

Duquesne University **Duquesne Scholarship Collection**

Electronic Theses and Dissertations

Summer 2014

Are Community Food Assistance Programs Meeting the Needs Of Food-Insecure Households in Pittsburgh's North Side Neighborhoods?

Ryan M. Van Dinter

Follow this and additional works at: https://dsc.duq.edu/etd

Recommended Citation

Van Dinter, R. (2014). Are Community Food Assistance Programs Meeting the Needs Of Food-Insecure Households in Pittsburgh's North Side Neighborhoods? (Master's thesis, Duquesne University). Retrieved from https://dsc.duq.edu/etd/1303

This Immediate Access is brought to you for free and open access by Duquesne Scholarship Collection. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of Duquesne Scholarship Collection. For more information, please contact phillipsg@duq.edu.

ARE COMMUNITY FOOD ASSISTANCE PROGRAMS MEETING THE NEEDS OF FOOD-INSECURE HOUSEHOLDS IN PITTSBURGH'S NORTH SIDE NEIGHBORHOODS?

A Thesis

Submitted to the McAnulty Graduate School of Liberal Arts

Duquesne University

In partial fulfillment of the requirements for the degree of Master of Arts

Ву

Ryan Van Dinter

August 2014

Copyright by

Ryan Van Dinter

ARE COMMUNITY FOOD ASSISTANCE PROGRAMS MEETING THE NEEDS OF FOOD-INSECURE HOUSEHOLDS IN PITTSBURGH'S NORTH SIDE NEIGHBORHOODS?

By

Ryan Van Dinter

Approved July 18, 2014

Douglas Harper, Ph.D. Professor of Sociology (Committee Chair) Evan Stoddard, Ph.D.
Associate Dean
Adjunct Associate Professor of Sociology
(Committee Member)

James C. Swindal, Ph.D. Dean, McAnulty College and Graduate School of Liberal Arts Charles F. Hanna, Ph.D.
Director, Graduate Center for Social and Public Policy
Associate Professor of Sociology

ABSTRACT

ARE COMMUNITY FOOD ASSISTANCE PROGRAMS MEETING THE NEEDS OF FOOD-INSECURE
HOUSEHOLDS IN PITTSBURGH'S NORTH SIDE NEIGHBORHOODS?

By

Ryan Van Dinter

August 2014

Thesis supervised by Dr. Douglas Harper and Dr. Evan Stoddard

Semi-structured interviews with three food-insecure householders and three community food program managers were conducted to explore if food assistance programs meet the needs of residents on Pittsburgh's North Side. Insufficient income underlies food-insecurity, while unexpected events increase its severity. Access to fresh and affordable food is also an issue. Farm stands and farmers' market vouchers are appreciated, but they only provide seasonal access to fresh food. These factors increase reliance on food assistance programs, and utilizing multiple programs is necessary. Householders appreciate the food assistance programs; however, responses suggest some needs are unfulfilled and householders face monotonous diets. Providers may be unaware of dissatisfaction because householders may mask dissatisfaction to avoid

appearing unappreciative. North Side food assistance programs provide sufficient food and usually complementary food to residents, but there appears to be a lack of variety in household diets and seasonal access to fresh and nutritious foods.

TABLE OF CONTENTS

Abstract	iv
Dedication	viii
Preface	1
Background	3
Food Insecurity	3
What is Food Insecurity?	3
Defining Public and Private Food Assistance	
Food Access	8
Ideologies Pertaining to Food Insecurity and Food Access	11
Methodology	13
Respondents	14
Householders	
Providers	
Findings	
Income	
Income and Expenses	
SNAP Cuts	
Employment	
Unexpected Events	
Anticipated Income	
Access to Food	
How Households Get Food	
Sufficient Food	
Shopping Trips	
Multiple Food Pantries	
Stockpiling vs. Hoarding	
Satisfaction and Appreciation	
Coping with Food Insecurity	
Food Management	50
Increasing Self-Sufficiency	
Food Assistance Programs Needs and Solutions	
Summary	
Policy Recommendations	

Limitations	67
Bibliography	67

DEDICATION

Mom and dad, this is for you. Thanks for putting all on the line 30 years ago. I appreciate everything you've done to get me here.

Happy Anniversary!

Love,

Ryan

Preface

My interest in food issues and food insecurity began as I started my Peace Corps service in Ukraine. I joined the Peace Corps with the idea that I would get two years of international development experience, then obtain a master's degree of some sort before embarking on a journey with USAID. In 2008, riots over food shortages broke out in several countries. Food security for these countries is tied up in global food trade, subsidies, and their impact on local food systems, and all tied up with poverty. The impact was even felt in the U.S., but to a lesser degree. (I recall fears that organic food was just too expensive.)

I grew a garden in Ukraine—pretty impressive garden that would have completely failed if my neighbor/counterpart/school principal had not shown me the ropes and kept some plants alive for me when I was away at summer camps. I loved working in the garden and thought that gardens could help people alleviate the pains of food insecurity in the U.S., especially since I had so much food for one person.

I started my degree at Northeastern University in 2012 and wanted to focus on the impact of community gardens and food insecurity in their neighborhoods. After coming to Duquesne, I started working with the Southwestern Pennsylvania Food Security Partnership. The mission of the program is to enroll eligible households into the Supplemental Nutrition Assistance Program (SNAP) by training community organizations to assist clients with the online SNAP application. At the time there were roughly 112,000 individuals that were eligible but not receiving the benefit.

I left this topic for a while but returned with this thesis paper; the challenge and experience that this research has provided has been immense. It is a true privilege to be the

person that can travel the world and study the effects of poverty, to be the person on my side of the tape recorder. One person I interviewed wept while recalling growing up in the late 1940s in food lines in the South, the food her family ate, and the struggle her parents went through to provide for them on five dollars a week. To avoid a life of hardship is a true blessing. To meet people that are willing to share their experiences is a miracle.

Food insecurity is a terribly complex problem. I hope I accurately represent the issue and the views of respondents in this work, and that it can be put to some positive use in the community.

Background

My purpose in this section is to provide background about food security in the Pittsburgh area and surrounding food access on the North Side. First, I define food insecurity and provide some underlying factors. Second, I define public and private food assistance programs. In this section I provide brief details from recent events that may affect household food security. Fourth, I define food access and explore issues of food access on the North Side. Fifth, I provide previous research that looks at how households and providers view food insecurity.

Food Insecurity

What is Food Insecurity?

Approximately 161,679 people in Allegheny County receive Supplemental Nutrition Assistance Program benefits (food stamps), about 165,540 people are food-insecure, ¹ and an estimated 108,934 of the food—insecure reside in Pittsburgh. ² This means that a fairly significant part of the population lives in a situation where "the availability of nutritionally adequate and safe foods or the ability to acquire acceptable foods in socially acceptable ways is limited or uncertain."^{3, 4} Food insecurity is often confused with hunger but the two concepts are not synonymous. The USDA defines hunger as "an individual-level physiological condition that may result from food insecurity," or more simply, a subjective feeling arising from a lack of food. ⁵ "Hunger" was used during the food stamp program in the 1970's, but "food insecurity" was adopted in order "to include a lack of secure provisions at the household and individual

¹ Greater Pittsburgh Community Food Bank. "Hunger Profile by County: Allegheny County," *Greater Pittsburgh Community Food Bank* (2013): 1, http://www.pittsburghfoodbank.org/pdf/allegheny.pdf.

² Murray, Zachary. "Strategies for Access to Healthy Foods in Allegheny County. A Menu for Food Justice," *Just Harvest* (2013): 4.

³ Kendall, Anne, Christine M. Olson, and Edward A. Frongillo Jr. "Validation of the Radimer/Cornell Measures of Hunger and Food Insecurity," *The Journal of Nutrition* 125, no. 11 (1995): 2793.

⁴ The term socially acceptable contains a value judgment. Some times this means "normal channels. What researchers really are referring to is buying food, preferably from super markets, rather than relying on donations. ⁵ U.S. Department of Agriculture, "Definitions of Food Security," (2013).

levels."⁶ The USDA further defines food insecurity as "the condition assessed in the food security survey and represented in USDA food security reports—is a household-level economic and social condition of limited or uncertain access to adequate food."⁷ These changes allow researchers to measure different aspects and levels of food insecurity.

Food insecurity used to be defined as "with hunger" or "without hunger," but is now defined as "low food security" or "very low food security." Households with low food security give "reports of reduced quality, variety, or desirability of diet [with] little or no indication of reduced food intake," while households with very low food security report a reduction in food intake or disruptions in eating patterns in addition to reduced quality variety, or desirability of diet. Food security exists when households have sustainable access "to enough food for an active, healthy life." 10

Research shows that income and employment are factors determining food insecurity. Income and employment may be significant issues to families on the North Side as 30.5 percent of the population lives in poverty, about 15 percent are elderly, and median household incomes range between \$12,000/year to \$39,000/year. Research shows that income and employment are persistent needs for food-insecure households¹¹ as food insecurity increases as income

_

⁶ National Research Council. "Food Insecurity and Hunger in the United States: An Assessment of the Measure." *Panel to Review the U.S. Department of Agriculture's Measurement of Food Insecurity and Hunger.* Washington, DC: The National Academies Press (2006): 43.

⁷ U.S. Department of Agriculture. Definitions of Food Security (2013), http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security.aspx .

8 Ibid.

⁹ Ibid.

¹⁰ Mabli, James, Rhoda Cohen, Frank Potter, and Zhanyun Zhao. *Hunger in America 2010 National Report Prepared for Feeding America*, no. 6497, Mathematica Policy Research (2010).

¹¹ Hamelin, Anne-Marie, Céline Mercier, and Annie Bédard. "Needs for Food Security from the Standpoint of Canadian Households Participating and Not Participating in Community Food Programmes," *International Journal of Consumer Studies* 35, no. 1 (2011): 58.

decreases.^{12, 13} Limited incomes make obtaining food at supermarkets, or through "normal channels," difficult for some households, and this may occur at certain points during the month, such as before pay day.

Food insecurity is also affected by unexpected economic events, like divorce, unemployment, winter bills, or an increase in household members: "Households above poverty level, 37.5 percent of the food-insufficient had lost food stamps, lost a job and/or gained a household member in the previous 8 [months], whereas this was true of 16.9 percent of the food-sufficient households." Because several factors contribute to food insecurity, "examining the trigger events in people's lives that cause them to start using food assistance could be fruitful." ¹⁵ Understanding these events and how they affect household food security may allow for new methods in addressing household food needs and preempt food insecurity.

Defining Public and Private Food Assistance

Public and private food assistance programs attempt to alleviate food insecurity. Public food assistance programs usually provide financial assistance to households to purchase food. The Supplemental Nutrition Assistance Program is the largest federally supported food assistance program. SNAP, essentially, is money given to food—insecure households to purchase food. Households receive benefits through an Electronic Benefits Transfer card (EBT). SNAP benefits are indexed to the "Thrifty Food Plan" (TFP). The TFP determines what a low-income household would pay to buy the minimal food necessary to cook a nutritious meal from

¹² Furness, Bruce W., Paul A. Simon, Cheryl M. Wold, and Johanna Asarian-Anderson. "Prevalence and Predictors of Food Insecurity among Low-income Households in Los Angeles County," *Public Health Nutrition* 7, no. 06 (2004): 791-794.

¹³ Rose, Donald. "Economic Determinants and Dietary Consequences of Food Insecurity in the United States," *The Journal of Nutrition* 129, no. 2 (1999): 517S-518S.

¹⁴ Ibid., 518S.

¹⁵ Daponte, Beth Osborne. "Private Versus Public Relief: Use of Food Pantries Versus Food Stamps Among Poor Households," *Journal of Nutrition Education* 32, no. 2 (2000): 81.

scratch. Nutritious food is determined by the 2005 USDA dietary guidelines. ¹⁶ A household must be under 135% of the poverty line to receive SNAP. Eligibility and benefits are based on income, expenses, and household size. ¹⁷

Private food assistance programs are generally set up as emergency food programs.

Although there are a variety of programs, I will only focus on food pantries. Food pantries are small, typically religiously affiliated, and require large amounts of volunteer effort. ¹⁸ Food pantries may have certain eligibility requirements, but some urban pantries restrict the number of hours they are open and the number of visits a household may obtain food in a month. Food pantries receive food from a variety of sources through donations and the area food bank. Food banks are nonprofit organizations that act as a food distribution network for metropolitan and regional areas. ¹⁹ The Greater Pittsburgh Community Food Bank serves food pantries and provides other food-related programs over an eleven-county area. ²⁰

Some obstacles exist to public and private food assistance programs. Some studies show that SNAP does not always meet household needs. Both SNAP and some food pantries have asset and income tests which could limit households from receiving necessary, but food pantries are less stringent and give food based on need.²¹ SNAP benefits may also be insufficient to

.

¹⁶ Nord, Mark, Margaret Andrews, and Steven Carlson. "Household Food Security in the United States, 2004." *USDA-ERS Economic Research Report* 11 (2005),

http://www.cnpp.usda.gov/publications/foodplans/miscpubs/tfp2006report.pdf

¹⁷ U.S. Department of Agriculture Supplemental Nutrition Assistance Program. "Eligibility Requirements," (2014), http://www.fns.usda.gov/snap/eligibility

¹⁸ Daponte, Beth Osborne. "Private Versus Public Relief: Use of Food Pantries Versus Food Stamps Among Poor Households." *Journal of Nutrition Education* 32, no. 2 (2000): 72-73.

²⁰ Greater Pittsburgh Community Food Bank. "Our Service Area," (2014), http://www.pittsburghfoodbank.org/about/ServiceArea.aspx

²¹ Daponte, Beth Osborne. "Private Versus Public Relief: Use of Food Pantries Versus Food Stamps Among Poor Households." *Journal of Nutrition Education* 32, no. 2 (2000): 73.

cover household food needs for the month, or households may spend the benefits too quickly.²² Additionally, stigma may stop some food—insecure households from participating in food assistance. Stigma associated with using SNAP repels senior citizens in Allegheny County from participating in the program, increasing their reliance on food pantries.²³ These obstacles make alleviating food security difficult.

The Great Recession increased the need for both public and private food assistance programs. From 2007 to 2009, food pantry participation increased by 44 percent from 3.9 to 5.6 million households.²⁴ High unemployment prompted the Federal Government to increase SNAP benefits through the American Recovery and Reinvestment Act (ARRA). However, to allow states to address fiscal concerns, congress accelerated the expiration of the ARRA.²⁵ The repeal of the ARRA "will be the equivalent of taking away 21 meals per month for a family of four, or 16 meals for a family of three, based on calculations using the \$1.70 to \$2 per meal provided for in the Thrifty Food Plan," and the decrease in SNAP will only cover an average of \$1.40 per meal,²⁶ while the average cost of a nutritious meal in Allegheny County is about \$2.75.²⁷ SNAP was further cut in the most recent Farm Bill. These cuts combined with high unemployment will likely lead to further utilization of community food programs.

