Food Security for Seniors and Persons with Disabilities Project

A look at Household Food Security for Seniors and Persons with Disabilities in Seattle’s low-income housing
Executive Summary

The Food Security for Seniors and Persons with Disabilities Project was created to provide baseline information on food security among seniors and persons with disabilities who reside in Seattle’s government subsidized housing. The report characterizes levels of food security and food insecurity, assesses barriers of food security, and identifies strategies to increase this population’s access to the emergency food system (Federal food assistance programs, food banks, congregate meal sites, hot meal deliveries, grocery deliveries, church programs, etc).

Abstract

Food insecurity is defined as not having access at all times to enough food for an active, healthy lifestyle due to a lack of resources. The author used the United States Household Food Security Survey Module to sample 26% of the seniors and persons with disabilities population residing in seven government-subsidized housing buildings in Seattle, Washington. In addition, eighteen seniors or persons with disabilities participated in focus groups to describe their households’ food security situation and coping mechanisms.

One hundred and three respondents (54.8%) from the 188 sampled households were classified as food insecure, including 21.3% who were classified as having very low food security. Coping strategies included reducing their food variety, cutting the size of meals, and skipping meals. Food insecurity was more than five times as widespread among low-income seniors and persons with disabilities who reside in Seattle’s government-subsidized buildings than among the general U.S. population.

Several policy changes are recommended to increase access to the emergency food system to decrease this food insecurity.

About the Author

Brad Johnson works in the Partners in Caring Program of Solid Ground. He is a Bill Emerson National Hunger Fellow with the Congressional Hunger Center.

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Introduction

Many individuals in the United States struggle to meet their basic food needs despite strong social programs intended to act as a safety net. Data published by the United States Department of Agriculture (USDA) estimates that 10.9% of American households were food insecure as some point in 2006. Food Insecurity is defined as not having access at all times to enough food for an active and healthy life, with a need for recourse to emergency food sources or other extraordinary coping behaviors to meet basic food needs.

Despite national statistics published by the USDA citing relatively high food security among seniors (94.1%) in 2006, according to a Gilmore Research study, nearly 33% of low-income seniors and persons with disabilities residing in Seattle’s government subsidized, public housing (Seattle Housing Authority high-rises) regularly missed meals due to a lack of food. The same study indicated that 47% of those surveyed indicated that they need assistance with grocery shopping.

Research has shown that diet-related diseases, such as diabetes and heart disease, disproportionately affect low-income individuals. The Association of Nutrition Services Agencies (ANSA) has noted for years the link between poor nutrition, poor health, and poverty. In response, nutrition service agencies who are members of ANSA use the “food as medicine” approach to alleviate these disparities. Evidence suggests that providing nutritious and medically appropriate food will improve the health of low-income individuals with a variety of conditions, while also lowering “the cost of care for patients by reducing the need for surgeries, hospitalizations, and long-term care.”

However, many low-income seniors and persons with disabilities face barriers that prevent them from accessing nutritious, medically appropriate food from local supermarkets and the emergency food system.

The Food Security for Seniors and Persons with Disabilities Project was created to provide baseline information on food security among seniors and persons with disabilities who reside in Seattle’s government subsidized housing. The report characterizes levels of food security and food insecurity, assesses barriers to food security, and identifies strategies to increase the demographics’ access to the emergency food system.
**Methods**

The primary goals of the *Food Security for Seniors and Persons with Disabilities Project* were 1) to ascertain the degree to which seniors and persons with disabilities experience hunger and nutritional deprivation and 2) to identify specific economic, cultural or other factors which contribute to food insecurity among vulnerable public housing residents.

**Sampling**

The study was conducted in seven government subsidized, low-income housing buildings within Seattle’s city limits (see Box 1).

Six of the buildings are designated by the Seattle Housing Authority as *Low-Income Public Housing (LIPH)*. In these buildings, all residents earn less than 80% of the area’s median income. However, a majority of residents earn less than 30% of the area’s median income. The final complex is a HUD designated *Section 8 project-based building*. All residents who reside in this building earn less than 30% of the area’s median income. (see Appendix H for Seattle Area median income levels and limits.)

There were 726 total units occupied in the seven buildings. Responses from 25% of the 726 total units were needed to obtain statistically significant data. The researcher, realizing that some seniors and persons with disabilities would be unwilling to participate, targeted 31% of the residents in each building through a random sample. Each of the targeted residents received a letter providing the basic details about the survey, the days and times of the interview, and contact names for the project.

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1 The six LIPH buildings are Ballard House, Beacon Tower, Bell Tower, Green Lake Plaza, Harvard Court, and Westwood Heights.
2 The Section 8 project-based subsidized building is International House.
3 The number provided is the total number of units that were occupied in the seven buildings on December 20, 2007.
4 25.9% of the total number of occupied units in the seven buildings completed the survey.
The author collected survey data through face-to-face interviews from October to December 2007.

Food security was measured using the United States Household Food Security Survey Module, which has been developed and tested by the United States Department of Agriculture. The module consists of a series of questions about conditions and/or behaviors that are known to characterize households having trouble meeting their basic food needs. The questions measure if the condition or behavior is caused from a lack of money to obtain food and does not factor in conditions such as dieting to lose weight. The survey includes six questions about household’s food conditions. (see Box 2, Questions Used to Assess the Food Security of Households).

