | 28 (64) |
| Cholesterol | 18 (38) | 37 (80) |
| Calories | 14 (32) | 29 (64) |
| Sugar | 29 (64) | 34 (74) |
| Salt/ sodium content | 26 (55) | 40 (87) |

Regarding the additional intake of vitamins and minerals, 53% of single parents and 68% suggested that they take vitamin or mineral supplements at least sometimes, if not regularly (Table 22). Mostly they preferred multivitamins. Intake of supplementary Vitamin D and calcium were high among the elderly persons (Table 23).

Table 22: Vitamins or mineral supplements

| | Single Parent | Elderly person |
|-----------|---------------|----------------|
| Regularly | 15 (31) | 28 (58) |
| Sometimes | 11 (22) | 5 (10) |
| Never | 23 (47) | 15 (31) |
| Total | 49 (100) | 48 (100) |

Table 23: Types of vitamins/minerals taken

| | Single Parent | Elderly person |
|--------------------|---------------|----------------|
| Multivitamins | 15 (31) | 13 (27) |
| Vitamin A | 1 (2) | 0 (0) |
| Vitamin B | 5 (10) | 5 (10) |
| Vitamin C | 6 (12) | 7 (15) |
| Vitamin D | 5 (10) | 22 (46) |
| Vitamin E | 0 (0) | 2 (4) |
| Calcium | 2 (4) | 14 (29) |
| Iron | 3 (6) | 1 (2) |
| Omega 3 fatty acid | 2 (4) | 9 (19) |
| Other vitamins | 3 (6) | 8 (17) |

The participants were asked about their interest in community-based solutions to food security problems. 67% of single parents and 28% of elderly persons indicated their interest in having a vegetable garden (Table 24). Single parents were particularly interested in participating in a community garden, container gardening, and sprouting. They were also interested in learning about nutrition and food budgeting and to learn fast, easy, and low-cost recipes and meal ideas. Elderly persons were keener to learn fast, easy, and low-cost recipes and meal ideas.

Table 24: Interested in growing own vegetables and efficient management

| | Single Parent | | | | | Elderly person | | | | |
|---|---------------|-------------------|------------|------------|------------|----------------|-------------------|------------|------------|------------|
| | Very much | Somewhat / little | Not at all | Already do | Don't know | Very much | Somewhat / little | Not at all | Already do | Don't know |
| Interested to have a vegetable garden | 33 (67) | 9 (18) | 7 (14) | 0 (0) | 0 (0) | 13 (28) | 7 (15) | 16 (35) | 10 (22) | 0 (0) |
| Like to have a plot at a community garden | 18 (38) | 18 (38) | 9 (19) | 1 (2) | 2 (4) | 10 (22) | 6 (13) | 26 (57) | 2 (4) | 2 (4) |
| Like to learn more about container gardening and sprouting | 25 (52) | 16 (33) | 6 (13) | 1 (2) | 0 (0) | 11 (24) | 8 (17) | 27 (59) | 0 (0) | 0 (0) |
| Like to participate in a community kitchen | 20 (42) | 17 (35) | 6 (13) | 4 (8) | 1 (2) | 14 (30) | 6 (13) | 25 (54) | 1 (2) | 0 (0) |
| Like to learn about nutrition and food budgeting | 30 (63) | 11 (23) | 4 (8) | 3 (6) | 0 (0) | 17 (37) | 11 (24) | 7 (15) | 11 (24) | 0 (0) |
| Like to learn fast, easy, and low cost recipes and meal ideas | 36 (75) | 8 (17) | 2 (4) | 2 (4) | 0 (0) | 28 (61) | 8 (17) | 2 (4) | 8 (17) | 0 (0) |

Participants' reluctance to participate in these activities or to learn about nutrition and food preparation skills typically stemmed from either a lack of time to commit to such activities or a general disinterest.