²² Leung, Cindy W., Elena E. Hoffnagle, Ana C. Lindsay, Hayley E. Lofink, Vanessa A. Hoffman, Sophie Turrell, Walter C. Willett, and Susan J. Blumenthal. "A Qualitative Study of Diverse Experts' Views about Barriers and Strategies to Improve the Diets and Health of Supplemental Nutrition Assistance Program (SNAP) Beneficiaries." *Journal of the Academy of Nutrition and Dietetics* 113, no. 1 (2013).

²³ Daponte, Beth Osborne. "Private Versus Public Relief: Use of Food Pantries Versus Food Stamps Among Poor Households." *Journal of Nutrition Education* 32, no. 2 (2000): 74.

²⁴ Andrews, Margaret. "More Americans Relied on Food Assistance During Recession." *Amber Waves: The Economics of Food, Farming, Natural Resources and Rural America* (2010), http://www.ers.usda.gov/amber-waves/2010-december/more-americans-relied-on-food-assistance-during-recession.aspx#.UpvuVsTs_6Q.

Dean, Stacy, and Dottie Rosenbaum. "SNAP Benefits Will Be Cut for All Participants in November 2013." Center on Budget and Policy Priorities (2013): 1-9.
 Ibid.

²⁷ Feeding America. "Map the Meal Gap." *Feeding America* (2011), http://feedingamerica.org/hunger-in-america/hunger-studies/map-the-meal-gap.aspx.

Food Access

Food access is a concern on the North Side. Several factors can contribute to a lack of access to food. These factors include distances to supermarkets, available transportation, and food prices. In Pittsburgh, 47 percent of Pittsburgh residents have low access to grocery stores and 71 percent are food-insecure. According to the USDA, "urban core areas with limited food access are characterized by higher levels of racial segregation and greater income inequality." North Side food deserts seem to fit this mold with African Americans making about 73.4 percent of the food desert population. 30

According to the 2008 Farm Bill, a food desert is an "area in the United States with limited access to affordable and nutritious food, particularly such an area composed of predominantly lower income neighborhoods and communities." Urban food deserts exist in areas more than a linear mile from a supermarket, but this does not consider topography or winding roads. When these are considered, more North Side neighborhoods appear to be food deserts. Further, census tracts on the North Side hilltop lack access to healthy food retail outlets, and neighborhoods below the hill and near Giant Eagle have a low ration of healthy food from

_

²⁸ Murray, Zachary. "Strategies for Access to Healthy Foods in Allegheny County. A Menu for Food Justice." *Just Harvest* (2013): 4.

²⁹ Ploeg, M. ver, Vince Breneman, Tracey Farrigan, Karen Hamrick, David Hopkins, Phil Kaufman, Biing-Hwan Lin et al. "Access to Affordable and Nutritious Food: Measuring and Understanding Food Deserts and their Consequences. Report to Congress." (2009).

³⁰ Murray, Zachary. "Strategies for Access to Healthy Foods in Allegheny County. A Menu for Food Justice." *Just Harvest* (2013): 27, 30.

I aggregated Murray's data to arrive at my numbers as his selection of North Side neighborhoods were split into different sections.

³¹ Ploeg, M. ver, Vince Breneman, Tracey Farrigan, Karen Hamrick, David Hopkins, Phil Kaufman, Biing-Hwan Lin et al. "Access to Affordable and Nutritious Food: Measuring and Understanding Food Deserts and their Consequences. Report to Congress." (2009).

supermarkets to fast food outlets and convenience stores (mRFEI).³² This indicates that the North Side has both food deserts, and food swamps. Low access to super markets usually means that households are unable to purchase healthy food because it is not available, or because the prices are too high. This increases reliance on transportation to get to supermarkets. ³³

Transportation is an issue for North Side residents living in food deserts. Nearly 46 percent of North Side households in food deserts do not own a vehicle³⁴ and some areas may lack access to bus lines. This may increase reliance on jitneys which cause problems because they charge per bag, per person, generally go to the poorer-quality stores, and may be the only transportation option available.^{35, 36} Reliance on more expensive transportation options decreases necessary income for purchasing food. Increasing bus access from low-income neighborhoods to better supermarkets may be a prudent option.

Food price is important to low-income households^{37, 38} and may block food—insecure households from purchasing nutritious food.³⁹ Racial segregation may play an additional role in

_

³² National Center for Chronic Disease Prevention and Health Promotion. "Census Tract Level State Maps of the Modified Retail Food Environment Index (mRFEI)," (2013), ftp://ftp.cdc.gov/pub/Publications/dnpao/census-tract-level-state-maps-mrfei TAG508.pdf

³³The Center for Disease Control created a Modified Retail Food Environment Index (mRFEI) that indicates whether a census tract is a food desert, food swamp, or food oasis. A food swamp is defined as an area that has a higher concentration of convenience stores, fast food chains, and grocers with less than three employees. These outlets typically provide junk foods and very little nutritional food and fresh produce. A food oasis is considered an area with easy access to healthy and nutritious food.

³⁴ Murray, Zachary. "Strategies for Access to Healthy Foods in Allegheny County. A Menu for Food Justice," *Just Harvest* (2013): 30.

³⁵ Kumar, Supriya, Sandra C. Quinn, Andrea M. Kriska, and Stephen B. Thomas. "'Food is Directed to the Area': African Americans' Perceptions of the Neighborhood Nutrition Environment in Pittsburgh," *Health &Place* 17, no. 1 (2011): 374.

³⁶ Walker, Renee E., Craig S. Fryer, James Butler, Christopher R. Keane, Andrea Kriska, and Jessica G. Burke. "Factors Influencing Food Buying Practices in Residents of a Low-income Food Desert and a Low-income Food Oasis," *Journal of Mixed Methods Research* 5, no. 3 (2011): 260, 263.

³⁷ Kato, Yuki. "Not Just the Price of Food: Challenges of an Urban Agriculture Organization in Engaging Local Residents," *Sociological Inquiry* 83, no. 3 (2013): 378-379.

³⁸ Smith, Chery, and Hannah Miller. "Accessing the Food Systems in Urban and Rural Minnesotan Communities," *Journal of Nutrition Education and Behavior* 43, no. 6 (2011): 102.

³⁹ Leung, Cindy W., Elena E. Hoffnagle, Ana C. Lindsay, Hayley E. Lofink, Vanessa A. Hoffman, Sophie Turrell, Walter C. Willett, and Susan J. Blumenthal. "A Qualitative Study of Diverse Experts' Views about Barriers and

food price and quality. In Pittsburgh, supermarkets in African American neighborhoods were found to sell expired or nearly expired foods at equal or high prices than similar, but fresher and better quality foods at super markets in predominantly white neighborhoods.⁴⁰ Creating groups to monitor food quality and prices may be useful in receiving better service and access at local supermarkets and grocery stores.⁴¹

Issues related to food access are not always clear. Although "6 percent of all U.S. households did not always have the food they wanted or needed because of access-related problems," more than half also lacked sufficient incomes to purchase the food they needed.⁴² In terms of food insecurity, differentiating between food price and low incomes may be difficult, but both may also play a role in household food insecurity.⁴³ Potential solutions include incentivizing the purchase of healthy foods for SNAP participants.⁴⁴ Double and triple coupons could also incentivize the purchase of healthier food and help households save money.⁴⁵ However, I also think that access to healthy food needs to be improved on the North Side. This could be done through opening a grocery store in Manchester and expanding the sales of local produce at local

_

Strategies to Improve the Diets and Health of Supplemental Nutrition Assistance Program (SNAP) Beneficiaries." *Journal of the Academy of Nutrition and Dietetics* 113, no. 1 (2013): 70-76.

⁴⁰ Kumar, Supriya, Sandra C. Quinn, Andrea M. Kriska, and Stephen B. Thomas. "Food is Directed to the Area': African Americans' Perceptions of the Neighborhood Nutrition Environment in Pittsburgh," *Health &Place* 17, no. 1 (2011): 370-378.

⁴¹ Ibid., 375-376.

⁴² Ploeg, M. ver, Vince Breneman, Tracey Farrigan, Karen Hamrick, David Hopkins, Phil Kaufman, Biing-Hwan Lin et al. "Access to Affordable and Nutritious Food: Measuring and Understanding Food Deserts and their Consequences. Report to Congress," (2009): 2.

⁴³ Ibid.

⁴⁴ Leung, Cindy W., Elena E. Hoffnagle, Ana C. Lindsay, Hayley E. Lofink, Vanessa A. Hoffman, Sophie Turrell, Walter C. Willett, and Susan J. Blumenthal. "A Qualitative Study of Diverse Experts' Views about Barriers and Strategies to Improve the Diets and Health of Supplemental Nutrition Assistance Program (SNAP) Beneficiaries," *Journal of the Academy of Nutrition and Dietetics* 113, no. 1 (2013): 70-76.

⁴⁵ Walker, Renee E., Craig S. Fryer, James Butler, Christopher R. Keane, Andrea Kriska, and Jessica G. Burke. "Factors Influencing Food Buying Practices in Residents of a Low-income Food Desert and a Low-income Food Oasis," *Journal of Mixed Methods Research* 5, no. 3 (2011): 264.

shops.⁴⁶ Issues of food distribution need to be addressed by providing shop owners contacts to farmers. Overall, these remedies could aid households in addressing financial issues and afford the food they need for a healthy and active life.

Ideologies Pertaining to Food Insecurity and Food Access

Community-level food programs attempt to alleviate issues of residents with food insecurity and a lack of food access. These programs may entail food distribution, but also the creation of urban agriculture and community gardens. However, these programs may miss the needs of residents. The needs of residents may be overlooked through differences in how issues of access and food insecurity are perceived by those experiencing the problem and those addressing the problem.

First, programs try to ensure that households have enough food to eat, often overlooking household needs for a balanced diet and culturally appropriate foods. Providers in several studies believed that households wanted more food in order to avoid hunger. Other providers misperceived household shopping habits in buying large quantities of cheap food as a lack of education, as they believed household thought they were getting more for their money. These misperceptions lead providers to conclude that nutrition, cooking, and food management education are necessary for households; however, it misses needs expressed by households, such as the desire for a job. This would allow households to generate the income necessary to take control of their food situation and purchase the food necessary for achieving food security.

Social distance is one cause for misperceptions in food pantries. In urban settings, social distance between providers and recipients may cause stigmatization. Providers may overlook

⁴⁶ Murray, Zachary. "Strategies for Access to Healthy Foods in Allegheny County. A Menu for Food Justice," *Just Harvest* (2013): 29.

participant needs through a lack of shared experience and knowledge of personal situations.

Indirect knowledge of household experiences with food insecurity may allow providers to ignore other needs households face that their services are not addressing.

Second, households' needs are underrepresented when community-level interventions are being developed. Although disenfranchised households' issues receive attention, they usually end up being perceived as less important by community stakeholders that are perceived as having more power. Power and influence over action items in community food system itineraries are maintained through the ability to frame problems, manage knowledge, and voice concerns over other stakeholders that are perceived to have more power.⁴⁷

Households appear to be largely concerned with financial issues; however, provider prescriptions often target what they perceive to be educational and access needs. The difference between household needs and provider prescriptions may arise from provider ideologies. Self-sufficiency seems to be looked at as building skills for household management rather than employment. Additionally, social values of independence and removing households from welfare may increase difficulties for providers to address household needs.

Addressing household needs may require some changes by providers and leaders of community programs aimed at increasing access through gardens and farms. Providers may need to decrease social distance by getting to personally know their clients and the issues they face.

This may reveal unmet needs, such as a lack of quality food, monotonous diets, or even a lack of affordable food in the neighborhood. This is important as white, middle-class values appear to be

12

⁴⁷ McCullum, Christine, David Pelletier, Donald Barr, and Jennifer Wilkins. "Agenda Setting Within a Community-based Food Security Planning Process: The Influence of Power." *Journal of Nutrition Education and Behavior* 35, no. 4 (2003): 189-199.

rooted in food assistance programs, but clients, especially on the North Side, are low-income and largely African American.

Current values surrounding food insecurity may need to be reevaluated.⁴⁸ Private food assistance programs may potentially make providers into managers of poverty, but adopting a framework of social justice rather than empowerment or self-sufficiency may be more effective:⁴⁹ "Households need more than food for survival: they need a set of conditions that will ensure them regular and sustainable access to a good quality diet."⁵⁰

Methodology

I conducted interviews with food assistance recipients and providers to find if community food programs meet the needs of food-insecure North Side residents. I recruited providers by sending them an IRB-approved email containing essential information about the study. I followed up with interested providers through phone calls and meetings. I gave fliers to providers and agencies that agreed to the study in order to recruit household-level participants. The fliers included thesis information, contact information, and a set of questions from the Radimer/Cornell Food Insecurity Index used to measure food insecurity. When householders called, I screened them for food insecurity and age, and where they lived. A "yes" response to one of the questions on the Radimer/Cornell index indicated food insecurity. Additionally, I wanted respondents over the age of 23 years, to avoid IRB issues with minors and increase the chances of having multiple people in the household. Non-North Side residents and homeless

⁴⁸ Hamelin, Anne-Marie, Céline Mercier, and Annie Bédard. "Perception of Needs and Responses in Food Security: Divergence Between Households and Stakeholders," *Public Health Nutrition* 11, no. 12 (2008): 1395.

⁴⁹ Ibid

⁵⁰ Hamelin, Anne-Marie, Céline Mercier, and Annie Bédard. "Needs for Food Security from the Standpoint of Canadian Households Participating and Not Participating in Community Food Programmes," *International Journal of Consumer Studies* 35, no. 1 (2011): 66.

I adapted this method for screening household participants for food insecurity from Hamelin et al. (2008).

individuals were excluded from the study. Household respondents received a \$10 gift card to Giant Eagle for their participation. This process resulted in the selection of three providers and three food-insecure individuals.

I collected data through one-hour, semi-structured interviews. Interviews were recorded on a digital recorder. The literature review and studies by Hamelin et al. guided the creation of the interview schedule. Participants chose the interview location to allow them to be interviewed in a familiar and comfortable environment. Two householders chose to be interviewed at home and one chose to be interviewed at a public library. All providers were interviewed at their offices. I transcribed the recorded interviews in full. Transcribed interviews were hand-coded and analyzed by the interviewer using content analysis. I coded interviews by writing quotes onto 3x5 cards and creating piles of responses based on the content of the quotes. The cards were labeled according to category and subcategory. Householder and provider responses were compared to add validity to claims and to observe differences in the perception of household needs. This allowed for triangulation of the data.