Box 2: Questions Used to Assess the Food Security of Households

1. “The food that (I/we) bought just didn’t last, and (I/we) didn’t have enough money to get more.” Was that often, sometimes, or never true for (you/your household) in the last 12 months?
2. “(I/We) couldn’t afford to eat balanced meals.” Was that often, sometimes, or never true for (you/your household) in the last 12 months?
3. In the last 12 months, since last October/November/December, did (you/you or other adults in your household) ever cut the size of your meals or skip meals because there wasn’t enough money for food? (Yes/No)
4. (If yes to Question 3) How often did this happen—almost every month, some months but not every month, or in only 1 or 2 months?
5. In the last 12 months, did you ever eat less than you felt you should because there wasn’t enough money to buy food?
6. In the last 12 months, were you ever hungry but didn’t eat because there wasn’t enough money for food?

Each household’s food security status is calculated by the number of food-insecure conditions/behaviors they report having occurred at any time during the past 12 months. This instrument classifies households as having food security, low food security or very low food security during the previous 12 months. If no food-insecure conditions or only one

* The survey tool was translated into Chinese, Russian, Spanish, and Vietnamese by native speakers and then back translated to test its accuracy. The author was assisted by native speaking interpreters while interviewing non-English speaking residents.
Food-insecure condition is reported, households are classified as food secure. Respondents who report 2 or more food-insecure conditions are classified as food-insecure.

Food-insecure households are broken into two categories, those who have low food security and those who have very low food security. The low food security category identifies households who reported multiple indications of food access problems, but typically have reported few, if any, indications of reduced food intake. Respondents who are categorized as having very low food security have reported multiple indications of reduced food intake and disrupted eating patterns due to insufficient money and lack of other resources for food. In most households with very low food security, the survey respondent reported that he or she was hungry at some point during the past year, but did not eat because there was not enough money for food.

The survey data were supplemented with qualitative data gathered from the same population through two focus groups. The two focus groups were held at the two sites identified as having the highest rate of food insecurity after the survey’s completion, Bell Tower and Green Lake Plaza. Participants in the focus groups overlapped with those participating in the larger food security questionnaire. Conversations with the City of Seattle’s Aging and Disability Case managers, Seattle Housing Authority building managers, food bank directors, and Seattle Housing Authority Resident Council members identified participants who they felt regularly face food security problems. In each focus group, there was an even mix of seniors and persons with disabilities.

The first focus group at Bell Tower had six participants. During the course of the focus group, participants were asked about their food shopping patterns—the store or stores they use and why—and about other places in the community that people might go for food.

The second focus group at Green Lake Plaza had 12 participants. Participants were asked about whether they have ever had trouble getting enough to eat in the past year and what they did to prevent or cope with the circumstances.

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vi “Food-Insecure conditions are indicated by responses of “often” or “sometimes” to questions 1-2, “almost every month” or “some months but not every month” to question 4, and “yes” to the other questions.” (Nord, et al, 2007)

vii “Prior to 2006, households with low food security were described as “food insecure without hunger” and households with very low food security were described as “food insecure with hunger.” (Nord, et al, 2007)

viii A Resident Council consists of persons residing in a public housing complex who work to improve resident quality of life and satisfaction and “to participate in self-help initiatives to enable residents to create a positive living environment for families living in public housing.” (HUD §964.115)
Results

Prevalence of Food Security

Overall, 45.2% of the sample households were classified as food-secure (Figure 1). The remaining 54.8% of the sample households were food insecure at some point during the year, with 33.5% of respondents falling into the low food security category, and 21.3% in the very low food security category. (see Box 3)

![Figure 1: Seniors/Persons with Disabilities by Food Security Status in Seattle’s Government Subsidized Housing, 2007]

<table>
<thead>
<tr>
<th>Status</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>Food-Secure households</td>
<td>45.21%</td>
</tr>
<tr>
<td>Households with low food security</td>
<td>33.5%</td>
</tr>
<tr>
<td>Households with very low food security</td>
<td>21.28%</td>
</tr>
</tbody>
</table>

About two-thirds (61%) of food-insecure (low food-secure and very low food-secure) households avoided extensive disruptions in food intake, mainly by reducing the variety of their diet and relying on basic food staples. However, forty households (21.3%) were very low food-secure and reported substantial changes in their eating patterns and reduced food intake at some point in the last year because they could not afford to buy more food.

It is important to remember that households are classified as food-insecure if they reported the condition at any point during the past 12 months. On an average day, the occurrence of any of these conditions is much lower than the annual prevalence.
Households who are very low food-secure at times during the year reported reduced food intake and disrupted eating habits caused from a lack of resources for food. In the recent survey, households who were very low food-secure (about 21.3% of the sample) reported the following conditions (Figure 2):

- 97.5% reported that the food they bought just did not last and they did not have money to get more.
- 100% reported that they could not afford to eat balanced meals.
- 100% reported that they had cut the size of meals or skipped meals because there was not enough money for food.
- 90% reported that the above condition had occurred in three or more months in the last year.
- 92.5% reported that they had eaten less than they felt they should because there was not enough money for food.
- 90% reported that they had been hungry but did not eat because they could not afford enough food.
Seattle Seniors and Persons with Disabilities' Households reporting each indicator of food insecurity, by food security status, 2007

- Food bought did not last: 77.78% Very low food security
- Could not afford balanced meal: 80.95% Low food security
- Cut size of meal or skipped meal: 100.00% Food secure
- Cut or skipped meal in 3+ months: 90.00% Low food security
- Ate less than felt should: 92.50% Very low food security
- Hungry, but did not eat: 90.00% Very low food security

Source: Calculated by author from the Fall 2007 "Food Security for Seniors" Food Security Survey.
Focus Groups

Five general areas emerged from the analysis of the qualitative focus group data.