Food purchasing practices

The participants were asked about purchasing practices of food from grocery stores and barriers. 62 respondents, including 42 single parents and 20 elderly people said that they always had a budget when shopping for groceries (Table 25). This reflected how the single parents who participated in the study dealt with more financial constraints than the seniors. Furthermore, 67% of single parents and 41% of seniors indicated that they do not always have sufficient money or credit limit when shopping for groceries. Transportation is an issue for roughly 28% of participants (37% of single parents and 19% of seniors), who indicated that they at least sometimes do not have the ability to transport groceries home. The qualitative data suggest that some participants who do not have their vehicles rely on the bus service, cabs, or catching rides with friends to get groceries when walking are not an option.

Table 25: Purchasing practices of food from grocery stores and barriers

| | Single Parent | | | | Elderly person | | | |
|--------------------------------------|---------------|-----------|---------|------------|----------------|-----------|---------|------------|
| | Always | Sometimes | Never | Don't know | Always | Sometimes | Never | Don't know |
| Having a budget for groceries | 42 (86) | 5 (10) | 2 (4) | 0 (0) | 20 (44) | 12 (26) | 13 (28) | 1 (2) |
| Using a written grocery list | 26 (53) | 16 (17) | 7 (14) | 0 (0) | 24 (50) | 10 (21) | 13 (27) | 1 (2) |
| Deciding items while at the store | 11 (23) | 27 (56) | 10 (21) | 0 (0) | 21 (45) | 17 (36) | 8 (17) | 1 (2) |
| Planning meals before going to store | 11 (22) | 27 (55) | 11 (22) | 0 (0) | 8 (17) | 22 (47) | 16 (34) | 1 (2) |
| Selecting foods on nutrition levels | 10 (20) | 23 (47) | 16 (33) | 0 (0) | 19 (41) | 11 (24) | 15 (33) | 1 (2) |
| Checking flyers for food for sale | 37 (76) | 9 (18) | 3 (6) | 0 (0) | 36 (77) | 8 (17) | 2 (4) | 1 (2) |
| Consider the location of store | 25 (51) | 14 (29) | 9 (19) | 1 (2) | 24 (52) | 8 (17) | 13 (28) | 1 (2) |
| Enough time for grocery shopping | 31 (63) | 15 (31) | 3 (6) | 0 (0) | 39 (85) | 6 (13) | 0 (0) | 1 (2) |
| Transport groceries to home | 31 (63) | 11 (22) | 7 (14) | 0 (0) | 37 (79) | 6 (13) | 3 (6) | 1 (2) |
| Have sufficient money/credit limit | 15 (31) | 20 (42) | 12 (25) | 1 (2) | 26 (57) | 6 (13) | 13 (28) | 1 (2) |

When asked whether in the last twelve months the participant and their family had enough to eat but *not always the kinds of food they wanted*, 51% of single parents said “often true” and another 42% said “sometimes true” (Table 26). Meanwhile, 49% of seniors said this was “often true” and another 32% said “sometimes true.” Over 77% of participants, including 47 single parents compared to 27 seniors, said that they *at least sometimes have to cut out certain foods from their diet because of their budget*. Again, this reflects how the single parents who were surveyed were in more constrained financial situations than the seniors. 64% of participants, including 88% of the single parents and 40% of the seniors, indicated that it was at least sometimes true that their food did not last and they could not afford more. 54% of the sample at least sometimes uses a food bank to supplement their dietary needs. These food bank users were overwhelmingly single parents, 40 single parents compared to only 12 seniors. Although these statistics may not accurately represent the prevalence of food insecurity in this sample, it without a doubt is an

indication of the high price of food in NL, which certainly factors into many people’s food purchasing practices.