I used pseudonyms and omitted participant-specific data to maintain confidentiality. I stored data on an encrypted and password-protected thumb drive. Recorded, transcribed, and coded data will be deleted within six months of the approved final thesis.

Respondents

This section includes pseudonyms and pertinent information about respondents in the study. Respondents were distinct in their responses, attitudes, and the circumstances between and within each group varied greatly. Finally, it is important to note that the information I present in

this section is taken from the interviews. I did not pull age, race, household size, etc. from a questionnaire, so it is based on my judgment and the honesty of the respondent.

Householders

There were three household respondents in this study: *Linda., Roger, and Tim.* All respondents lived on Pittsburgh's North Side and all were considered food-insecure. The respondents all appeared to provide honest answers to my questions, but sometimes answers changed from the beginning to the end of the interviews. Household respondents are older, but capture factors that may affect food security, such as having children, divorce, age, and life history.

Linda is a single, African-American woman in her early- to mid-60s. She lives a life of chronic poverty. She had several children, but lost her husband. Originally from the South, Linda helped her mother bring food home from the food lines when she was eight or nine. Linda cried when she described growing up in food lines and living in poverty her whole life. Her parents had \$5 a week to spend on food that consisted of mostly potatoes, and homegrown vegetables and chickens. Linda believes that she learned how to cook and survive from her mother, who stretched a can of salmon to feed a family of 12. Linda tried to give her kids a better life by getting them the essentials and getting them to parks and libraries to spend less time in the projects.

Roger is an African-American male in his late mid- to late-50s. Roger is divorced and has two children that he sees between two to four days per week. Roger had jobs in the military and in human services. Roger was unemployed for over six month at the time of the interview, but was starting a new job in about two weeks.

Tim C. is a retired African-American male in his mid-70s. He is single father to a teenager and already raised three other children, one of which died young. Tim has a serious medical condition. Tim held occupations in steel mills and as a roofer when the mills collapsed.

Each story for these households is unique. These stories provide some basic factors and experiences that may help explain the need for food assistance. Although the respondents are older, certain factors may be seen across the larger population that may affect food insecurity, such as age, divorce, children, employment, etc.

Providers

Providers did not offer as much personal information as householders, possibly because they were asked to speak more broadly about food insecurity and their clients, rather than about their personal experiences.

Sara is an African-American female social worker. She oversees various food programs, including pantries and gardens. Sara explained that one time she was in the position of several of her clients. She believes that most of her clients can and should work, but they need someone to push them to do so, like her social worker did for her. Sara's views may seem harsh at times, but this harshness is not directed at the poor or food-insecure as a whole, but more to able-bodied individuals that appear to abuse services. Sara also speaks often about hunger, rather than food insecurity, which may also shade the responses she gives in the interview, as hunger is a feeling rather than underlying economic and social barriers that cause insufficient food, poor diets, and other effects.

Helen is a white community organizer on the North Side that is slotted for retirement.

Helen helped organize and keep the farm stand on the North Side, but the project was organized

and run by several other volunteers. Her solutions to food insecurity revolve around education, nutrition, gardening, and communication. These notions fall under the umbrella of self-sufficiency as they aim to teach low-income individuals how to make better use of their resources

Etna is a white woman that helps run a food pantry and organizes a community garden. Etna also resides on the North Side. For Etna, food insecurity appears to be largely a social, rather than individual, problem, and greater education is required as a solution. However, education carries two meanings: traditional education, and normalcy. Normalcy appears to be an idea that revolves around the idea of integrating impoverished and isolated into individuals into society and training them to be functional members. This included responsible citizenship, employment, and paying taxes. Etna also believes that gardening may be a beneficial way to help low-income households become more self-sufficient. In total, these concepts also appear to fall under the self-sufficiency ideology presented in the literature.

Providers appear to see food insecurity largely in the same manner. Interventions generally require employment, some type of education, or learning to better use resources. These notions fit with the concept of self-sufficiency and show some continuity with previous research. Provider responses may be a result of needing to speak broadly on the concept and on clients. It is possible that speaking on individual cases, or delineating between the various clients they receive, would yield different responses in regards to what food-insecure households need to alleviate this problem.

Findings

My findings consist of four main sections. Section one looks at factors of food insecurity. In this section I look at the sufficiency of household income to cover expenses, household employment, and the effect of unexpected events on food security. I also present household anxiety about food security based on future prospects of increased incomes.

In the second section I present information concerning householder and provider perspectives of food access on the North Side. This section examines the perceptions of food quality and price at Giant Eagle and interventions that increase the availability of quality food at affordable prices.

The third section looks at how households get food. First, I define what is enough food from the household perspective. Second, I look at how households plan shopping trips. Third, I look at how households use food pantries. This includes the need for multiple food pantries, perceptions of reliance on food pantries, and perceptions of appreciation and satisfaction for the services.

Finally, I look at how households cope with food insecurity. Coping is done through food management strategies based on experiences with food insecurity and the ability to get food from stores and food pantries.

Income

Household respondents and providers gave several reasons for food insecurity. Factors fell into categories of income and expenses, employment, and unexpected events. Primary factors for food insecurity from the household perspective are based on insufficient income.

Insufficient income was caused by SNAP cuts and low wages, making the ability to pay for basic

utilities, transportation, medication, and things for children difficult. Etna, Sara, and Roger perceive that employment is another factor of food insecurity, but finding quality jobs on the North Side is an obstacle. Finally, unexpected events seem to magnify food insecurity. Unexpected events appeared to be both in- and out- of the control of household respondents. These events included paying bills, weather, and life circumstances. All of these factors contribute to varying degrees of anxiety, where anxiety increases with lower perceptions of increased future income.

Income and Expenses

Insufficient incomes to cover expenses and purchase food are factors for household food insecurity. For this study, income is a resource that allows a participant to choose expenditures. In addition to wages, I include SNAP benefits as an income source because it acts like money in the sense that households may choose the foods they want. I do not include housing and heating benefits because households do not have real choice in finding housing, and these benefits are, generally, paid by the government to the owner, or included in the housing cost. I also do not address WIC in this paper because it was not mentioned by householders or providers.

Participants' incomes were both based on wages and benefits. Roger received low wages for part-time work and, a self-described, small military pension. Linda and Tim's incomes are based on benefits. Linda receives Social Security, SNAP, and Social Security Disability, and Tim receives Social Security and SNAP. Household respondents spend money on needs, like utilities and things for their children. Low wages due to part-time work and fixed income make paying for expenses difficult.⁵²

⁵² Defining what is necessary may be difficulty when it comes to technology, especially cable television. All respondents had television, and two mentioned having cable. Although this may not be a necessity, the fact is that internet is packaged with other services like television and/or phone line. As cell phones are generally cheaper and

Interviewer: How is money spent in your household

Roger: "Well I'm the only one [at home], [but] I take care of my kids [when they are here]. I make sure the water and the electric is paid first, and the phone, my cable bill, which is small, and my son, he has a cell phone, I pay his. I make sure those utility things are paid first. And then the rest of them I get to, you know, within reason. But, food is maybe now, like, 10% of my spending budget. I have other things to pay for. I have lots of winter pants, I'd like to get them cleaned, I just don't have money right now."

Tim: "Well, the basics: rent, light, gas, water...the necessities."

Interviewer: Do you find yourself going to the food pantries more since food stamps were cut?

Tim: "If I didn't go to the food [pantry] with the income that I get it's enough for rent, gas, light, and enough to buy my son his tennis shoes and things. When I'm [done with that] I haven't got any money left. I have a couple hundred bucks to buy food with. So those food stamps were the ticket."

Insufficient incomes require households to balance bills and other debts.

Tim: "It's a juggling thing here. You know, you got to juggle here; you got to juggle over there, too, in order to make ends meet. It shouldn't be that way."

Balancing incomes and expenses result in trade-offs for households. These trade-offs determine what households will buy in terms of food and which bills to pay first. Additionally, elderly households may need to make difficult choices pertaining to the medication they will take.

Linda: "I can't get part of my medication, so sometimes I have to let one go, or one or two a month. I'll let my lotion go because I got bad skin or whatever. I let that go one or two months and I'll get the other medicine I need. The HMO will only let you get so many of the other medications you need. You cannot pay for some medicine that costs sixty something dollars or whatever when you're on food stamps."

In conclusion, food—insecure households have competing demands on their incomes. In terms of demands, food is one need that may take second place to utilities, medications, and

more convenient than landlines, the smarter option for households may be getting cable television as part of their package. Further, television seemed more important to elderly households that have more free time than Roger, who is seeking full-time employment and working a part-time job. However, this necessity of T.V. and internet requires its own discussion elsewhere.

children. Reducing food costs to cover other expenses increases reliance on public and private food assistance programs.

SNAP Cuts

Etna often hears complaints about SNAP cuts from her clients. Etna reports that the cuts seem larger than expected. Reductions in SNAP may be policy- or household—related. Policy—related cuts affect the whole population of recipients. The effects of the ARRA and new Farm Bill appear to have affected the ability of households on the North Side to get food through normal channels, and increase reliance on food pantries.

Etna: "Oh yeah, they all complain about it, all of them. 'Cause lots of times their situations change too. I can tell you, there are very few people that tell me they've lost five percent of their benefits. It's more like a 20 to 30 percent cut. I mean, when they tell me the numbers, people aren't just getting cut a little bit. I mean, they said it was only going to be a 5 percent cut, but I just don't see it here. I mean, again, that's all anecdotal. But yeah, with rent, and gas, for people it could seem like more. But, I mean if you go from \$37 to \$34 in food stamps, that's a big deal, if that's all you get. And that's not an unreasonable number. I mean \$16, a lot of people with \$16 worth of food stamps! The worst I ever heard was \$4...And you know what you're going to have to do with that? Go get a case of Ramen noodles. That's what you spend that \$4 on."

Linda's experience with SNAP reflects Etna's statement. Linda experienced two cuts to her SNAP benefits because of cuts to the ARRA and due to increased income. Although she is unemployed, increases in her Social Security resulted in decreases in SNAP when she asked for a reexamination of her SNAP benefits.

Linda: "I got an \$11 raise, \$10 on my SSI and a dollar on my Social Security. And I'm on Section 8 and they raised my rent thirty something dollars, so you know, I asked for a hearing for that because I can't see paying over thirty-something dollars when I only got eleven. [Does] that make any sense? Then they cut my food stamps in November. I did my recertification, and then they dropped my food stamps another \$6. So, now I get \$122 dollars for food stamps, and without the food bank giving me extra eggs, juice, and milk—because that would be something that I wouldn't be able to afford. Not paying rent, gas, light, and sewage—and nobody can live without a little cable."

Linda's statement highlights additional issues. Often, SNAP benefits do not appear to cover household food needs for the month. For Tim, this is a real issue as he is one a fixed income and raising a teenager. Mirroring Etna's observation of low SNAP benefits, Tim complained that his benefits do not cover the true cost of food.

Tim: "I only get \$15 in food stamps. Now what can you buy with \$15. I was at one time getting a hundred and something dollars in food stamps, and now I'm down to \$15 damn dollars. So, what can you buy with \$15? You can buy a loaf of bread, a couple eggs, some bacon, and whatever, that's your \$15 right there."

SNAP is an unreliable source of income for long-term food—insecure households, like the elderly. Benefits are subject to cuts and may be reduced as Social Security benefits increase. This does not help low-income senior households achieve food security as they are food—insecure before reductions occur. However, it is unclear how significant the cuts were to Tim and Linda. Further, the ARRA cuts would occur anyway, just at a delayed date. What this shows is that the standard levels were insufficient before the ARRA, and have become more insufficient with the new Farm Bill.

Employment

Employment with adequate wages is necessary to alleviate food insecurity, but economic, social, familial, and individual obstacles need to be addressed. Etna and Roger stated that finding adequate employment in the North Side or in the city is difficult. Several of Etna's clients are seasonal or part-time workers with low wages. Although her clients have low skills, subsidized entertainment industries on the North Side not offer adequate employment and undercut the neighborhoods tax base.⁵³

⁻

⁵³ Etna speaks to stadium concession stands, but it is also interesting that casino taxes go into county grants rather than into neighbor investment. The use of casino revenue to support the North Side should be part of the city conversation.

Etna: "I got a lot of guys who are very, very seasonal workers: Roofers, demo, lawn care and guys who come and go out of unemployment and, you know, they spend their money as soon as they get it. And, there's just those people [working] for Aramark, those concessions at the stadiums. So, they have jobs that are 8 months long but its only 6 hours, 4 hours, 6 hours, 4 hours and so they don't make a living wage. THANKS TAX PAYERS FOR PAYING FOR THAT. YEAH, WE NEEDED A STADIUM. So, we got three hundred people living on the North Side with jobs that don't pay to keep them housed as tax-paying citizens. So, a lot of those folks come here."

Roger fits Etna's description in that he is a part-time worker receiving low wages.

However, Roger had two professional careers already. He acknowledges that his time on unemployment could have been spent better, but he did not realize the difficulty of getting a job in the current economy.

Roger: "See, I've always worked two jobs so this stuff was never a problem for me. But when I went on unemployment, and then that ended, and then the emergency ended, I had to get a job, you know. And I didn't plan ahead. I knew it was coming but I figured, you know, I've never had a problem getting a job, and now jobs are even harder to find. Everything's harder now."

Seeking employment is also associated with costs. Roger's primary costs related to employment are transportation related like gas, insurance, repairs, and citations. Requiring a car to obtain employment because bus lines are not available may also inhibit other North Side residents from seeking employment opportunities in different parts of Pittsburgh or outlying areas.

Roger: "Transportation is everything, too. I feel the pinch. I either walk or drive because I can't get the bus because both my jobs I need a car to get there. That's one thing that concerns me. My car goes out and I'm out of work...I didn't have a car before. I used to ride the bus. I could get a bus pass for ninety-nine bucks and go everywhere... But, now I have to drive to my job which is out on the Parkway West, and gas is what, \$3.35 a gallon? I'm spending a lot more money than I was before on other things other than food...

"My ultimate thing, I haven't been able to do it yet—if you're in the city, if you can get a job in the city and function in the city, mass transit is a lot cheaper—when you park you got to worry about getting a parking ticket, you got to pay for parking, you know. It's all eating your finances."

As a senior citizen with severe health problems, Tim views employment differently. He does not identify employment as a central reason for his food insecurity, but he would work under the table to have the income to provide for his teenager.

Tim: "I'm [70-plus-] years old and I [have several children]. I've always provided for them. And I don't do any less to provide for the one I have now. If I have to hustle, I do whatever it takes, jitney, you know, to get food. To the grace of god, my Social Security sustains just a little bit. Not as much, that's why I use the food banks."