Food Resources and Shopping Patterns

Focus group participants indicated that they shop at grocery stores, usually large supermarkets, for the majority of their food purchases. Most respondents cited close proximity, variety of items offered, and more competitive prices as the major reasons for shopping at large supermarkets.

“I go to Safeway because it's closest.” [Male, D]

“I don’t think [Safeway’s] prices are high at all. I think their prices are reasonable.” [Male, D]

A majority of participants who are not considered homebound rely on public transportation to travel to large supermarkets, but typically depend on taxis to return home with large food purchases. Despite the close proximity to their housing complex, some residents experience transportation problems when traveling to and from large supermarkets. As a result, most residents stated that they are forced to make one or two big grocery trips a month and make multiple “fill-in” trips each week to obtain one or two small items at higher priced, neighborhood stores which offer less variety.

“A block of cheese usually normally cost around $5 or $6 bucks [from a large supermarket]; [the neighborhood store owner] sells it for $10. He’s already told the community here that…his cop-out is that it cost him too much for his food, so he has to jack [the price] up, but it’s extremely above retail.” [Male, D]

“I feel bad because I’m trucking on the bus with two big bags of groceries and in a wheelchair. That really limits what I can do. But, the bus wasn’t meant for cripples like me.” [Male, D]

“I go over to Safeway by bus and then if I don’t have very [much] then I come back on the bus, but if I have too much I come back in a taxi-cab.” [Male, S]

Several residents who experience travel problems to large supermarkets, but who are determined to take advantage of their variety and lower prices, will use supermarkets’ online grocery delivery service.

“Nowadays you can shop online from Safeway. Spend over fifty dollars and they'll deliver.” [Female, D]

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vi Respondents are coded as female or male. D represents a person with disabilities. S represents a senior.

vi The author researched local supermarkets in Seattle—as of February 2008, only Safeway offered grocery delivery. However, EBT cards are not currently accepted online as a form of payment.
"You know the day the [delivery] order is coming in and you don’t have to take the bus or call a relative or whatever to get down there and back and go through all the hassles of all the lines.” [Male, D]

**Food Insecurity Cycles**

Participants reported that many seniors and persons with disabilities experience food insecurity in cycles. Typically the cycles correspond to payment periods (when residents receive their monthly public assistance benefits/Social Security and Disability checks). Residents reported having trouble making food last the full month from paycheck to paycheck.

"I’ll have [enough food] not quite two weeks and then you’re starving again.” [Female, D]

Respondents said they experience seasonal cycles of food insecurity. Although most focus group participants worried all year about acquiring enough food, a majority agreed that the threat of food insecurity is worse during the winter months.

"You need food; you need fuel to stay warm.” [Female, D]

"During the winter [it is a tough] time especially when you’ve got the holidays coming up, you need all that food because you’ve got company coming in, you’ve got family coming in.” [Female, D]

**Coping or prevention strategies**

When residents faced difficulties obtaining enough food, they reported changing their buying and eating habits, as well as cutting the size or portioning their meals to make them last.

"Sometime I have to portion out [my meals]. If I cook something, I have to cut it up into three so it’ll last me at least two days.” [Male, D]

"You can take a whole chicken and roast it and de-bone the whole thing. You can get up to ten meals out of a whole chicken if you play it right. I’ve done it.” [Female, S]

"With all the diabetic problems I have, I end up eating sugar, just raw sugar out of the bag because if I stand up, I fall. I’m depleted and the stuff sitting in the cabinet is stuff I can’t cook.” [Female, S]

Residents also mentioned that when facing economic difficulties they have changed the types of food they buy.

"I go to the store because I know QFC. I get manager specials and things like that. Sometimes the meat is not the greatest, but I have to boil it, I can’t fry it because it’s hard on my teeth.” [Male, D]

"I very seldom buy meat, outside of ground beef.” [Male, D]
Where to turn for other resources…

Focus group participants reported using Meals on Wheels, food banks, and other food distribution programs run by social service organizations to become more food secure.

“For some reason, I don’t qualify for food stamps and so I don’t have that, and I have a lot of medical bills, so every single penny goes to paying all of my living expenses and I have nothing left for food. I am fully dependent on the food bank.” [Female, D]

“Basically the food bank has been my source of food.” [Female, S]

“Even within this last year, I’ve gone to several different food banks and gotten frozen chicken and salmon, some beef, especially beef patties.” [Male, D]

A few residents reported utilizing local church programs to receive groceries and grocery vouchers. However, very few of the residents realized that the churches offered the services.

“St. Vincent’s [Church] give you like thirty [or] forty dollar vouchers sometimes. Most churches bring you out a bag or something, canned goods, pastas.” [Male, D]

“I only go to churches when I am super, super desperate. Like when I wasn’t digesting food at all and I had to live off of the Boost or Ensure, so I couldn’t go to the food bank; that was the time I went to the church and they gave me a grocery voucher so I could go get the Boost.” [Female, D]

“There is quite a few churches that do community lunches throughout the week. There is quite a few churches where you can just go and get food, there is some that you need vouchers for. Some of the churches give you vouchers to the grocery stores.” [Male, D]

Barriers to the Emergency Food System

There were five main barriers that emerged from focus group discussions that prevent seniors and persons with disabilities residing in government subsidized buildings from accessing the emergency food system.

1. The foods offered from the food banks’ grocery delivery programs do not always meet residents’ special dietary needs. Several residents who were diabetic complained about the high amount of starches included in the bags (i.e. bread, pasta, rice, sugary, canned fruits, candy bars, and soda). Other residents who have limited chewing capacity complained about the shortage of soft-chew items included. In several cases, the residents believed they could not use some foods included in the delivery bag, so they decided not to sign up for the program at all or to quit the program after they felt it failed to meet their needs.