Table 26: Food situation in past twelve months in the households

| | Single Parent | | | Elderly person | | |
|--|---------------|------------|------------|----------------|------------|------------|
| | Often true | Sometimes | Never true | Often true | Sometimes | Never true |
| The respondents and family members had enough of the kinds of food they wanted | 5 (10) | 34 (69) | 10 (20) | 28 (58) | 10 (21) | 10 (21) |
| The respondents and family members had enough to eat, but not always the kinds of food they wanted | 25 (51) | 21 (43) | 3 (6) | 23 (49) | 15 (32) | 9 (19) |
| Whether they had to cut out some foods because of budget | 31 (63) | 16 (33) | 2 (4) | 19 (40) | 8 (17) | 20 (43) |
| The food they bought didn’t last and they could not afford to buy more | 18 (37) | 25 (51) | 6 (12) | 9 (20) | 9 (20) | 28 (61) |
| Use of food bank to supplement their needs | 26 (53) | 14 (29) | 9 (18) | 8 (17) | 4 (9) | 35 (75) |

The participants were asked about considering food choices because of other budget priorities, such as heat, rent, or medications (Table 27). 70% of participants indicate that they make certain food purchasing practices and choices based on other competing budget priorities. This percentage is made up mostly of single parents, stressing again the economic barriers that many in this subgroup face. Further inquiry revealed that the vulnerable families considered ‘rent’ and ‘heating’ the most important priorities affecting food choices (Table 28).

Table 27: Consideration of food choices due to other budget priorities

| | Single Parent | Elderly person | Total |
|-------|---------------|----------------|----------|
| No | 6 (12) | 23 (48) | 29 (30) |
| Yes | 43 (88) | 25 (52) | 68 (70) |
| Total | 49 (100) | 48 (100) | 97 (100) |

Table 28: Other budget priorities affecting food choices

| | Single Parent (=43) | | | Elderly person (=25) | | |
|------------|---------------------|-----------|--------------------|----------------------|-----------|--------------------|
| | Most important | Important | Somewhat important | Most important | Important | Somewhat important |
| Rent | 24 (56) | 5 (12) | 1 (2) | 11 (44) | 2 (8) | 0 (0) |
| Heat | 11 (26) | 12 (28) | 8 (19) | 7 (28) | 9 (36) | 3 (12) |
| Medication | 1 (2) | 5 (12) | 10 (23) | 1 (4) | 5 (20) | 2 (8) |

When asked in an open-ended question about what else could be done to improve the quality, quantity, and nutritional value of the food they consume, the most common response was for food to be cheaper and more affordable, particularly healthy and nutritious options such as fresh produce (Table 29).

Table 29: Suggestions to improve the quality, quantity, and nutritional value of the food

| Options | Single parents | Elderly person |
|---|----------------|----------------|
| Food be cheaper, more affordable healthy food | 18 | 18 |
| More organic options, more locally grown food, have own garden, more food grown in NL, supermarkets offer fresher produce | 5 | 10 |
| More income, increased budget for food, supplement for food | 6 | 2 |
| Take time to prepare meals, be more organized | 4 | 3 |
| Use less butter, fatty foods, less salt, follow Canada's Food Guide, need better guidelines, more awareness | 3 | 7 |
| Take cooking lessons, learn healthy recipes, learn more about nutrition | 3 | |
| Eat smaller portions, more self-control | 3 | |
| Group/bulk grocery shopping programs | 1 | |
| Hard to cook for one | | 1 |

Qualitative data

Qualitative data was collected through the section provided for additional comments, as well as through the research assistant's notes of any additional comments that participants made while completing the survey. A common theme throughout the additional comments was the issue of the high cost of food in Newfoundland, particularly for fresh fruits and vegetables. Many participants, both single parents and seniors, felt that this was the biggest barrier for them to be able to eat healthily. Twelve single parents and fourteen seniors talked at length about this issue, beyond what was asked in the survey. The cost of food was the topic that participants brought up most frequently while completing the survey, indicating that it weighs heavily on their minds. Many participants discussed how they tend to opt for processed, "junk" food over fresh produce and meats, as this is usually the cheaper option. In reference to this issue, a handful of participants explained their specific strategies in purchasing healthy options, which include buying produce in bulk or purchasing items while on sale. When talking to three elderly women, the research assistant made a note about how they all had diabetes, however, they were unable to maintain a proper diet to deal with this chronic disease: "They talked a lot about white grains versus whole wheat. Although eating white grains spikes their sugar levels and whole wheat is the healthier option, they can't afford to buy whole wheat products unless they are on a very good sale" (RA notes). These women were the extreme example among the participants, having indicated that they can only afford to buy fresh fruit once a month, for example. That being said, even among the participants who had higher incomes, the increasing cost of food in the province was a frequently mentioned comment.