Linda, on the other hand, regrets that she did not work more when she was younger because it limits her Social Security check. A lack of child care and poor environmental factors made her feel the need to raise her kids.

Linda: "I should have been working real hard [when I was younger] so my Social Security would have been more. But you couldn't find good baby sitters. Good baby sitters are real hard to find. They got a lot of programs now where you can take your kids to work, but they didn't have all that when I was having [kids]. Because my kids are older than you are."

Views on employment in relation to food insecurity vary among household respondents. Without receiving benefits, employment is Roger's only way to generate the income he needs to achieve food security. Getting a job is challenging because finding decent paying jobs on the North Side is difficult, leading to increased transportation costs. Tim and Linda receive various benefits, so employment is not necessarily their central concern. Tim will work when necessary to supplement his income, but poor health and age limit his abilities. In hindsight, Linda sees employment as something that would have helped her in her current situation through a larger Social Security check.

Sara believes employment is critical for alleviating food insecurity. An increasing number of younger clients at her organization receive SSI (disability) benefits and are unemployed. Sara sees that they live in a system of poverty where households subsist on

disability, SNAP, and food pantries. For Sara, work increases quality of life and dignity. She thinks the main obstacle is a lack of awareness surrounding how disability benefits work, namely, that clients can work part-time and still receive disability.

Sara: "Fifteen hundred households...and the one common thing that I find out of all those households is that a lot of people are on SSI, young and old, retired. We have a large population of those, but the majority of people who are on Social Security over here who are taking benefits, are young people. Young people, maybe disabled, but I'm just thinking, even people on Social Security and disability, you're still able to work, and most people don't know that. You're still able to bring in an additional amount of resources....

"But most people think 'I can live off of \$700—.' I just saw one [case], ... \$700 a month [in disability] for a single head of household. Even people on Social Security and disability are still [allowed] to work, and most people don't know that. You're still able to bring in an additional amount of resources. And I'm thinking I really need to contact her because she could still work part-time, still bring in money and she could have a better quality of living. Most people get so satisfied with 'I got that check, now I can't do anything,' which is not true. And I think we need more advocacy around that. And that's what I'm moving towards."

Providers also mentioned that many clients lack support and come from broken families or unhealthy relationships. Although there is an individual component to finding and maintaining employment, a supportive environment is also necessary and something that their food pantry clients appear to lack at home.

Sara: "And most of these people, [there's no one in their life], [and] a lot of them have not graduated from school. Their family relationships are broken. There's no one to encourage them. They're in a rut. If they just had someone to say, 'You know what, you can get up and work. You can still get your disability. There's no reason stopping you. Go to work.' And, help them find a job. But, there's no one there to tell them. I'm going to be that person....

"I'm a social worker and I've been there. And someone, just like you, a white man, who saw something in me, picked me up and said, 'You know—you can do it.' And he just got it out of his mouth that this is all I needed to do, all I needed to hear."

Etna: "I get so sick of success stories, the boot strap stories, because for every one of those there's 7,000 people who haven't done that. And perfectly good families, college educated families, have kids, uncles, nephews, who don't pull their shit together, and who never are successful, but if it wasn't for [their] family protecting those people, they

wouldn't do any better, either. And that goes with all of the support structure that your family had."

North Side providers are concerned with employment, but recognize that there are persistent obstacles. In addition to broken relationships and a lack of jobs, providers saw mental illness, sexual abuse, and a lack of education as factors for food insecurity and a lack of employment. Although employment may alleviate household food insecurity, other obstacles and individual issues may inhibit households from maintaining employment. Solutions to these issues require supportive environments. However, employment is only part of the solution as household income is still highly relevant.

Unexpected Events

Household level participants identified unexpected events that either caused or increased food insecurity. Unexpected events were related to employment, weather, and bills. Roger experienced several events that caused and increased his food insecurity. He lost his job, inherited his father's house and utility bills, and could not get food due to severe snow storms that stopped Produce to People trucks.

Roger: "My father passed, so I have his home, so I'm paying his utility bill and I'm paying mine also. Both homes are paid off, but I have both utility bills and the water. It's been sky high with the weather the way it is. Once the weather warms up, those will go down and I can catch up. So, it's kind of tight right now."

Household respondents also mentioned that issues related to health, weather, and bills could hinder their ability to get food. This winter seemed particularly brutal. I visited one food pantry when it was minus nine degrees. Needless to say, the pantry did not seem too busy. These findings are similar to previous research that includes divorce, adding a new family member, and other events as factors effecting household food security.^{54, 55}

26

⁵⁴ Hamelin, Anne-Marie, Céline Mercier, and Annie Bédard. "Needs for Food Security from the Standpoint of Canadian Households Participating and Not Participating in Community Food Programmes," *International Journal of Consumer Studies* 35, no. 1 (2011): 62 under proximal risks.

Anticipated Income

Roger appeared to have the lowest level of food security among all participants. The unexpected events in his life created a situation where he ate a small meal a day, and his meals may have lacked variety. The food pantry he attended closed down before Christmas and he did not know about other food pantries on the North Side. Roger did not appear too anxious despite need to stretch a chicken breast, frozen broccoli and some potatoes over four days. This is because he viewed his problem as short-term and knew his income would soon increase.

Interviewer: How does it feel when you don't have enough to eat? Or, do you usually have enough to eat?

Roger: "It doesn't really stress me out because I know it's only temporary. Now my pension, I'll get that next Friday. And this part-time job I'm getting ready to leave for the full-time. I'll get paid Wednesday or Thursday."

Long-term food insecurity appeared to cause greater anxiety. Linda always keeps food in the house in case of illness or poor weather. Additionally, her income will not increase in a way that is not tied to cost of living or inflation. Therefore, her circumstances are unlikely to improve in regards to income and food security.

I discuss anxiety further in how households cope with food insecurity. In some regards, anxiety over sufficient food may be the basis for household food management strategies.

Access to Food

Access to affordable nutritious food is limited in some North Side neighborhoods. The price and quality of food were primary themes. Although there are two supermarkets on the north side, participants and providers mostly negatively commented on the Cedar Avenue Giant Eagle.

⁵⁵ Rose, Donald. "Economic Determinants and Dietary Consequences of Food Insecurity in the United States," *The Journal of Nutrition* 129, no. 2 (1999): 518S.

Providers and household respondents mentioned that the food quality here is poor and the prices are too high.

Sara: "The prices [at Giant Eagle]...are a little inflated; the quality is less, much less, where, if you went to the suburbs, they have better fresh [food, and better] variety; but it's not on a bus route, so poor people down here—and the jitneys—they are forced to go there. So they don't have fresh, they don't have the top quality. They have a deli with all that fried food. Fried, Fried, Fried. Not like Market District."

Linda: "The Giant Eagle on Cedar Avenue...is the worse Giant Eagle. I go out to West View because they got real poor quality of everything in there. The meat smells, the food is—I bought a box of grits there and it looked like it had a spider web in the box. I drink buttermilk and got buttermilk there and it was already outdated by two days. I like wheat bread. The bread [at Giant Eagle] is hard, so I catch the bus and I go out to West View because that way I can eat steak and it only costs me a dollar."

Although quality is an issue, affordability of food appears to carry more weight.

Households travelled to dollar stores in West View, bought food on sale, and visiting multiple stores to get food they need. Gaining access required transportation.

Linda: "I make my money try to last from month to month. I might have to get a couple dollars from my son, or what not, to catch the bus, even some time when its real cold I'll get my girlfriends bus pass... my income won't let me use no jitneys.⁵⁶

I am uncertain if households shopped for quality food or only wanted affordable food.

What seems certain is that the North Side has little access to both affordable and nutritious foods.⁵⁷ Current programs on the North Side try to increase food access by operating in food deserts, selling fresh produce at reduced prices, and accepting SNAP, WIC, and farmer market specific vouchers. The Farm Stand Project, the Senior Farmers Market Nutrition Program (SFMNP/senior vouchers), and using SNAP at farm stands and farmers markets were mentioned by respondents.

The Greater Pittsburgh Community Food Bank (GPCFB) began the Farm Stand Project in 1993 to increase access to fruits and vegetables to low-income residents that are "underserved"

28

⁵⁶ This was in reference to going to the food pantry, but I think it applies getting to West View, too.

⁵⁷ Based on interview responses, Murray's paper, and CDC food environment maps.

by supermarkets."⁵⁸ This program targets the food access issues of quality, location and affordability. Quality is ensured by providing fresh fruits and vegetables from regional Pennsylvania farms. Location and affordability are ensured by locating farm stands in low-income neighborhoods and selling food at steeply reduced prices. Furthermore, farm stands accept SNAP benefits, WIC vouchers, and "senior vouchers," allowing households to save cash for other needs and use benefits for nutritious food.

Farm stands require several partnerships for success. The state connects programs with farmers, and in Allegheny County, the GPCFB connects neighborhoods with the necessary tools and food to operate farm stands. The Brightwood Civic Group partnered with the Brighton Heights Citizens Federation, WestBanco, and the GPCFB and turned a vacant lot into a farm stand because they saw a need for greater access to affordable fruits and vegetables to improve the quality of life in surrounding communities. These efforts help both farmers and low-income residents by providing business opportunities, nutritious food, and creating an opportunity for community-building in the neighborhoods.

Helen: "I can tell you that the families that came to this were really thrilled that it was coming straight from the farmer and that it was reasonably priced. So price was definitely an issue—a concern, not an issue. But a concern to the families. We think that's one of the reasons why this farm stand was as successful as it was, is because they could buy the food at a reduced [price] versus going to one of the grocery stores...

"I even had people come from [the] Fine View neighborhood, so they came out of their own community to come to this farm stand that was over here...because I was marketing it in both of [the] neighborhoods so they knew to come here. But, just them coming off the hill over to another community says something because normally communities tend to stay right where they are, because people, unless they go to the store, or something like that, they don't come out too often."

29

⁵⁸ Greater Pittsburgh Community Food Bank. "Farm Stand Project," (2013), http://www.pittsburghfoodbank.org/programs/farmstandproject.aspx

Helen was unsure if her community would have the financial and human resources to continue the farm stand. The GPCFB decided it needed to close the farm stands because their money could be spent more effectively in other programs as most farm stands were costly to operate and showed limited results. Fortunately, the GPCFB is giving more responsibility to the Brightwood farm stand and three others, and giving them some support to continue operations. The stand is important because it alleviates some food access issues, provides a forum for cooking, attracts diverse people in age, race, and income, and helps with community-building.

Tim and Linda valued their senior vouchers. They look forward to their distribution every summer and use them to by vegetables. Further, this seems to be one of the only times seniors get fresh fruit and vegetables. Tim and Linda did not mention being able purchase these at grocery stores, and Linda noted the expense of tomatoes. Additionally, Etna's experiences suggest that seniors have little access to fresh food, noting excessive appreciation for tomato juice and answers on a survey.

Etna: "Apparently in that Farm Bill that passed there's going to be some sort of expansion of that voucher system that just goes to WIC and to seniors. That's a beautiful everybody-wins program, and everybody just has coupons, JUST HUNDREDS OF DOLLARS WORTH OF COUPONS TO GO TO A FARMERS MARKET AND SUPPORT YOUR FARMERS. It's insane that that's not the best thing going! Its health, I mean everybody wins...

"Hopefully it will be expanded. For seniors it's only 20 bucks, you only get 20 bucks for a season. That's all... It's not much, and I'm not sure how much you get through WIC. Hopefully, it's more than that. But, yeah, those are great.

"I saw one survey response where somebody said 'where do you get your fruits and vegetables other than fresh?' And it said farmers markets, which means she only gets them when the farmers markets [are in season], and it might only be if she's got the vouchers. That's with seniors especially, they're really limited."

Tim: "Well now, I usually get [senior] vouchers in the summer and I go and spend them and get greens and green peppers and different things like that."

These programs have several drawbacks. The chief issue is that they are seasonal. These programs only occur between May and October, leaving participants without food access for four to six months. Additionally, voucher programs are limited in scope and dollar amount. Vouchers appear to only be available for WIC participants and senior citizens. Seniors receive \$20 a season, or \$5 dollars a month for purchasing fresh food. Therefore, additional interventions to increase fresh food purchase and consumption are necessary.

Household respondents rarely referred to farm stands or farmers markets. Only Tim and Linda really used farm stands because they receive senior vouchers. Tim and Linda used these vouchers for purchasing fresh produce, but did not comment on produce quality. They appreciated and looked forward to using their senior vouchers each summer because it is when they can get the freshest food at an affordable price.

Farm stands have fewer problems with food quality because the produce comes fresh from farms. Additionally, farm stands seemed to have more flexibility in addressing customers' service concerns. Helen said she could not remember any complaints, but the farm stand would address any issues when the market opened the following week.

Helen: "Do I think participants are satisfied with the food they received? From that, absolutely. I am trying to think if we ever had any complaints. Any time we did ever [hear] a complaint: If something didn't taste right or if it was over ripe or something like that—the next week we would be more than happy to give them something else to replace it. And again, it was a service that—we did this not to make money 'cause we really didn't make any money. We did this for the community as it was a community service. Because we wanted to do something that would help the residents and help this community."

Farm stands seem to offer increased customer service because they do not rely on third party donors, per se, and they do not distribute food allotments on a monthly basis to their clients. Following a more business based model where goods are exchanged for money and

operating on a weekly basis, farm stands can address issues with quality more readily. Customer expectations may also be different as they are exchanging income for food rather than receiving food as a donation. More importantly, the community owned the program. Helen said participation was diverse, primarily with low-income and moderate-income households, but also included small business owners in the area. She even mentioned participants' coming from other neighborhoods on the North Side to shop at the farm stand. This exhibits appreciation for the service.

Helen: "When this farm stand was here, they loved it, they absolutely loved it. And unfortunately this is not being funded again for 2014, so we are looking at other things that we can potentially do, but when people heard that this was potentially not going to be there this year they were pretty sad about that, because we ran it—we utilized it! I ate better than I ever did when this farm stand was here because I was going home with stuff every week. Fresh fruits, fresh vegetables. So that was awesome."

Fortunately, the North Side farm stand is able to continue operations. It seems that diverse community participation is necessary for farm stands to survive, especially with the GPCFB decreasing their activities with the project. Community ownership of farm stands and exchanging goods may allow households to more readily voice concerns and create a forum where different classes and perspectives can mix. Farm stands are especially beneficial on the North Side because they address issues of affordable food and proximity to stores. Further research into how households view this service is necessary.