“There’s food and there’s food. Stuff with a lot vitamins, you know fruit [and] vegetables, are really expensive and they go bad fast. The stuff from the food bank, I’m grateful for, but often it’s not in a condition that you can put it in your fridge for a day or two without it getting moldy.” [Female, D]

“I had one of those gastric bypasses and well, I should eat healthier on my own, but it’s sort of hard to because we mainly get starches and sweets and not a lot of nutritionally sound food that will stay or keep for that matter [from the food bank].” [Female, D]
“They seem to leave out things that we need, like milk, margarine, eggs—sometimes they’re here and sometime they’re not here—just important ingredients and you can’t cook it if it doesn’t have that stuff in it. So you’re stuck with what amounts to eating noodles raw or you can’t cook anything.” [Female, S]

2. **Residents cited transportation issues as a major concern when accessing local supermarkets and the emergency food system.** The cost of public transportation inhibited some respondents from utilizing King County’s Metro system. However, the major concern surrounding transportation was how to return with items picked up from local supermarkets and food banks. Many residents say they have trouble physically carrying multiple bags of groceries home, whether they are on the bus, on foot, or in a wheelchair. Several residents stated that they took taxi-cabs to return home when making large purchases, but the price of taxi-cabs restricted many focus group respondents from utilizing this as a means of transportation.

“For me its two things, I got attacked on a bus, so I have issues taking the bus, so I pretty much bike everywhere I go. But then, I’m also in a physically weak state so I can only bike so far. And then you bike to a food bank and get all of this food…[but] it really limits what you can really get at the food bank. Even though you might be able to get so much on your cart, its like you can’t take all you can get and that’s your weeks trip. Its not like, ‘Can I take half now, and come back tomorrow?’” [Female, D]

3. **Residents’ physical health prevented many seniors and persons with disabilities from both accessing the emergency food system, as well as preparing food collected from those resources.** Several residents stated that their physical health prohibited them from standing for long periods of time. This, coupled with long lines at food banks, discouraged many residents from going to the food bank in the first place. Many residents who had problems standing for long periods of time, but were still able to access the food bank, reported having troubles standing to cook the food they received.

“Not a lot of people are willing, or able, to go to some of the outside food banks—but they’re available.” [Male, S]

“Sometimes you go to some of these food lines, and the line is so long. Like me, I’ve got 70% deteriorate arthritis all through my body from my head to my toes. I can’t stand in no line for like 3 hours waiting. Most of the time its so far away, when it gets cold my bones hurt and I feel like my legs are going to break and it’s hard for me to get around.” [Male, D]

“I have a really, really small apartment. I can get to a couple parts of my stove, but I don’t cook a lot on it. It’s hard to get to and I’d have to stand. I can walk short distances no
problem, but standing at length sometimes, it makes my legs blow up. So I do a lot in the microwave.” [Female, D]

4. Some residents also reported mental health issues as barriers that prevented them from leaving their apartment or housing complex, much less accessing the emergency food system. Several residents suffer from agoraphobia—a type of anxiety disorder where people fear being in places that may be difficult to get out of quickly—and feared leaving their housing complex or apartment. Other residents mentioned the negative effect of depression on their ability to access the emergency food system.

“One of my problems, aside from that sometimes just physically I’m in pain and I’m not going to go drive anywhere, is [I’m] just sort of agoraphobic. I used to live on the street when I was a teenager and sometimes I’m afraid to go out at night, or afraid to go out after it gets dark, especially now that it’s getting dark earlier. And I think there are people also who have similar issues of either not wanting to leave their apartment or not wanting to leave the building. Me, I just don’t want to leave my apartment.” [Female, D]

“And what’s really sad, is that, at least I’ve found for myself, that if you don’t eat enough, that just exacerbates the depression. The dentist just said your teeth are getting loose because you’re malnourished.” [Female, D]

“Panic. You just aren’t certain how you’re going to calm down to be rational and the depression and the fear, the agoraphobia, you just can’t even get to your door to go out.” [Female, S]

5. A majority of focus group participants displayed a limited knowledge of the existing emergency food system programs to help them meet their food needs. Most residents knew where conventional emergency food resources, such as food banks and pantries, are located. However, many displayed limited knowledge of less conventional resources such as hot meal programs, congregate meal programs, and church programs. For example, residents were unfamiliar with the eligibility rules and policies of the Meals on Wheels program and hot meals programs, as well as the locations of congregate meal sites.

“There’s a ton of resources out there, you just need to know how to access them. This city is probably one of the most resource heavy cities in America. I think probably a lot of what we have here is that people don’t know how to access the resources.” [Male, D]

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1 Almost half of the focus group’s twelve participants reported having problems standing to cook for long periods of time.
Discussion

This study reveals that food insecurity is extremely high among seniors and persons with disabilities residing in Seattle’s government subsidized housing complexes. Food insecurity is almost five times more prevalent in the sampled population than the general population in the United States (Figure 3). In theory, the United States’ social programs should be acting as a safety net, preventing these populations from experiencing hunger and nutritional deprivation. However, there are many barriers that prevent this demographic from acquiring an adequate amount of nutritious food for an active and healthy lifestyle.

The current emergency food system has many shortcomings that prevent seniors and persons with disabilities from accessing nutritious food. Not only do these people have a hard time knowing where to turn for assistance, many have physical and mental health conditions that prevent them from physically accessing those resources. However, qualitative data from focus groups stated that accessing the resources for food is not the only problem. Many seniors and persons with disabilities experience difficulty standing for long periods of time to cook the food they receive from emergency food resources like food banks.