The increasing cost of living and competing for budget priorities were also frequently discussed issues among both the single parents and seniors. As many of these participants are living on fixed incomes, such as social assistance or Old Age Security, their income does not necessarily increase with the rising cost of living. Food budgets appear to be one of the areas of sacrifice when people have to pay other bills, such as heat and rent. The single parents who discussed this issue at length often brought up extra expenses that they face with their children, such as paying for school supplies and extra-curricular activities. Different budgeting strategies

and priorities were discussed. One single mother indicated that she always leaves room in the budget for one fun outing a month while another mother noted her dread when her children's schools have book fairs because she can never fit that into the budget. The elderly participants particularly brought up how the cost of living in St. John's has skyrocketed over the years. Some of these participants own their own house or are eligible for housing subsidies, but even without having to pay rent they have been impacted by the cost of living. As one participant put it:

"I've been retired for 15 years and up to this point I'm doing ok but I do worry about my finances in another 10-15 years. Will I be able to maintain my present standard of living? I doubt it and food will be one of the few things where I'll be able to try to save money."

In considering possible solutions to the issue of the rising cost of living, many participants indicated that the government has a role to play in addressing these concerns. Examples of what the government needs to do include providing subsidies to seniors and single parents to be able to afford food on top of their current budgets or increasing social assistance and Old Age Security rates so that they are appropriate to what is needed to maintain a healthy lifestyle in the current economy. Interestingly, some of the elderly people interviewed did not see themselves as being in vulnerable situations, however, many of them discussed their concern for young families and single parents who are living on a limited income. These participants understood of families' busy schedules and small budgets, which impedes their ability always to feed their children the most nutritious foods. A couple of participants suggested that the government provide low-income families with income supplements to be able to purchase quality, nutritious foods for their children.

For many seniors, having a limited income was connected to transportation issues and their inability to get to a grocery store on a regular basis. As previously mentioned, some of these seniors relied on public transportation or catching rides with friends or family members. Without a mode of transportation, some seniors opted to walk to the grocery store and carry items by hand. This is made more difficult as they age and if they encounter mobility issues. Three seniors discussed how their arthritis impacts their ability to go to and from the grocery store. When these people are unable to get to a store regularly, they are forced to rely on food that has a longer shelf life, which is typically heavily processed options rather than healthier fresh foods. Compared to the elderly participants, the single parents did not mention transportation issues as frequently, however five participants discussed it in detail. Similar to the seniors, these participants related their reliance on processed foods to needing to purchase foods that have a longer shelf life.

Regarding the role that food banks play in addressing food insecurity issues, participants showed mixed sentiments. At least four single parents mentioned that they often supplement food received from food banks into their families' diets. However, these participants acknowledged that the food that they receive is typically canned and heavily processed, so they know that it is not the most nutritious options. Therefore, despite being thankful for food banks, they question the quality and nutritional value of the food. One participant was particularly critical of food banks and the quality of food they offer:

"She raised concerns about food banks, saying that the products they provide are often defective or spoiled, because their donations are primarily based on the overflow"

of goods or defective packaging. She thinks there should be more regulations to ensure better food quality given “charitably” to those suffering from increased cost of food in Newfoundland. She commented that it shouldn’t be acceptable to give people subpar food simply because they’re poor – they also should be able to maintain a healthy standard of living.”

Although many seniors indicated that they make use of food banks in the survey, only three elaborated on this fact. One participant discussed how food banks are not an appropriate solution to dealing with food insecurity issues, as they focus on immediate, short-term solutions, rather than getting at the source of the problem.

Something that seemed to be more of an issue for single parents than for seniors was their significant time constraints and the challenges that accompany having such a busy lifestyle. Earlier in this report, an example was provided of the single mother who preferred living on social assistance and having the time to devote to cooking healthy meals from scratch. Other participants reiterated these sentiments, saying that they wished they have extra time to be able to cook proper meals, rather than relying on what is convenient (and often healthier).