Food access is limited on the North Side, and it varies by neighborhood. Providers and households recognize that the Cedar Ave Giant Eagle does not provide quality food at affordable prices. This is similar to issues in Pittsburgh's East End neighborhoods.⁵⁹ Current initiatives address issues of affordability, quality, and location. Associated programs increasing client

32

⁵⁹ Kumar, Supriya, Sandra C. Quinn, Andrea M. Kriska, and Stephen B. Thomas. "'Food is Directed to the Area': African Americans' Perceptions of the Neighborhood Nutrition Environment in Pittsburgh," *Health &Place* 17, no. 1 (2011): 370-378.

purchasing power also increase client access. These programs are similar to research showing coupons increase for healthy food increase their purchase and consumption.^{60, 61} However, the lack of residents using SNAP at farm stands or farmers' markets means more information about farm stands and nutrition is also necessary for households. Interviews with key informants yielded the suggestion that SNAP can be used as an incentive or disincentive for food purchases by providing discounts for healthy options and restricting the purchase of junk food.⁶² The main drawback to these programs is that they are seasonal. Forming partnerships between supermarkets, the city, and SNAP managers to create a voucher system to purchase nutritious food could provide sustainable access to low-income families.

How Households Get Food

This section explores how households get food. Economic constraints make stretching monetary and food resources between pay periods the primary goal for households. Households get food mostly from the stores and food pantries; However, it is unclear if households purchase food based on what they receive from food pantries, or if they use food pantries as a supplement to food they buy at stores. However, it seems that households need to use several food pantries in order to get the food they need.

⁶⁰ Hamelin, Anne-Marie, Céline Mercier, and Annie Bédard. "Perception of Needs and Responses in Food Security: Divergence Between Households and Stakeholders," *Public Health Nutrition* 11, no. 12 (2008): 1395. Hamelin et al. cited: Anderson, Judith V., Deborah I. Bybee, Randi M. Brown, DONNA F. McLEAN, Erika M. Garcia, M. Breer, and Barbara A. Schillo. "5 A Day Fruit and Vegetable Intervention Improves Consumption in a Low Income Population," *Journal of the American Dietetic Association* 101, no. 2 (2001): 101.

⁶¹ Walker, Renee E., Craig S. Fryer, James Butler, Christopher R. Keane, Andrea Kriska, and Jessica G. Burke. "Factors Influencing Food Buying Practices in Residents of a Low-income Food Desert and a Low-income Food Oasis," *Journal of Mixed Methods Research* 5, no. 3 (2011): 264.

⁶² Leung, Cindy W., Elena E. Hoffnagle, Ana C. Lindsay, Hayley E. Lofink, Vanessa A. Hoffman, Sophie Turrell, Walter C. Willett, and Susan J. Blumenthal. "A Qualitative Study of Diverse Experts' Views about Barriers and Strategies to Improve the Diets and Health of Supplemental Nutrition Assistance Program (SNAP) Beneficiaries," *Journal of the Academy of Nutrition and Dietetics* 113, no. 1 (2013).

Reliance on food pantries is viewed differently by providers. One view is that households are hoarding food because it is free. Another view is that households need to stockpile food in order to buffer against unexpected events. Both views are based in real experiences from working in food pantries and likely reflect the reality of how clients use these programs. These perceptions may mask household satisfaction as households appear satisfied with the quantity of food they receive. Additionally, households do not blame food pantry providers for low-quality food donations that come from third-party sources. They are happy to get any food and do not expect that much can be done to change that. Since needs may not be met because of third party donations, households may not mention dissatisfaction because they appreciate the services and good treatment they receive.

In the first part, I present household responses defining "enough food." In the next section, I explore themes that emerged concerning food pantries. First, I show that participation in multiple food pantries is necessary for households in meeting food needs. Second, I explore provider perceptions of stockpiling and hoarding as a result of reliance on food pantries. Third, I find that there are mixed levels of household satisfaction with food pantries. Fourth, I present how satisfaction is viewed from the provider perspective. Fifth, I look at views of appreciation from the household and provider perspective.

Sufficient Food

Household respondents said that sufficient food is enough to last between pay checks.

Tim and Linda both said that they needed enough food for a month, which is when they receive their Social Security checks. This is also when households go shopping for food.

Tim: "I usually go [shopping] the first of the month when I get my Social Security check. [I got to] get enough [food] to last. My son, he eats like it's going out of style. That's why I [got to] go to the food bank. And he's fifteen and he'll eat dinner, he'll eat supper, and he'll come down in the middle of the night and whatever is left over, he'll eat that too."

Linda shopped more frequently because she received more benefits disbursed biweekly.

According to Social Security disbursement schedules, Linda receives Social Security and Social Security Disability around the third of the month, and \$122 in SNAP around the 14th.

Linda: "I shop every three to four days so I can get out the house. Well, I'm by myself, so enough food, is, oh, exactly what I like to eat and having enough of it to last a month. Which is never, ever going to happen. Not with them keep cutting my food stamps."

Household size also determines the amount of food a household thinks is necessary. Tim and Roger have children, but the amount of time children are in the household is different. Tim always has a son living with him, but Roger only has his kids for two to four days per week.

Sometimes Roger's lack of food means he cannot have his kids over, but his more frequent pay checks and fewer days of feeding children means he does not require as much food.

Roger: "I've been going to the food bank because you know, I just don't have money. My kids eat a good bit when they're there, the four days they are with me....Well, my kids are only with me on the weekends now, until I get back on my feet. We eat two meals and I make sure they eat good...."

Sufficient food is enough food for each household member within a certain pay period. Sufficient food is dependent on the frequency and amount of income, and the number of individuals in the household. Households with children appear to require more food, while households with a single adult appear to seek food that is more desirable, but getting more desirable food is limited by income.

Shopping Trips

Household respondents organized shopping trips to get the food they need within their budgets. Food participants wanted a standard American diet, but not necessarily a nutritional diet. Meat seemed to be a priority, but households also wanted milk, eggs, bread, bacon, greens, tomatoes, and some other canned, frozen, or fresh vegetables. Roger focused on nutrition more

than Tim and Linda due to a more recent diabetes diagnosis. He wanted fish because it was healthier than meat, but sought out meat, milk, and juice for his kids.

Households' shopping strategies required finding the best prices on food and reducing transportation costs. To stretch income and get enough food, households visited several sores, bought food that is on sale, and bought cheap food. This could include shopping at dollar stores or grocery stores that sell near-expired at discounted prices. For Linda, the West View dollar store offered meat, "dollar steaks," at prices she could afford. For Robert, the dollar store sold some staples, like noodles and potatoes, at lower prices than other stores, while lower quality vegetables were available at affordable prices in the Strip District.

Linda: "[I shop at] Giant Eagle and to Kuhn's. Whoever got what I want on sale....I'm glad they got that little [dollar] store in [West View] because there is no way I would be able to do it. Some people just go to one store, but that doesn't get you what you need to last or stretch... Every penny is saved means I can buy a cheap chuck roast for three or four dollars and that will get me two or three meals."

Roger: "At the dollar store [they] have fettuccini, mashed potatoes, but I try to keep some vegetables."

Roger: "I used to go to the Strip District, right across from Robert Wholey's. I may get some chicken from Robert Wholey's, but the place right next door I get all my fresh vegetables, and it's cheap there too. You can get a whole thing of romaine lettuce for a dollar, whereas if you go to Giant Eagle, that same thing of romaine lettuce is \$3. And most people don't know that when they go to Giant Eagle, now."

For car-dependent households, getting to West View to buy food is a trade-off between the cost of transportation and food savings.

Roger: "There's a dollar store out at West View Mall where you can get a lot of meat, well some things for a dollar. But then, you got to drive. It's a gas trip. So, you got to think about your gas and what you have in your pocket, and what's close in proximity, and buy based on that."

Fuel seemed too expensive for Tim to purchase, and appeared to be a primary concern.

He exaggerates the cost of fuel in getting groceries, but also said that he could use his gift card for gas to go get groceries.

Tim: "They're going up to \$3.75 by summer. That's almost \$4 a gallon. By time I ride down to the food bank I burned up about a gallon or two in gas. So I have to burn more in gas than what they would give me as far as food is concerned. If I got to burn four gallons of gas, I'm roughly out \$20, \$20 that would go to my food."

Public transportation is also difficult for some low-income seniors. The cost of a bus pass may be too high, requiring seniors to split a pass. This decreases the amount of travel they can perform and requires additional scheduling. Additionally, seniors cannot shop a busy times because they require seats at the front of the bus for comfort and to avoid pushing through a crowd with their food carts.

Linda: "I'll use my girlfriend's bus pass so I'll have a couple dollars and I'll have my half-off bus pass. It's sometimes a chore getting on that bus because if you don't get that front seat with the cart [so you] can get out the aisle, because they want the passengers to be able to get on and off. Luckily, I'm an early person. Usually, I'm the first person on the bus and usually the first one out of the thing and to the food bank. And usually it's mid-morning because they start it at 9 o'clock, and [it's] usually [with] those who don't want to work. No bodies coming back out of town, everybody's going back into town. Usually, I get in there and out before the bus is full. But, coming back from MLK I'll walk down to Giant Eagle to make sure I can sit down because my knees be hurting. I'll just walk down because folks already be waiting at the [MLK bus] stop. I'll just go through the park and go the other way with my food."

Shopping trips are organized to stretch resources, but households are unable to get necessary food to last between pay periods. Low-quality and cheap food is purchased out of the need to stretch resources rather than out of a desire for the food they want. Supermarkets are only one store households use, but food prices may be too high for their budgets, pushing households toward dollar stores and grocery stores selling nearly expired foods. Additionally, transportation costs for grocery shopping eats away at the food budget. Car-dependent households need to factor in the fluctuating price of gas and consider a trade-off between fuel and food. Bus-dependent seniors face additional issues related to the price of bus passes. Although sharing bus passes brings down the cost, it also requires extra coordination.

Multiple Food Pantries

Household respondents use multiple food pantries and Produce to People in order to supplement the food they are able to buy. Food pantries and Produce to People both distribute food, but the models are slightly different. As mentioned earlier, food pantries receive food from food bank networks in addition to other third-party donors. This food then goes to the client. Clients can typically visit food pantries on a monthly basis and receive about 20 pounds of food. Produce to People is run by the GPCFB and distributes food to neighborhoods on a monthly schedule. People show up to the site and receive between 30 to 50 pounds of food. Another difference is that Produce to People deals with produce. It provides fresh and some canned goods, but no meat or dairy products. Households seem to need both food pantries and Produce to People to receive enough food, especially produce, to meet their needs. Not participating in at least two programs appears to increase food insecurity.

Roger attended the Perrysville Avenue food pantry and Produce to People. When the food pantry closed Roger only relied on Produce to People distributions for his food. Reliance on one program opens households to the risk of food shortages during inclement weather or other unexpected events. After the Perrysville Avenue food pantry closed, households needed to adapt to these changes. This required knowledge of the food pantry system on the north side. Roger had no knowledge of the food support system and this affected his ability to get food. Linda, on the other hand, was able to get the food she needed.

Roger: "They used to have a nice one up on Perrysville Avenue. They closed it down. I used to go to that one a lot. I would get bread...Right now I think I've got one of those rotisserie chicken breasts. I don't have any canned vegetables. I have some potatoes left. That's got to last me till [about] Wednesday. I get paid for my part-time job on Wednesday, so once I get this full-time thing working I'll be in pretty good shape. And then [Produce to People] was closed Saturday [because of the snow]. I went to the one on the South Side, they were closed. Had I got to them I would have been fine. 'Cause with those canned goods I could make it.'

Linda: "Before I went down here I was going to the [pantry] up on Perrysville, but that closed, which was closer because all I'd have to do is walk to the top of the hill. About three doors from the store on the corner was the food pantry and I didn't have to do nothing, just walk up and walk back down. But when they close you got to change. You got to go where you have to [to get food]."

Senior residents visited food pantries more frequently. One reason is that they did not want to experience food shortages in their house. This shows a certain level of resources management, especially in regards to anticipating future events. This reveals a certain level of anxiety in regards to food. Secondarily, households appear to visit food pantries to get some daily food and for some socializing. This may be important for seniors who feel isolated.

Tim: "I don't lack for nothing as far as food is concerned. I got to do what I can to go to food banks and go to stores to get the food that I need. I don't think that I have that problem...I use the two food banks and it's a big help.... I go to the one where you were at on Brighton and the one at Martin Luther King.

"You can go every day. You don't have to be a participant. You don't have to be low-income. You can just go and get a loaf of bread if you need one or, some sweets. It's for everybody."

Linda: "It's time to go to the food bank [when] you're getting low because you don't wait till you get everything out your house because if you wait until you got nothing and you go down there and if they don't have nothing, then what are you going to do? So you have to go down there when you have two or three packs of meat still left. And I'm not talking about no full pack because I'm just one person."

Linda: "I go to the food bank just about every day... Even if you can't use the food pantry, you can always go down there and grab bread, and Danishes, or something like that.... I know they give stuff out at the Salvation Army, I think on Tuesday. I was going by on Sunday and saw a sign that said 'free bread.' I went in and got loaves of bread. I put one up in my freezer and one in the bread box."

Knowledge of the food assistance programs is an important aspect for household to get the food they need. Providers pointed out that this may be one reason why some households are food are food-insecure.

Helen: "They don't know what's out there. They don't know what they qualify for. One of the things that we have put into place for both of these communities, it's just internal websites... But if you don't have a computer you may not be able to access that."

Sara: "I feel sorry for people who've been newly laid off because they're in shock. They don't know where to turn, who to call, what resources, and when I them with the food stamps it's like, it's a new day."

For new and short-term food-insecure households, finding the necessary resources may be difficult. A certain level of knowledge is needed in order to find pantries and other programs that give out food. Food pantries are particularly important as some of these households may not qualify for SNAP benefits. Too much savings, a second car, or another home could be disqualifying factors. Roger would be disqualified because he inherited a second home, and selling his home to address short-term food insecurity would be a mistake. Yet some food—insecure households face these types of trade-offs.

Stockpiling vs. Hoarding

Providers see their clients' frequent use of pantries as a sign of reliance on the program. They see several factors relating to household use of food pantries, including lack of support networks, old age, unemployment, and misunderstanding of benefit programs (as mentioned in the employment section). Providers are also split on the frequency they see their clients. Etna says most clients come for a couple of years, but a few will always return. Sara sees the same clients repeatedly, and often sees them at other pantries and out shopping. This difference in frequency between how often providers see clients seems to relate to how they view reliance on food pantries. Etna appears to see it as a mix of short- and long-term household problems, while Sara sees some abuse in how some households, especially households with younger adults, use multiple food pantries and still go shopping.

Interviewer: Would you say that most of the people that come here, is it a chronic problem or is it cyclical, or is it kind of one offs?