Figure 3: Comparison of food security status: Seniors and Persons with Disabilities Residing in Seattle’s government subsidized housing buildings

Source: Nord, et al.
Economic Incentive to Reduce the Food Insecurity Rate

Beyond the moral obligation of alleviating hunger and nutritional deprivation, a study conducted by the Association of Nutrition Services Agencies (ANSA)\textsuperscript{12} has cited economic reasons why providing nutritious food to our country’s low-income seniors and persons with disabilities is important. ANSA researchers state that “access to reliable and adequate nutrition can play a large role in reversing” health discrepancies between those who are food secure and those who are not, ultimately reducing health care expenditures.\textsuperscript{7}

In an effort to reduce these health discrepancies, ANSA member organizations provide medical nutrition therapy for low-income persons with life-challenging diseases. This therapy consists of in-depth nutrition assessments, nutritional diagnosis, and counseling provided by a registered dietician, as well as the delivery of medically appropriate and nutritious individualized meals to clients free of charge.\textsuperscript{8} On average, it costs an ANSA member organization $1,507 per client to provide nutrition therapy and home-delivered individualized meals annually.\textsuperscript{9}

ANSA member organizations treat a large number of diabetic clients each year. Nationwide, roughly 30% of people living below the poverty line are at a high risk for developing type II diabetes, a disease that is “common among low-income elderly, dual-eligible Medicare/Medicaid patients resulting in significant morbidity, mortality, and cost.”\textsuperscript{10,11} On average, “the cost of one day in the hospital for those with complications to diabetes is $3,839.” Diabetic patients spend an average of 5.4 days in the hospital each year (5.4 days/$20,730).\textsuperscript{12}

Potential government savings from involving low-income seniors and persons with disabilities’ in nutrition therapy and meal delivery can be substantial. For example, if participation in an ANSA organization’s nutritional therapy and home-delivered meal program can keep a diabetic client out of the hospital for one day, an average of $2,332 could be saved.\textsuperscript{13} The ability of nutrition therapy and home-delivered meal programs to help alleviate health discrepancies between low-income individuals and their counterparts creates a strong argument for support of these nutrition services.

\textsuperscript{12} Association of Nutrition Services Agencies: http://www.aidsnutrition.org/
Limitations

Limitations to this study include a small sample size, as well as the use of the United States Food Security Module Questions to measure household food security among immigrants, seniors, and persons with disabilities.

Sample Size

Due to limited resources and the short six months allotted to complete this project, the researcher was only able to survey residents from seven government subsidized buildings in Seattle, Washington. From those seven buildings, the researcher sampled 26% of the seven buildings’ total population (726 households). According to DSS Research, the author’s survey of 188 households had a margin of error of plus or minus 6 percentage points at the 95% confidence level. A larger sample size would decrease the margin of error for the sample.

Use of Standard USDA Food Security Module Questions

The translated USDA Food Security Module Questions may not be the best measure of the food security of the immigrant population sampled. The researcher encountered a large Asian immigrant population in two of the seven buildings. The food security rate among the Asian population in this building was drastically higher than their non-Asian counterparts, raising the issue of whether methodological questions may contribute to these rates. Although native speakers translated and back-translated the survey tool into multiple languages, the researcher is unsure if households’ interpretations of the survey questions differed from that of native English speakers. Also, the USDA Food Security Module Questions determine if monetary resources prevent households from obtaining an adequate and

Food Security of Immigrant Population

It was not within the scope of this project to analyze predictors of food insecurity. Therefore, the project did not formally collect and analyze links between respondents’ gender, race, or ethnicity. However, the researcher did observe that the low-income Asian population who constituted the majority population in both the International House and Beacon Tower exhibited much higher rates of food security than their non-Asian counterparts. Many expressed to the interpreter similar sentiments: “If I have $125 for food per month, I will spend the $125 for food. But, if I only have $100 for food one month, I will only spend the $100 that month by budgeting for cheaper foods. But there is never a time where I run out of food.” Much of the Asian demographic were not reducing their food intake, eating less food than they felt they should, or running out of food, but in turn were changing the variety and the quality of their diets to ensure they would have enough food for a healthy and active lifestyle. Therefore, the questions used in this sample fail to address the variety or quality of respondents’ diet in identifying food insecurity in the sample population.

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xiii All of the residents randomly sampled in the International House were Asian. A majority of those sampled in Beacon Tower were Asian.
nutritious diet at all times. The questions do not focus on non-monetary resource barriers that may cause a household to become food-insecure—for example, not offering culturally appropriate food at local supermarkets, food pantries, or meal programs.

**Questionnaire use on the Seniors and Persons with Disabilities population**

In addition, the Food Security Module Questions may not be as sensitive to the barriers that prevent seniors and persons with disabilities from accessing enough food for an active and healthy lifestyle. The USDA Food Security questions measure food insecurity caused specifically from a lack of monetary or other resources for food. For example: In the last 12 months, since last October/November/December, did (you/you or other adults in your household) ever cut the size of your meals or skip meals because there wasn’t enough money for food? [Refer to Box 2 for additional questions]. However, the USDA Food Security Module fails to address non-monetary barriers that seniors and persons with disabilities face—for example, health problems, mobility issues, or lack of transportation. Therefore, the USDA Food Security questions may over-classify this demographic as food-secure.

Despite these limitations, the use of the established United States Department of Agriculture’s Food Security Module Questions makes the data comparable to statewide and national findings.
Recommendations

This study indicates that there is a significant percentage of seniors and persons with disabilities who are food insecure and identifies major barriers that prevent low-income seniors and persons with disabilities from accessing enough food for an active, healthy lifestyle at all times. While the answers to this problem are not easy, there are solutions that can help alleviate this problem in the Seattle community.