Another topic that was raised mainly by single parents was the issue of food intolerances and sensitivities. They discussed children having behavioral issues that are made worse by eating certain foods (e.g. ADHD) or having sensitivities to particular foods such as gluten or dairy products. It was expressed that following restrictive diets tends to be more expensive and more challenging for the parent.

Newfoundland’s unique situation of food insecurity was mentioned several times, particularly by seniors who feel that the food imported to the province is “second class.” Seniors were more likely to discuss this issue than single parents, with seven participants bringing up the issue of food in Newfoundland, in reference to how the food is poorer quality because it must be imported in from other areas of Canada and globally. In discussing the far distances that food has to travel to get to the province, one senior brought up the amount of chemicals needed to keep the food fresh. So even if people can afford to buy fresh produce from the supermarket, it is not necessarily healthy due because of these chemicals.

Discussions of Newfoundland’s food situation often led to comments about the potential of local food production and of gardening. Nine seniors discussed gardening in detail, compared to four single parents. Several of the seniors mentioned their own gardening practices and their ability to grow their own food. Others pointed out that they would like to have a garden, but for either physical health reasons or a lack of outdoor space they cannot. Four single parents also mentioned gardening and their interest in having their own garden, however, these participants seemed to think it would be more possible to have a plot at a community garden rather than maintaining one on their own.

In discussing food preparation skills and strategies, five seniors mentioned their reluctance to cook for one. They indicated that they did not justify the extra time and energy needed to cook for themselves. Thus, they opt for quick, convenient foods, which tends to be processed options. Another issue raised regarding cooking for one is how quickly fresh food goes bad and their inability to eat it before it spoils. They find they waste and throw out too much food if they are cooking from scratch. Strategies to overcome this include freezing large quantities of homemade foods, one participant giving the example of how he will make a big batch of chili and freeze whatever he cannot eat.

Conclusion

The brief conclusions are as follow:

- Insufficient money to buy quality food and lack of transportation. Many of the single parents, as single income earners, don't maintain a car. Therefore, it is difficult for them to get beyond the corner store sometimes.
- Due to lack of money, single parents are on welfare and hence buy cheaper, calorie-dense, processed food. They sacrifice quality food, such as fruits, vegetables, and better quality meats.
- Lack of cooking skills, awareness about nutrition information and healthy eating, and/or sticking to the traditional NL cooking that is not especially healthy. Many of them do not have a great deal of knowledge about how to get best nutritional value for the food dollar. Lack of education for cooking, for using a variety of foods, for introducing healthy things like herbs. Lack of exposure, lack education, lack of information. Moreover, it is the motivation to make a change. Once people get habituated to a particular food, i.e. junk food; they may have more money, but they will not bother on buying the healthy alternative.
- Time constraints were specifically mentioned concerning single parents.
- Mobility and fine motor skills at old age to prepare food and have proper food consumption. A common experience among seniors where because they are typically living alone. They don't have the desire or drive to be preparing healthy meals, which then lead them to be more dependent on heavier processed foods and also again coming back to affordability, they end up eating more probably cheaper and again processed foods.
- Food banks are very limited in the extent to which they can ameliorate the situation. They only provide temporary relief from food insecurity, without getting at underlying issues of poverty and inequalities. The food bank does not have control over the quality of food, other than making sure people don't give out outdated foods and poison people. Therefore, the food banks can only give out what they get from Community Food Sharing or anyone who does a food drive. For these needy people, the food bank is usually an emergency measure, which the poor are willing to spare if they could, as users do not have any control of what they would receive. There is a certain amount of shame and stigma that people associate with receiving subsidies of this nature.
- Community kitchen programs are an excellent way to build those skills, both the cooking skills and the budgeting skills.
- The reliance on limited government funding was also mentioned. The underlying issues of inequalities can be addressed by promoting poverty reduction policies and campaigns. There should be an adequate level of income to be able to afford healthy foods. This is especially important because of the rising costs of living and rising food costs. Poverty Reduction Strategy can be an alternative.
- Promote more accurate nutritional information, to improve awareness about these issues, for both seniors and single parents.