Etna: "Seldom are there one-offs [in the pantry]. Seldom. By the time you get down here you are isolated enough, you've used up your family support. Umm, no, most people come for a year or two, I would guess, this would just be anecdotal, and they're not—

sigh—and, some people come like clockwork, and they are always here, and they will always, always be here."

Interviewer: So, how often do you see the same people coming in, typically? [Respondent cell phone rings.] Ok, so are you typically seeing the same people here?

Sara: "So we do see the same people, and they rotate from one [pantry] to the other, and that's why we've changed to once a month. We were going [weekly], but for families only to come once [a month], that was kind of hard to manage, because after a while you're seeing them every week. And then the other thing was, as far as [we go]: an emergency. That's all you have to say. "It's an emergency." Oup, that's it. Give me the keys. But in truth, they became programed just to say "an emergency," and they were shopping, and then going to all the other food banks. So, you know, I'm not enabling people. I'm trying to empower people."

Different experiences running the pantries and different life experiences may also contribute to the providers differing perspectives on clients' reliance on pantries. Etna and Sara both mentioned households getting and saving food, however, their take on the households was different. Etna said households are building bomb shelters, but acknowledged that this may be because they are not getting the support necessary to feed additional household members (like grandkids). Sara saw the use of multiple pantries as hoarding. Sara believed that households only wanted an abundance of food and do not really care what the food is.

Etna: "So that's a perfectly reasonable option. 'I have four weeks' worth of food for me and my family in the basement.' And so what looks like what appeared to be an unreasonable situation, no it's not. And you know, she's operating at the top of her game. She's not going to get better, she's not going to get a job, she's not going to get any smarter than she is now, and that's all she's ever going to get from society, and all society is ever going to get back from her are more grandchildren. And if we don't take care of her well enough to keep those grandchildren in a reasonable state, we don't help ourselves. And so let her have 300 cans in her basement."

Sara: "Most are not trying to get anything. Nutrition-wise? They're not trying, they're harboring, they're hoarders. It's not that they're hungry. The issue is it's free...So, I'm going to go because it's free. And you can get it, but it comes at a cost. Nothing is free, and if you really don't need it, then let it be available for someone who really does need it. So there's a condition to this. It's not really a nutritional thing, or I need fresh vegetables or milk, it doesn't matter, it's just that it's free."

There may be several explanations for the divergent provider views on food pantry reliance. First, the providers have had different life circumstances, and Sara lived on assistance for a while, and as a social worker, she may know about her clients' situations. Second, these pantries may attract different clients with different needs. Third, missions of these programs may slightly differ. Sara's food pantry sees food shortages as an emergency. So clients that come weekly appear like they are abusing the service, rather than getting food out of need, especially when most receive SNAP and other benefits.

Understanding the missions of private food assistance organizations is important in how society approaches food insecurity. I think hunger and food security are often viewed as the same thing, when in reality they are different.

Sara: "...None of them are truly hungry....When I get the homeless, you know they're hungry, and it's very rarely that I get someone who is really hungry, starving, or 'oh, ok, let me make you something."

This confusion results in battles over how we address food insecurity on a policy level.

Conservatives try to increase the use of private assistance in addressing the needs of food—insecure households food-insecure households. Food-insecure households are not always hungry, but are short of having the necessary income to purchase the food they need to live an "active and healthy life." Private food assistance may be able to address some needs of food-insecure households, but they do not solve the economic conditions underlying the problem, and this is not their mission

Sara: "We feed hungry people."

The mission of these programs is to address hunger issues. This limits the role of food pantries in addressing food insecurity. Although they may not change their mission, it is important from a policy perspective that if achieving food security is the goal, than economic interventions are necessary to increase household purchasing power and improve access to nutritious food. This

may require increased SNAP benefits, but other interventions may also be possible on the local level. Access can be improved through a year-round produce coupon scheme, connecting convenience stores with regional farmers, and opening a new grocery store in food deserts.

These ideas can be discussed and implemented on the local level, and help households get more out of their SNAP benefits.

Satisfaction and Appreciation

Household Satisfaction

Households' satisfaction with food pantries and Produce to People were mixed.

Households were satisfied because they received sufficient food from the programs, and they received what they consider healthy food. In addition, households said the programs treated them respectfully. However, households seemed unsatisfied with food quality, and occasionally they did not receive enough food.

Households also related satisfaction with receiving meat. Meat held practical value as it was easy to cook and complimented other foods, and symbolic value as certain meats could make households feel that they belong to society.

Dissatisfaction appeared to be minimal as households referred to negative experiences with "sometimes" or "one time"; however, households may not reveal dissatisfaction because they do not want to appear like they are unappreciative. Households are unlikely to blame these programs for dissatisfaction because the food they receive comes from third parties. Households take food because it's available, rather than what they want to eat. This shows that households take food out of obligation, rather than out of desire. This causes a problems, as households begin to experience monotonous diets.

Households received healthy food from food pantries and Produce to People. Access to these foods is important to households because it is difficult for them to purchase fresh produce with their incomes. However, produce was sometimes of low quality. Fresh food was described as overripe and other goods were past expirations dates. Although these foods can be safe for consumption, certain expired goods are undesirable.

Tim: "What they give us is healthy. You know, green peppers, onions, potatoes, string beans, corn, cabbage, carrots."

Linda: "Tomatoes are so high all you can do is buy one at a time...but if they have it down at the food bank, it's there... But a lot of the stuff you got to go through because the store isn't going to up and give out real nice tomatoes. Every now and then we get, but usually they're over ripe, but you still can use them if they ain't too soft."

Linda: "A lot of the stuff is a little ripe. A lot of it is outdated. When I first started going to the food bank I would throw a lot of the stuff away because it would be two months over the deadline. Then I found out food, canned goods and boxed goods, is still good even after the due date is up on it. Even some juice, but definitely I would not drink no milk after no due date. Even though it's the kind that before you open it you can keep it on the shelf..."

Meat was an important item for respondents. Households usually receive ground beef or chicken. In practical terms, these meats are easy to cook and complement other foods households receive and buy at stores. Meat and some dairy products are not given out at Produce to People, making food pantries important resources for households.

Linda: "They [are] usually going to give you some chicken. They ask if I want chicken and say yes I do because you can fry it, bake it, broil it, BBQ it...you can make soup, you can stew it, you can make chicken and noodles—because they give us noodles also. They give us a lot of stuff you can work with if you know how to cook. I got to pat myself on the back, I am a good cook."

Roger: "I'll say this much: Once I get on my feet I won't use [Produce to People]. I'll save that for somebody else. You get things, but you don't get any meat. You get no milk. You get carrots and potatoes, and a couple canned goods."

Repeatedly receiving ground beef and chicken seems to associate these meats with poverty from the household level. Receiving different meats was associated with luck and

inclusion with the rest of society. Getting the same meats from the same sources likely equates that food as being lower class. Households may perceive these meats as food for poor people.

Tim: "Spice it up with a variety of things. Every now and then, a pork chop. I know steak is obsolete. Get something people might enjoy. A treat to the people in the community. Throw a little something in that will make them feel that they are part of America."

Linda: "Just like I say, you might get lucky and get a roast, but they always got ground, well I won't say always, but they usually going to give you some chicken."

Programs occasionally run short of food. This hurts clients, especially those that only use one program. The fact that this can happen makes stockpiling food necessary for households.

Linda: "I have been down there and the shelves might as well have been empty. I mean really empty and you wind up with no meat. All you get is certain kinds of canned goods."

Roger: "One time I went the other day and all I got was fruit. I wanted some cans of vegetables so I was kind of disappointed."

Households claimed that they mostly received sufficient food from these food programs, however, they mostly used two programs to have their needs met in regards to food sufficiency and variety. Unfortunately, households did not always desire the food they received.

Linda: "The food bank stretches a whole lot because we usually get chicken and there's a lot of stuff you can do with the noodles, and rice. I get canned goods and stuff....I get enough food at the food pantry, but it ain't exactly what I want to eat."

In each category above, statements indicate that household diets based on using food pantries become monotonous: "certain types of canned goods," "spice it up with a variety," "usually going to give," "all I got was." Interviews contained additional statements and conditions showing monotony. Ironically, monotony manifests differently among the respondents. Tim and Linda suffer from getting the same meats and canned goods. Roger, on the other hand, experienced monotony by lacking these foods. Overall, households took what was available in order to have food to eat.

Linda: "You go ahead and you take because you always can make a meal out of some soup."

Finally, respondents did not blame food pantries for dissatisfaction. Two possible explanations exist for this. First, households recognize that food comes from third-party donations. They believe that improvements in food quality and variety rest with the donors. Second, households appreciate the services of food pantries and may withhold dissatisfaction to avoid seeming unappreciative.

Linda: "There's nothing I could say that I really dislike because they could only give us what people donate."

Household satisfaction in how food pantries meet the needs of participants is ultimately mixed. Households want meat, fresh food, and some canned food for practical reasons related cooking and storage, and for symbolic reasons related to inclusiveness. Households facing long-term food insecurity, like Tim and Linda, are likely to face a degree of monotony that increase the value of certain meats and fresh foods. Although they need complementary food for cooking complete meals, there statements suggest that there is a high degree of repetition in their diets. Receiving the same foods also may cause participants to decrease their own self-worth as the food they receive defines their status. Feeling of lower status and separate from the rest of society may be reinforced by the fact that donated food comes from third-party sources, and may be considered a reflection of how society views poor, low-income households from the household perspective. Households take food because they need to, not because it is food that they want to eat.

Perceptions of Satisfaction

Food pantry managers held different views of client satisfaction. Etna did not really seem to think clients were satisfied or dissatisfied, but she did acknowledge food quality was sometimes low and that she did not always know what households needed. Sara thought

households could not be unsatisfied because of the amount of food they received. She also based this on a decline of phone calls for emergency food assistance.

Etna: "The fresh food does make a difference when it looks good and lots of times our stuff does not look very good."

Etna: "Sometimes people come and the certainly don't take their 20 pounds of food. That this is just a fill in for something else."

Etna: "I don't know very much about how they deal with these foods I just know what they want sometimes. Because they say, "you don't have any eggs. I'll come another day. I really wanted eggs."

Sara: "That's what I think, they're very happy. Their carts are heavy, packed, and they are very happy. We did not have repeat callers, and they told me that they were satisfied. They had enough and they felt like they couldn't come back."

Etna says there is a lack of knowledge surrounding some foods and that households won't take them. These foods appear to be surplus exotic fruits aimed at middle- and upper-class households. These types of foods are unfamiliar and culturally inappropriate.

Etna: "Today I went down there, and the fruits are still out there, and I'm like, 'Oh, look, a persimmon!' And nobody down there, none of the employees or volunteers [knew what they were]. They were like, 'Oh, what are those? They're like weird tomatoes.' And I'm like, 'no, they're persimmons!'.... Nobody knows what an avocado is, nobody knows what a persimmon is.... We get the little red baby bananas. I eat those in front of people. It's good. It's just like a little banana, but, you know, it's all black—and it's hopeless. Some people take them. And some people are—it's funny, some people are, yeah I'll try that."

It is ironic that these foods are not appealing because they are not necessarily cheap at grocery stores and are targeted at higher-income households. However, it shows that food pantries sometimes miss households' needs because they are unaware of what they want and how they deal with foods. Another issue exists with the notion of what is culturally appropriate food. Knowledge surrounding some foods may be limited and this affects the household's ability to accept and prepare these items. However, food culture is based on preparing foods that are

available. A persistent lack of fruits and vegetables may create a food culture in which no knowledge exists on different types of produce and how to prepare a meal.

Associating sufficient food with satisfaction is understandable, but it may blind providers from addressing issues of monotonous diets and a lack of quality food. Although I know Sara's food pantry offers fresh food, food sufficiency alone does not satisfy households, especially seniors wanting fresh produce.

Food pantries may improve services by understanding what households are able to get at other pantries and stores, and by knowing how they deal with the foods they receive. Food pantries already offer some educational classes, but obtaining more familiar food from donors may also be necessary to increase household satisfaction.

Appreciation

Clients appreciated services for two reasons: 1) they receive food; 2) they were treated with dignity. Providers said they knew clients appreciated services because they said "thank you" and "we appreciate it." The manner in which households show appreciation may mask dissatisfaction and result in unmet needs.

Linda: "The people there [are] really courteous. They help you there, help you bring it out, help you put it in your car, or help you load it in cars and stuff like that, so everybody that volunteers, all of the volunteers, are very, very nice. If you ask them for something and they got, they'll give it to you."

Sara: "They're comfortable and can point other people because they're comfortable and we treat them with dignity and respect."

Etna: "You can miss your number being called because you went to the bathroom. There are no huge consequences. They respond to proper treatment!"

Households seem to typically say anything is good. This seems to mean that they are willing to accept anything, or that their needs are so low, anything is appreciated. However, the

reality is that households need certain items. The next two quotes highlight confusion arising between appreciation and how it is perceived.

Linda: "You take what they give you and say thank you, I appreciate it. And I do appreciate it because just like I say, I eat pretty well..."

Etna: "We get a lot of thank yous, you get a lot of that. Anything you have will be fine. Thank you, I appreciate it, everything I can get helps."

Also, it seems that households, and providers to an extent, do not perceive that households are allowed to be unappreciative or unsatisfied because the food is free.

Tim: "You can't down someone that's giving you a hand out. Why down them?. And whatever they give you is appreciative; you know what I'm saying? I hear people [complaining about the pantry]. Well, gee whiz they're giving you something and you're bitching about that. You know, be thankful. The food: they're giving it to you. I don't criticize no one. It isn't about that. Somebody's doing something for you. Be grateful. I've always been a grateful person, so it don't bother me."

Etna: "Every now and again you get somebody who is a crank, but it's funny. They feel like they've been disserved somehow. They will pound their hand and [say], I'VE BEEN A CLIENT HERE FOR 10 YEARS,' like that's something to be proud of—and so those are the ones so deep in the system that there is no idea of other ways of surviving."

Households do appreciate these services because it helps them stretch their resources and because they receive respect from workers at the food pantries. However, the way clients show appreciation appears to undermine their ability to fulfill other needs because a lack of dissatisfaction can be interpreted as a lack of appreciation. Seeming dissatisfied or unappreciative is taboo from both household and provider perspectives because the food clients receive is free. Further investigation into this issue may be beneficial because it may reveal unfulfilled needs to providers.

Coping with Food Insecurity

In this section I present methods for coping with food insecurity from household and provider perspectives. Household perspectives detail how they cope with food insecurity through

food management. Provider perspectives identify potential paths to increasing household self-sufficiency through cooking education, nutrition education, and gardening. These perspectives are directed at younger households and youth, more than the elderly population. Importantly, these are coping mechanisms, and neither viewpoint offers a real solution for achieving food security.