1. Create a “building specific” food resource guide for residents living in Seattle’s government subsidized complexes. Each guide should be tailored to the food resources offered for that building’s zip code. Each resources’ hours, days of service, contact number, location, accessible bus routes, and criteria to be served should be included if applicable. Not only should mainstream food resources such as food banks, food distribution programs, and meal programs be listed, but also less conventional resources, such as church programs.

2. Expand the city of Seattle’s Food for Seniors and People with Disabilities Program (homebound grocery delivery). This program alleviates many of the major barriers that prohibit seniors and persons with disabilities from accessing the emergency food system. Residents who are homebound, due to mental issues as well as physical disabilities, are able to receive a bag of groceries weekly or bi-weekly. With the high rate of food insecurity among this population and the current waiting list for program participation, it is evident that expansion of this program will increase these people’s access to the emergency food system.

In addition, the city of Seattle should allocate substantial funding to expand the capacity of the Food for Seniors and People with Disabilities Program to deliver individualized meals that are catered to the strict dietary needs of homebound residents. Toward this end, the extremely successful Meals for More program of the Chicken Soup Brigade serves as a powerful model for creating and delivering individualized meals, that are both diet and culture-appropriate, for low-income people who are homebound due to disability or illness. Many seniors and persons with disabilities who experienced trouble standing for long periods of time and had difficulty preparing their own meals expressed interest in obtaining balanced meals that were easy to cook (i.e. microwavable or oven ready).

“I think I’ve more or less turned to fast, get it fixed fast, otherwise I’m diabetic and I get kind of crazy.” [Female, S]
“It was just like $3 a meal [for Meals on Wheels] was too steep, but I thought maybe I could get like one meal a day, or just one meal that was balanced that I didn’t have to cook.” [Female, D]

3. Create a nutrition workgroup of representatives from food banks, Aging and Disability Services, Seattle and King County Public Health, Seattle Housing Authority, Senior Services, etc. The workgroup will increase nutrition education to diabetic seniors and persons with disabilities to provide information and support regarding food choices and their affect on an individual’s health. Studies show that almost 1 in 5 adults over 65 live with diabetes. The researcher encountered several diabetic individuals who have incorrect perceptions of the types of food they should and should not eat. Many avoid using the food banks because they believe they can not eat a majority of the items received and believe they should be given special diabetic-friendly bags. Due to limited funding resources, many food banks rely only on serving items they have been given: pastas, white breads, ice cream, and canned goods with high sugar contents. However, registered dieticians, with whom the researcher spoke, agree that diabetic seniors and persons with disabilities do not need specialized bags, but need education on making smart nutritional choices.

“People living with diabetes should not need special food bags. There are ways we can help diabetics and the people who are serving those clients on how to make better choices through nutrition education. Some examples could be washing canned fruit to rinse off the sugars, or choosing whole grains like whole wheat bread instead of white bread. A few dietary interventions and lifestyle changes can improve the quality of life for people who have diabetes. I encourage diabetics to meet with a Registered Dietitian, who can help clients achieve their goals of a healthy lifestyle.” -Brooke Kidd, R.D.

4. Create a Transportation Coalition among churches in the Seattle area for Seniors/Persons with Disabilities. This coalition will provide free transportation from government subsidized buildings to food banks and grocery stores on a weekly basis for seniors and persons with disabilities. Currently King County Metro operates the Americans with Disabilities Paratransit Program to provide “curb-to-curb ‘paratransit’ service as a ‘safety net’ for persons whose disabilities prevent use of accessible non-commuter, fixed route bus service.” However, many residents and caseworkers felt as though the eligibility rules were becoming too restrictive for many seniors and persons with disabilities who need access to the service. The proposed transportation coalition among churches in the Seattle area would provide free transportation to grocery stores and food banks to supplement the existing services offered by King County Metro. The successful Senior Resource Center transportation program operated out of the Jefferson Unitarian Church in Golden, Colorado serves as a great model for providing free transportation to grocery stores for low-income people who are homebound due to disability or illness.
5. **Expand the Solid Ground “Food Security for Seniors Research Project.”**

This study should be expanded to conduct a community food security assessment. Additional research should build on the household food security data collected by this study by evaluating the effectiveness of the local infrastructure for delivering and administering Federal food assistance programs; the adequacy of supermarkets regarding their location, the variety of food offered, and the price of that food; and the community’s food production resources (i.e. community gardens, community-supported agriculture, or small farmers). The additional research would provide information about the ability of existing community resources to provide adequately nutritious food to seniors and persons with disabilities who reside in Seattle’s government subsidized buildings.

The ability to develop solutions to the problems of hunger and food insecurity in the community of seniors and persons with disabilities residing in Seattle’s government subsidized housing is not within the capacity of this report. However, small alterations and expansions to the current emergency food system can help diminish the barriers that are preventing these populations from acquiring enough food for an active and healthy lifestyle.
Appendix A- English Version
of Questionnaire

United States Adult Food Security Survey

The following questions are about the food eaten in your household in the last 12 months, since November of last year and whether you were able to afford the food you need.

HH3. I’m going to read you several statements that people have made about their food situation. For these statements, please tell me whether the statement was often true, sometimes true, or never true for (you/your household) in the last 12 months—that is, since last November.

The first statement is, “The food that (I/we) bought just didn’t last, and (I/we) didn’t have money to get more.” Was that often, sometimes, or never true for (you/your household) in the last 12 months?