References:

1. Health Canada (2012). Household Food Insecurity In Canada in 2007-2008: Key Statistics and Graphics <http://www.hc-sc.gc.ca/fn-an/surveill/nutrition/commun/insecurit/key-stats-cles-2007-2008-eng.php#c> accessed on 22nd Jan, 2013
2. Tarasuk, V, Mitchell, A, Dachner, N. (2014). Household food insecurity in Canada, 2012. Toronto: Research to identify policy options to reduce food insecurity (PROOF). Retrieved from <http://nutritionalsciences.lamp.utoronto.ca/>
3. McIntyre, L, Rondeau, K (2009). Food insecurity (Chapter 13). In: Social Determinants of Health, edited by Dennis Raphael.
4. McLeod L, Veall, M (2006). The dynamics of food insecurity and overall health: evidence from the Canadian National Population Health Survey, *Applied Economics*, 38:18, 2131-2146.
5. Eisenmann, JC, Gundersen, C, Lohman, BJ, Garasky, S, Stewart, SD. (2011). Is food insecurity related to overweight and obesity in children and adolescents? A summary of studies, 1995–2009. *Obesity Reviews* 12, e73–e83 [doi: 10.1111/j.1467-789X.2010.00820.x]
6. Vozoris, NT, Tarasuk, VS (2003) Household Food Insufficiency Is Associated with Poorer Health. *J. Nutr.*133: 120–126.
7. Hamelin, AM, Hamel, D. Food Insufficiency in Homeless Persons is Associated with Poorer Health. <http://www.homelesshub.ca/ResourceFiles/m1vcfl5r.pdf> accessed on 22nd Jan, 2013
8. McIntyre, L, Bartoo, AC, Pow, J, Potestio ML, (2012). Coping With Child Hunger in Canada: Have Household Strategies Changed Over a Decade? *CJPH*, 103 (6).
9. CBC (2011). Infographic: Who uses local food banks? <http://www.cbc.ca/news/canada/newfoundland-labrador/story/2011/11/01/nl-infographic-food-banks-1101.html>
10. Government of Newfoundland and Labrador (2006), Eating Healthier in Newfoundland and Labrador- Provincial Food and Nutrition Framework and Action Plan
11. Quinlan JA (2012). Building Agriculture capacity in Newfoundland and Labrador, Harris Centre, Memorial University, St John's.
12. Dieticians of Newfoundland and Labrador. The Cost of Eating in Newfoundland & Labrador - 2003 A Discussion Paper
13. Carter, MA, Dubois, L, Tremblay, MS, Taljaard, M (2012). Local social environmental factors are associated with household food insecurity in a longitudinal study of children. *BMC Public Health*, 12:1038
14. McIntyre, L, Glanville, NT, Raine, KD, Dayle, JB, Anderson, B, Battaglia, N (2003). Do low-income lone mothers compromise their nutrition to feed their children? *CMAJ*;168(6):686-91.
15. McIntyre L, Tarasuk, V, Li, TJ, (2007). Improving the nutritional status of food-insecure women: first, let them eat what they like. *Public Health Nutrition*: 10(11), 1288–1298 [doi: 10.1017/S1368980007702902]
16. Green-LaPierre, RJ, Williams, PL, Glanville, NT, Norris, D, Hunter, HC, Watt, CG, (2012). Learning from “Knocks in Life”: Food Insecurity among Low-Income Lone Senior Women *Journal of Aging Research*: 2012, [doi:10.1155/2012/450630]
17. Muldoon, KA, Duff, PK, Fielden, S, Anema, A, (2012). Food insufficiency is associated with psychiatric morbidity in a nationally representative study of mental illness among food insecure Canadians. *Soc Psychiatry Psychiatr Epidemiol* [DOI 10.1007/s00127-012-0597-3]

18. Progressive Conservative Party of Newfoundland and Labrador (2011). 2011 Policy Blue Book.