Food Management

Food management describes household strategies for dealing with food insecurity and using the food households obtain. Food management practices appear to be based on how well households procure food, especially in regards to using food pantries. However, other circumstances also influence household management practices, like experience with food insecurity and household size. Food management methods include rationing food, restricting food intake, and cooking large meals. Restricting intake and rationing also require methods for coping with hunger.

Linda practiced food rationing. Linda bought single-serving steaks and portioned chicken and froze them to quickly make single meals. Linda said she is too experienced to go hungry, and it is likely that rationing food is a method she learned living a food insecure life. Rationing helps her stretch resources and have a couple of small meals every day. Rationing also allows Linda to cook when she feels ill.

Linda: "I take and I divide, like if I'm having chicken wings, I'll take and put three chicken wings in a pack. I can divide my food so I can have it and try to make it last. One time, no, no, no, a couple times, we even got turkeys from the food bank down there at MLK. You know something, I take it, I slice it, I put it in my freezer and then I put it in a little pack, so when I'm ready for, if I don't got a lot of time, or I don't feel like cooking because I got a lot of medical problems—I'll just take it and heat it up and eat it."

Tim and Linda both tried to cook meals that would last a couple of days. Cooking in bulk likely helps stretch resources because it reduces waste. Cooking large meals was limited to items that could generally be received at the food pantry. Dishes typically are noodle-based or soupbased; however, receiving Pizza Hut was beneficial for Tim because it lasted a few days and did not require cooking or using food in the house.

Tim: "[My son is a teenager] and he'll eat dinner, he'll eat supper, and he'll come down in the middle of the night and whatever is left over, he'll eat that too.... You see with the sauce that they have, they give you ground meat and I make chilies, soups, stews and different things that will last for a couple days."

Tim: "Oh yeah, say they have pizza. Well that evening say we'll have pizza instead of going and opening something or doing something for me and my son. They give you a pretty nice big pizza, and him and I eat that pizza for a couple days. It be in the refrigerator and that's a savings there, you know... And I only eat one or two [slices]. And my son usually eats it because he likes pizza. Like I say, I try to eat enough to where I'm full and not over full, and that way he'll have enough to eat. You're always supposed to let your kids eat. You're supposed to eat less and they're supposed to eat more."

Tim and Roger practiced different versions of food restriction. The presence of children played a role in both households. Tim restricted the amount he ate so his teenager could eat more, while Roger partially restricted his diet to save food for his kids' visits. Tim never went hungry. Roger ate one meal a day when alone, and two meals with his kids.

Tim: "I've had kids for generations. So I know about feeding kids. And doing and taking care of them. I have long practice. Those kids didn't ask to come here so you got to do what you got to do...I eat the less because I know I got a child, so I have to eat enough so that he can have a second portion or a third portion. So that's how I do that. You always supposed to go lacking and your child is supposed to get more than you. After all he's growing."

Roger: "My kids eat a good bit when they're there, the four days they are with me, and when they are not, I usually just have one meal a day, and I'm diabetic so it's been really tight."

Hunger was a concern for household respondents. Linda spent a life avoiding hunger, and this experience seems to direct her method of food management. However, both Roger and Linda needed to make their stomachs feel full in order to avoid feeling hungry.

Have you ever not had enough food?

Linda: "Oh yeah, but not since I've been grown. I make sure I never go to bed hungry. When I was young I didn't realize how poor we was until I got to be a teenager. I then I learned how poor we was and nobody ate like we ate. {crying} And I always promised myself that me and my kids would not eat like that. But I do alright. I do alright, I do alright. It's been hard to be poor. Most especially all your life. {less crying} But I grew. My kids ate pretty good. You know, being from [the South], my momma knew how to make—she was a good cook and could stretch. I mean my dad and mom and seven kids would sit around the table and have a can of salmon and rice and peas and whatever. You learn from your parents to [know how] to stretch your food, making sure that everybody has something to eat."

Linda: "I keep my ice cream, because if you eat ice cream in the evening and you go to bed about the time I do, then you don't be hungry."

In difficult times when you have recourse to food aid, like a food bank, do your meals change a lot compared to the usual? And how do they differ?

Roger: "Not really. My portion sizes decline. I just eat smaller portions to stretch it more. Drink more water."

Roger and Linda's food management and hunger strategies allow a comparison between individuals with long- and short-term experience with food insecurity. Roger's strategy of food restriction is not a real strategy or choice. Restriction is a result of not knowing about other food pantries in the area and the need to stretch resources, especially for having his kids visit. Restriction leads to feeling hungry, and hunger is managed by drinking water to feel full.

Linda's strategy allows her to better manage her resources as a food insecure household and is based on avoiding hunger. Unlike Roger, Linda has sufficient food to make small, but complete, meals throughout the month. Hunger is still an issue for Linda, as she eats ice cream at night to avoid feeling hungry in the morning. Her system is a result of lifelong poverty and food

insecurity. I would not call Linda's strategy a choice, but her system appears to allow her to manage her resources better and potentially avoid hunger.

Another important comparison between Roger and Linda is feelings of anxiety related to food. Roger repeatedly mentioned that he was not worried about lacking food, as it is a temporary situation. Tim did not think he lacked food. This may be because his Social Security check is enough that he does not need too much food assistance. However, Linda's food management strategy is based on scarcity. Experiencing food insecurity and poverty since childhood seems to have engrained in her a way of life that deals with obtaining the resources necessary to avoid hunger. Linda's main goal seems to be avoiding hunger and ensuring that she is protected from events that may inhibit her ability to cook or get food. I expect that Linda is often anxious about having enough food to meet her needs and avoid hunger.

Finally, it is critical to point out that food management does not ensure food security. The best resource management strategies fall short of achieving household food security. ⁶³ Food security requires sustainable access to a nutritious diet to ensure an active and healthy life. Reliance on food pantries and other food assistance programs undermines food security because access may be limited due to seasons, weather, or health. Additionally, household food management is in reaction to scarcity. Management is not enough to obtain food security. Increased income and improved access to nutritious food are also necessary.

Increasing Self-Sufficiency

Providers believe cooking skills, nutrition education, and gardening are necessary for households to increase self-sufficiency and improve household food situations to some extent.

⁶³ Hamelin, Anne-Marie, Céline Mercier, and Annie Bédard. "Perception of Needs and Responses in Food Security: Divergence Between Households and Stakeholders," *Public Health Nutrition* 11, no. 12 (2008): 1394.

Providers said that there is a lack of knowledge surrounding nutrition and cooking for younger households and youth on the North Side. These issues are coupled with a lack of awareness of where food comes from. Providers believe that targeting these issues will increase the intake of fresh food and give skills to households to increase self-sufficiency.

Sara and Helen offer lessons at the food pantry and the farm stand teach, cooking skills and increase awareness about fresh foods. Sara believes that increasing these skills is vital for her clients, but also important for increasing her own knowledge on dealing with food. Providing these lessons gives younger clients the knowledge to use food they may pass up at the farm stand or food pantry because they do not know what to do.

Helen: "[Households need] education on how to cook a zucchini. Most people don't even know what certain fruits and vegetables are...One of the things at our farm stand is we have a lot of recipes. So if somebody were to buy that zucchini, here you go, here's what you need to do. And we also had a demonstration. One person came out with their little gas operated grill and grilled the zucchinis and showed how easy it was to make these recipes. So that's part of education.

Sara "We're doing fresh food demonstrations...We've had all kinds of things. We've had farmers markets [on] Fridays come and give us their stuff, but young families, they don't know how to prepare anything if it's not fried, or if it's not ready to dunk down into the oil. They don't know how to slice and dice and bake. Even myself, I don't know how to cook rutabagas or turnips. So we're having demonstrations. I'm having some eggplant from the food bank today, and we're actually going to have a demonstration. We're going to have eggplant parmesan one day next week and we're going to have hands on here, and taste sampling, and let's do it together to encourage people to use fresh produce."

In addition to educating clients on nutrition and cooking, providers see importance in teaching youth how food is grown. Providers know that youth have some basic understanding about food, but they do not realize how food is grown. There is a disconnection between the reality of food production and what appears in the grocery store. Providers see this as a problem for not only knowing about food, but also for eating it. Teaching youth about food is seen as a way to promote improved diets as well as community-building.

Helen: "The kids that grow up in the city, they don't really get where food comes from, and how—they may know chickens lay eggs, but I happen to own chickens and the kids in my neighborhood, they seem to think that those are different eggs than the ones they get in a grocery store. They don't realize it's the same thing...Kids are also 100 times more likely to eat vegetables if they grow them themselves, because most kids don't want to eat vegetables. And if they grow their own tomatoes, or grow a carrot, whatever, that's kind of an ownership thing and makes them proud. So they're more likely to eat things they might not necessarily even try... So the education on where the food actually comes from [is important]... And I know the Pittsburgh Project, that's one of the things they did. They worked a lot with children and the kids had their own gardens. Those kids ate so well because they learned how to eat well and they took that home and took that back to their parents, and instilled the good behavior and the good eating, and that's huge, that's really huge."

Sara: "The kids learn because they've never seen, they never knew, 'Oh!, tomatoes grow out the dirt.' We had eggplant [in our garden], and they were getting all purple on the vine, and the kids were all like, 'What is that?' And we had all of these eggplants [busted] on the basketball court, and I'm like, 'psh... They picked them.' But, you know, it was halfhearted. At least they were kind of curious to know what it was, because they had never seen, apart from [at] Giant Eagle, that vegetables really do come from the garden, out the ground. So, it's been a learning experience... And this garden has really become the foundation of the area. It used to be a little tricky...but, now everybody recognizes and respects that garden. And the kids—it's amazing to see the look on a child's face when they say, 'Oh, that's a tomato?!"

Although Helen believes that seniors are a lost cause in some respects, Etna sees the history of African-American gardens as a potential for increasing self-sufficiency among food insecure north side residents. However, she thinks that issues with education and race are obstacles in achieving results through gardening.

Etna: "I think the one thing that people would like to do more of—and I don't know why more of them don't do it, and I suppose it's an education thing because they've never been successful with education, so they're loathing to suspect they would be able to learn anything, or to improve—but, self-sufficiency and gardening. We got tons of grass being mowed by the public housing people that can be turned into food production, and a point of pride to the vast majority of African Americans is talking about their grandparents and the way their grandmother could stretch a chicken for a week, and you know, the things that they grew and they cooked. So I think that self-sufficiency would be a way to get into success in many different ways. Through food. And I don't know why it doesn't work as well, except it's all white people trying to teach black people how to do it, and we want to teach them how to do it organically, and they don't care about that. And so yea, the class pushing down on another class is very awkward. At no point would I say,

'Hey! Would you guys want to get a club together and I'll teach you how to garden?' No, I'm not doing that"

Etna's reluctance shows understanding of issues concerning decision making, disenfranchised populations, and power. Previous work shows that the needs of low-income households are discounted when white, middle-class values are at the forefront of interventions. Additionally, Etna alludes to the fact that elderly citizens have the knowledge to promote potential gardens. Tim and Linda both claimed they gardened when they were younger. They identified issues with health and rodents as a problem to maintaining their gardens.

Linda: "My back is too bad [to garden]...I used to have a garden when I was on the South Side. I used to have a garden about the size of this room. We used to have collard greens, cabbage, peppers, onions, cauliflower, string bean, tomatoes. We'd have beef steak tomatoes and regular tomatoes. Oh yeah, we had a good garden, mhmm. Oh I was younger. Now I exercise and I walk, but doing that kind of bending over and all that, you do not do that if your back is bad as mine is. Oh no, I knew that I could never have what I call a garden with all the moving and all the hoeing. They got a community garden right up that hill. My neighbor two doors up, she goes up there sometimes. But then again, she ain't nothing but 55 or something like that.

Tim: "I had a garden. I had one. Let me tell you what happened. The groundhogs they got more of the food than you. I had a big garden. My neighbor next door had one. You can't sustain them. One day one was eating, sitting there looking up at me as if to say, thanks buddy. I had nice gardens. Tomatoes, greens, all kinds of stuff. And I would share it with the neighbors...I'm not as healthy I was to be able to sustain that."

Providers feel these needs are necessary for behavior change and self-sufficiency, but cooking skills, nutrition education, and gardening are closer to coping mechanisms than solutions for food insecurity. These perceptions may be based in an ideology of empowerment.⁶⁶ Providers in other studies see needs for improved financial and food management, but there is a limit to

⁶⁴ McCullum, Christine, David Pelletier, Donald Barr, and Jennifer Wilkins. "Agenda Setting Within a Community-based Food Security Planning Process: The Influence of Power," *Journal of Nutrition Education and Behavior* 35, no. 4 (2003): 196.

⁶⁵ Kato, Yuki. "Not Just the Price of Food: Challenges of an Urban Agriculture Organization in Engaging Local Residents," *Sociological Inquiry* 83, no. 3 (2013): 383-386.

⁶⁶ Hamelin, Anne-Marie, Céline Mercier, and Annie Bédard. "Perception of Needs and Responses in Food Security: Divergence Between Households and Stakeholders," *Public Health Nutrition* 11, no. 12 (2008): 1394-1396.

how much improved management and empowerment can take a household to becoming self-sufficient and food secure.⁶⁷

This is similar to my findings. Households appear to tightly manage their income and food to make ends meet between pay periods. The persistence of food insecurity, for my group, is a result of inadequate income through Social Security and low wages. Although Linda's Social Security check is low from a lack of employment, Tim is also struggling with food security despite having two careers. Additionally, these interventions are targeted at younger residents with a goal for long-term change, but seem to neglect skills and knowledge of senior citizens. These skills may be necessary to an extent, but food insecurity cannot be solved without addressing underlying economic factors.

Food Assistance Programs Needs and Solutions

All providers mentioned that they need financial and skilled volunteers or workers to fulfill their current missions and to create new programs. Helen was originally unsure if farm stand volunteers would have the skills necessary for book keeping and adopting responsibilities from the food bank. Etna said that some volunteers are serving community service. They may not have the desire to advance programs, or skills necessary to do so.

Food programs were also concerned about financing their operations. With decreasing food bank support, Etna noticed that her organization was not able to offer certain items to clients that they needed. This could be in relation to food, but also included toiletries and some household goods. Sara said that overuse of her food pantry started to drain time and energy from her and her staff, as well as money.

-

⁶⁷ Ibid.

These providers found some ways to remedy their situations. Etna networked with acquaintances and created a webpage that allowed for online monetary or in kind donations. Donors could submit funds via Pay Pal, or send items listed on a wish list to the organization through Amazon. Sara simply changed her organizations operating schedule to decrease pantry use and save resources.