[ ] Often true
[ ] Sometimes true
[ ] Never true
[ ] Do not Know or Refused

HH4. “(I/we) couldn’t afford to eat balanced meals.” Was that often, sometimes, or never true for (you/your household) in the last 12 months?

[ ] Often true
[ ] Sometimes true
[ ] Never true
[ ] Do not Know or Refused

AD1. In the last 12 months, since last November, did (you/you or other adults in your household) ever cut the size of your meals or skip meals because there wasn’t enough money for food?

[ ] Yes
[ ] No (Skip AD1a)
[ ] Do not Know (Skip AD1a)

AD1a. [IF YES ABOVE, ASK] How often did this happen—almost every month, some months but not every month, or in only 1 or 2 months?

[ ] Almost every month
[ ] Some months but not every month
[ ] Only 1 or 2 months
[ ] Do not Know

AD2. In the last 12 months, did you ever eat less than you felt you should because there wasn’t enough money to buy food?

[ ] Yes
[ ] No
[ ] Do not Know

AD3. In the last 12 months, were you every hungry but didn’t eat because there wasn’t enough money for food?

[ ] Yes
[ ] No
[ ] Do not Know
Appendix B- Chinese Version of Questionnaire

HH3.

AD1.

AD2.

AD3.

Appendix C- Spanish Version of Questionnaire

Examen para Adultos Sobre la Seguridad de Comida en los EEUU

Las siguientes preguntas pertenecen al alimento comida en su hogar en las doce meses pasadas, desde Octubre del año pasado, y si usted podía pagar por todo el alimento que usted necesita.
HH3. Voy a leerte varias declaraciones que personas hacían hecho sobre sus propias situaciones del alimento. Por estas declaraciones, por favor digame si la declaración estaba verdad con frecuencia, as veces verdad, o nunca verdad por (usted/su hogar) las doce meses pasadas – o desde este Octubre pasado.

La primera declaración es “El alimento que (yo/nosotros) compro no quedaba, y no tenia dinero para conseguir más.” Esto estaba verdad con frecuencia, as veces, o nunca para (usted/su hogar) en las doce meses pasadas?

[ ] Con frecuencia
[ ] As veces verdad
[ ] Nunca verdad
[ ] No sé o rechazado

HH4. “(Yo/nosotros) no puedo pagar por comidas balanceados” Esto estaba verdad con frecuencia, as veces, o nunca para (usted/su hogar) en las doce meses pasadas?

[ ] Con frecuencia
[ ] As veces verdad
[ ] Nunca verdad
[ ] No sé o rechazado

AD1. En las doce meses pasadas, desde el Octubre pasado, usted o otros adultos en su hogar, comer menos o faltar comidas porque no podía pagar para alimento?

[ ] Sí
[ ] No (Ignora AD1a)
[ ] No Sé (Ignora AD1a)

AD1a. [Si sí arriba, pregunte] Cuantos veces ocurrió este — casi cada mes, algunas meces pero cada mes no, o solo en una o dos meces?

[ ] Casi cada mes
[ ] Algunas meces pero no cada mes
[ ] Solo en una o dos meces
[ ] No sé

AD2. En las doce meces pasadas, usted comió menos que pensaba que debía porque no tenía dinero para comprar alimento?

[ ] Sí
[ ] No
[ ] No sé

AD3. En las doce meces pasadas, usted tenía hambre pero no comía porque no estaba dinero para alimento?

[ ] Sí
[ ] No
[ ] No sé

Appendix D- Russian Version of Questionnaire

Анкета для Проведения Опроса о Безопасности Питания для Взрослых в США

Следующие вопросы относятся к продуктам питания, которые употребляла ваша семья за последние 12 месяцев, начиная с октября прошлого года, и могли ли вы позволить покупку необходимых вам продуктов.

HH3. Я предлагаю Вам несколько утверждений, которые были сделаны другими об их ситуации с проблемами питания. Ознакомьтесь с ними, и пожалуйста, скажите насколько это относится к Вам: часто это правда, никогда относится или никогда не имело место (в ситуации со мной или моей семьей) за последние 12 месяцев — с октября прошлого года до сегодняшнего дня.

Первое утверждение: “Продукты, которые я/мы купили, быстро закончились и у меня/нас не было денег купить большее количество. Происходило ли это часто, иногда
или никогда в вашей семье за последние 12 месяцев?
[ ] Часто
[ ] Иногда
[ ] Никогда
[ ] Не знаю или отказываюсь отвечать

HH4. “Я/мы не могли позволить себе сбалансированное питание.” Было ли это часто, иногда или никогда в вашей семье за последние 12 месяцев?
[ ] Часто
[ ] Иногда
[ ] Никогда
[ ] Не знаю или отказываюсь отвечать

AD1. За последние 12 месяцев, с октября прошлого года, вам или вашей семье приходилось сокращать количество употребляемой еды или пропускать принятие пищи, потому что у вас не было достаточно денег на питание?
[ ] Да
[ ] Нет (если нет, то пропустить AD1a)
[ ] Не знаю (если не знаю, то пропустить AD1a)

AD1a. [ЕСЛИ ДА ВЫШЕ, ТО ОТВЕТЬЕ НА ВОПРОС] Как часто это происходило — почти каждый месяц, в отдельные месяцы, но не каждый месяц, или только 1 или 2 месяца?
[ ] Почти каждый месяц
[ ] В отдельные месяцы, но не каждый месяц
[ ] Только 1 или 2 месяца
[ ] Не знаю

AD2. За последние 12 месяцев питались ли вы меньше, чем следовало, вследствие отсутствия денег на покупку питания?
[ ] Да
[ ] Нет
[ ] Не знаю

AD3. За последние 12 месяцев были ли вы когда нибудь голодны и не могли поесть вследствие отсутствия денег на еду?
[ ] Да
[ ] Нет
[ ] Не знаю

Appendix E- Vietnamese
Version of Questionnaire

Bản Thẩm đồ An toàn Thực phẩm Hoa Kỳ
Những câu hỏi dưới đây là về nguồn thực phẩm của gia đình bạn trong 12 tháng qua, từ tháng Mười của năm trước, và về khả năng thưởng thức của bạn.

HH3. Tôi sẽ đọc cho bạn một vài nhận xét của một số người về tình trạng thực phẩm của họ. Sau khi đọc, xin bạn vui lòng cho tôi biết liệu những câu nhan đề này là thường dùng, thỉnh thoảng dùng, hoặc không bao giờ dùng cho trường hợp của bạn/gia đình của bạn trong 12 tháng qua -- tức là từ tháng Mười năm trước.
Câu đầu tiên là, “Thực phẩm mà tôi/chúng tôi mua thì mau hụt, và tôi/chúng tôi không có tiền để mua thêm.” Chuyển thể này thường, thịnh thông, hay không bao giờ xảy ra với bạn/gia đình của bạn trong 12 tháng qua?
[ ] Thường có
[ ] Thịnh thông có
[ ] Không bao giờ có
[ ] Không biết hoặc từ chối trả lời

HH4. “Tôi/chúng tôi không thể mua nói đầy đủ lương thực ăn cần đối.” Chuyển thể này thường, thịnh thông, hay không bao giờ xảy ra với bạn/gia đình của bạn trong 12 tháng qua?
[ ] Thường có
[ ] Thịnh thông có
[ ] Không bao giờ có
[ ] Không biết hoặc từ chối trả lời

AD1. Trong 12 tháng qua, từ tháng 10 năm trước, bạn/tháng viên trong gia đình bạn có bao giờ phải giảm khẩu phần ăn hoặc bỏ bữa vì không có đủ tiền mua thực ăn?
[ ] Có
[ ] Không (Bố phần AD1a)
[ ] Không biết (Bố phần AD1a)

AD1a. [Nếu trả lời có ở trên] Chuyển thể này xảy ra thường xuyên không -- gần như mỗi tháng, một vài tháng nhưng không phải mỗi tháng, hoặc chỉ có 1 hoặc 2 tháng trong năm?
[ ] Gần như mỗi tháng
[ ] Một vài tháng nhưng không phải mỗi tháng
[ ] Chỉ 1-2 tháng trong năm
[ ] Không biết

AD2. Trong 12 tháng qua, bạn có bao giờ phải ăn ít hơn mức bạn cho là nên ăn vì không có đủ tiền mua thực ăn?
[ ] Có
[ ] Không
[ ] Không biết

AD3. Trong 12 tháng qua, bạn có bao giờ nhận ăn khi đó vì không có đủ tiền mua thực ăn?
[ ] Có
[ ] Không
[ ] Không biết

Appendix F- Example of Letter sent to Random Sample

Apartment ###
9455 27th Avenue SW
Seattle, Washington 98126

November ##, 2007

To the Residents of Apartment ###,

My name is Brad Johnson and I’m with Solid Ground’s Partners in Caring as an Emerson National Hunger Fellow. Partners in Caring works with Seattle Housing
Authority residents and other community service providers to help residents live with greater independence, health and well-being.

Your household was selected at random from Westwood Heights and in the coming weeks, I am hoping to call you and ask you a few questions concerning your food and eating habits over the telephone. It will take around 5 minutes.

**Why are we asking these questions?** We are assessing the availability of nutritional food and the quality of food that is available to you. With these responses, we hope to see an expansion of the current food delivery program if necessary.

**Please understand that we will respect your privacy** and all of the information you provide us will remain **confidential**.

If you have any questions or comments, please feel free to contact me via (206) 694-6793 or by email at bradj@solid-ground.org, or your Resident Council President (Apartment ###). Thank you for your time, and we look forward to talking with you soon.

Very sincerely yours,

Brad Johnson

Emerson National Hunger Fellow, Partners in Caring
Solid Ground
1501 N 45th Street
Seattle, WA   98103
(206) 694-6793

### Appendix G- Number of Units Sampled Per Housing Complex

<table>
<thead>
<tr>
<th>Housing Complex</th>
<th>Total Number of Units in Building</th>
<th>Targeted</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ballard House</td>
<td>79</td>
<td>25</td>
<td>22</td>
</tr>
<tr>
<td>Beacon Tower</td>
<td>107</td>
<td>34</td>
<td>27</td>
</tr>
<tr>
<td>Bell Tower</td>
<td>107</td>
<td>38</td>
<td>28</td>
</tr>
<tr>
<td>Green Lake Plaza</td>
<td>128</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Harvard Court</td>
<td>79</td>
<td>25</td>
<td>12</td>
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<tr>
<td></td>
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<tr>
<td>----------------</td>
<td>-------</td>
<td>-----</td>
<td>---</td>
</tr>
<tr>
<td>International House</td>
<td>97</td>
<td>31</td>
<td>27</td>
</tr>
<tr>
<td>Westwood Heights</td>
<td>129</td>
<td>40</td>
<td>32</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>726</td>
<td>233</td>
<td>188</td>
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## Appendix H- HUD Calculated Seattle Area median income levels and income limits

<table>
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<tr>
<th>Effective date</th>
<th>Number in household</th>
<th>30% of median</th>
<th>50% of median</th>
<th>80% of median</th>
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<tr>
<td>3/20/2007</td>
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References