Finally, Sara is attempting to spearhead a youth business based on horticulture. She is in the grant writing stages of this program. Although this she is starting this program partially for personal reasons, the format fits with USDA entrepreneurial for addressing community food security. Essentially, this program will teach youth business and horticulture skills while offering affordable food to the community.

These providers are driven to solve problems in their organizations and better serve the needs of their community. What they lack are additional finances and professional volunteers. Given these capacities it is likely that some initiatives may help sustain their organizations and promote programs to improve their communities.

Summary

Food insecurity is a complex problem facing households. Several factors contribute to the problem, but main factors are economic. In this study, households largely lacked sufficient income to shop at the supermarkets near their neighborhoods. Wages and benefits were too low for them to achieve food security. Additionally, unexpected events increased household food insecurity.

Food access to residents is limited in geographic and economic concerns. Participants in this study highlighted the fact that food at Giant Eagle is too expensive for household budgets,

and the quality is lower than in suburban areas. The farm stand addresses some concerns of access to fresh foods by being located in the neighborhood, offering food at reduced prices, and accepting SNAP and senior vouchers. Although these programs work together to increase access to nutritious foods, they are only available for part of the year.

Households resort to using food pantries to stretch food between pay periods. Pantries fulfill their missions by offer a sufficient amount of food to food—insecure household, but households need to participate in multiple pantries to obtain enough food and achieve a certain level of variety. Unfortunately, pantry offerings may be expired, overripe, or not meet household needs for other reasons. Reliance on food pantries and Produce to People may create monotonous diets.

Communication and a lack of shared experiences between households and providers create problems in perceiving satisfaction and appreciation. Households appreciate services to the extent that they do not go hungry; however, some needs are unmet. Households seem to avoid appearing dissatisfied in order to avoid appearing unappreciative. Providers do not seem know this because households are grateful for what they receive. Additionally, dissatisfaction appears to be taboo, as households and providers see food as a free item that should be taken graciously. Since the food is free, households also perceive that there is nothing that can be done to improve services because food comes from unknown third party donors.

Policy Recommendations

In this section I make recommendations for increasing food security on the North Side. I begin with recommendations to increase the self-efficacy of food-insecure households. These recommendations require advocacy, organization, and creating partnerships with community

organizations. The second set of recommendations looks at increasing the purchasing power of residents, advocacy, and donations to food pantries to ensure year-round access to fresh produce. Implementing these recommendations will require partnerships between supermarkets and community organizations, and may require state support.

I recommend that organizations investigate clients who receive disability benefits, or live with household members receiving disability benefits, to determine if increasing advocacy of employment for this group is worthwhile in terms of time and resources.

Nationally, 8.8 percent of food pantry participants receive Social Security Insurance (SSI) and 9.9 percent receive disability benefits (SSDI/Worker's Compensation).⁶⁸ Sara has 1,500 clients receiving disability benefits, and she says most of them are young adults that could potentially work part-time jobs and increase their incomes, quality of life, and dignity. Sara believes this suggests increased advocacy to let clients know that they can work and still receive their benefits.

I think advocacy will primarily rest on the shoulders of community organizations; however, these organizations will require additional professional support and targeted marketing. Pittsburgh's universities present immense potential for providing support for an advocacy program through research, recommendations for implementation, and using interns in a semi-professional capacity in working with clients. Additionally, marketing can reach the target audience in Department of Public Welfare offices, community organizations, buses, and food retail outlets. Grants to create promotional materials will be needed.

60

⁶⁸ Mabli, James, Rhoda Cohen, Frank Potter, and Zhanyun Zhao. *Hunger in America 2010 National Report Prepared for Feeding America*. No. 6497. Mathematica Policy Research (2010): 95.

It is possible that participants will still be food-insecure if their wages are not sufficient to meet their needs; however, employment, especially for younger adults, may lead to future increased incomes and self-reliance, in addition to reducing demand on public and private food assistance programs. This increases control over the household food situation, as participants will be able to choose their food rather than receive stipulated commodities.

I recommend recruiting food-insecure North Side residents to volunteer or work with food-related programs.

The farm stand, food pantries, and community gardens have human resource needs that can be met with some volunteer work from food-insecure residents. Additionally, recruiting residents to participate as part of the provider network may encourage empowerment, which is a central theme of North Side providers. Farm stands need individuals to set up the stand, keep books, and advertise. The food pantries need assistance with raising money and giving out food. Experienced gardeners are needed for instructing youth and community members.

Implementing this recommendation would first require organizations to identify their human resource needs and identify which roles could be filled volunteers in the community. Some positions, like bookkeeper, may require additional training of community members. It may be possible to find professionals in needed tasks to provide on-the-job training. This would increase empowerment and self-efficacy in volunteers. Incentives can be given to interested volunteers, such as an additional discount at farm stands, or additional food at food pantries. I believe that this can create a mutually beneficial relationship between some clients and some providers, rather than a giving and taking relationship, while working on empowerment and meeting organizational needs.

Community gardening may have additional opportunities. Gardening is not sufficient to achieve full food security, but community gardens for low-income households are growing on the North Side, in addition to the youth gardens already in place. Incorporating the experience of African-American senior citizens could be beneficial to gardening projects in light of the significant history of African-American gardens in Pittsburgh and the gardening experience of the elderly respondents in this study. Additionally, Tim and Linda consistently spoke about teaching their kids by living as an example. For households with limited education, it seems they teach character by trying to live in a way that their kids can follow and adopt. Although there may be issues concerning race and values in implementing a gardening program, new and existing gardening projects could give North Side seniors the option to participate as educators. This provides seniors with an activity outside the house, gives them a prominent role, and gives gardens individuals with experience that try to teach through example. According to Sara, seniors take vegetables from youth gardens, already. Further incorporation of seniors seems possible.

I recommend establishing entrepreneurial enterprises within the North Side to increase food access and develop business skills.

Two recommendations arose from the literature review and from the interviews. The first, is to connect grocers and convenience stores owners with regional farmers so they can offer fresh produce in close proximity to food-insecure households in food deserts. ⁶⁹ This requires an individual or organization to introduce and facilitate negotiations with farmers and business owners. The second is to support youth-based, food-related, entrepreneurship programs. USDA

⁶⁹ Murray, Zachary. "Strategies for Access to Healthy Foods in Allegheny County. A Menu for Food Justice," *Just Harvest* (2013): 28.

grants exist for both of these initiatives, increasing their viability. Additionally, the Manchester Bidwell Corporation offers a horticulture technology major that develops skills related to these projects. These students can intern with community organizations and assist the implementation and operation of these programs.

I recommend the creation of a supermarket monitoring group in order evaluate and resolve issues with food quality, prices, and availability at North Side supermarkets.⁷⁰

Food price and affordability at Giant Eagle were concerns mentioned by Sara and Linda. Previous research on perceptions of supermarkets in Pittsburgh's East End concluded that a monitoring group may improve quality and affordability. 71 This same principle applies to the North Side, as similar statements were mentioned by food-insecure households and providers. This type of activity would give residents increased control over their food environment.

The tool that was suggested was tested over 85 stores in metropolitan areas and was tested for several types of validity. The drawback is that monitoring groups would need to operate at several stores in order for comparisons to be accurate, and evaluations of supermarkets in affluent neighborhoods and the suburbs are necessary. I believe an academic tool could be useful, but creators of the tool stated that personnel is costly in this endeavor, and monitors need

63

⁷⁰ Kumar, Supriya, Sandra C. Quinn, Andrea M. Kriska, and Stephen B. Thomas. "'Food is Directed to the Area': African Americans' Perceptions of the Neighborhood Nutrition Environment in Pittsburgh," Health & Place 17, no. 1 (2011): 375-376.

Note: I liked the idea, but not necessarily the tool. I attempted to modify the plan to incorporate resident participation. ⁷¹ Ibid.

to be trained.⁷² A further limitation is that both studies propose asking supermarket management for permission.⁷³

A simpler option for a monitoring group would be to organize interested residents through North Side organizations. A list can be obtained through North Side providers, one of which is the North Side Leadership Conference. As a group, residents can document what they bought, the quality, the price and other store observations, like deli options or needed items that are not at the store. This data would be collected by a central community organization and presented to the store manager. Changes can be assessed through ongoing monitoring and discussed at community meetings. With advanced technology, data collection can be as simple as taking a picture with a phone of products, prices, and a short text message describing the shopper's perception.

Advanced research opportunities and advocacy may involve universities, the Food Policy Council, the Department of Public Health, and other organizations. This could advance data analysis, create new partnerships, and develop new policy frameworks for food insecurity.

I recommend coupons, produce-specific vouchers, or allocating a portion of SNAP benefits to increase purchasing power and incentivize the purchase of fresh food.

There are several methods for increasing consumption of fruits and vegetables among food-insecure households. Some methods may include expanding farmers market vouchers for seniors and WIC participants to SNAP participants; developing a coupon program with local

64

⁷² Glanz, Karen, James F. Sallis, Brian E. Saelens, and Lawrence D. Frank. "Nutrition Environment Measures Survey in Stores (NEMS-S), Development and Evaluation," *American Journal of Preventive Medicine* 32, no. 4 (2007): 288.

⁷³ Ibid.

supermarkets and grocery stores to incentivize the purchase of fresh food; and, allocating a portion of SNAP benefits to the purchase of fresh food.

Coupons effectively promote the purchase and consumption of vegetables. ⁷⁴L⁷⁵ Developing a coupon program for food-insecure households could increase purchasing power and consumption of fresh foods. Current voucher programs, like senior vouchers, are popular, but limited due to the seasonality of the program. These programs appear to be coupled with promoting the purchase of regional foods, and this may limit supermarket participation.

However, current voucher programs are seasonal, so a winter and spring coupon program could provide year-round access to fresh food. Additionally, the program does not necessarily have to offer steep discounts. According to the USDA, "the majority of increased purchases due to the coupons came from the informational effect—people purchased more fruit and vegetables because the coupon increases awareness of the price discount being offered." So, rather than simply reducing prices to make food more affordable, it is essential that awareness of discounts be disseminated to low-income households.

Finally, key informants have suggested providing discounts for fresh food for SNAP participants, or making fresh foods a required purchase.⁷⁷ Both of these programs are feasible, but effectiveness may vary. Providing discounts for fresh food on EBT cards⁷⁸ may not be effective because they do not require active participation by the participant. There will likely be

⁷⁴ Hamelin, Anne-Marie, Céline Mercier, and Annie Bédard. "Perception of Needs and Responses in Food Security: Divergence Between Households and Stakeholders," *Public Health Nutrition* 11, no. 12 (2008): 1395.

⁷⁵ Dong, Diansheng, and Ephraim Leibtag. "USDA Economic Research Service-Price-Reducing Coupons Have a Dual Effect on Fruit and Vegetable Purchases," *Amber Waves* (2013).
⁷⁶ Ibid.

⁷⁷ Leung, Cindy W., Elena E. Hoffnagle, Ana C. Lindsay, Hayley E. Lofink, Vanessa A. Hoffman, Sophie Turrell, Walter C. Willett, and Susan J. Blumenthal. "A Qualitative Study of Diverse Experts' Views about Barriers and Strategies to Improve the Diets and Health of Supplemental Nutrition Assistance Program (SNAP) Beneficiaries," *Journal of the Academy of Nutrition and Dietetics* 113, no. 1 (2013): 73.

⁷⁸ Electronic Benefits Transfer. Cards that carry benefits like SNAP. See page 3.

no variation in the discount and they will not have to follow other requirements that are usually involved with coupons. Restricting a certain amount of SNAP for fresh food purchases is another option. The difficulty here is that this option does not address the affordability concern, or increase the purchasing power of households. This could hurt a growing number of suburban poor that live near supermarkets catering to wealthier clients. Additionally, this requires specific definitions of "food" and "healthfulness," which do not currently exist on the federal level.⁷⁹ Restrictions require increased bureaucracy, costs, and rely on checkout counter staff for enforcement.⁸⁰ Finally, 70 percent of SNAP participants pay for food with a portion of their earned income, which they could use to buy potentially restricted items.⁸¹ This makes restrictions inefficient and ineffective options.

Innovative solutions to increase access to fresh foods will most likely rest with nonprofit organizations and businesses, with support from different levels of government. SNAP can be a vehicle for increasing access through incentives; however, passive discounts do not require participants' attention, while restrictions are not possible in the current framework. Coupons appear to be a good option. These will need support from businesses and nonprofits and would need to be untied from local agricultural production to ensure year-round access to fresh food.

I recommend expanding Etna's program to increase private donations to improve food quality.

Increasing private donations is recommended in another study on urban and rural food pantries as a means to decrease demand on food bank systems, but no clearer idea was given than

⁷⁹ U.S Department of Agriculture Food and Nutrition Service. Implications of restricting the use of food stamp benefits—summary, March 1, 2007: 1.

⁸⁰ Ibid.

⁸¹ Ibid.

through tax incentives. 82 New and existing technology and services allow for innovative strategies for food pantries to increase resources. Etna set up a program for in-kind and monetary donations where donors can view a wish list on Amazon and make a needed donation. This can be replicated at other food pantries.

I think Etna has a great program, but it could be improved in one way. First, Etna said she does not always know what people want or how they deal with food. Greater understanding in these areas can refine the wish list to better meet her clients' needs. Second, food banks benefit from scale. Monetary donations allow them to purchase food at lower costs than what a typical donor could provide with an in-kind food donation. Replicating this model and combining resources could allow North Side food pantries to operate at a larger scale and purchase foods more cheaply than they can on their own. This would decrease pressure on the Greater Pittsburgh Community Food Bank and provide more sustainable access to fresh food, and potentially fresher food, to food pantry participants.

Limitations

The results of this study are not generalizable to other areas, I attempted to triangulate the phenomenon of food insecurity on the North Side by using multiple perspectives, but the responses from interviewees may differ from others in the same neighborhoods and organizations. This occurred because the recruiting method did not return a significant amount of interested participants. This resulted in interviewing older, unemployed participants who may have different needs, expectations, and experiences than younger households. It is possible that the results would be drastically different if more perspectives were included in this study.

⁸² Molnar, Joseph J., Patricia A. Duffy, LaToya Claxton, and Conner Bailey. "Private Food Assistance in a Small Metropolitan Area: Urban Resources and Rural Needs," J. Soc. & Soc. Welfare 28 (2001): 205.

The interview schedule contains significant limitations. First, I attempted to replicate one section of a much larger study of food insecurity in Quebec, Canada by Hamelin et al. Hamelin developed the interview schedule from an ethnographic case study of food—insecure households in Quebec. Because her study is limited to one geographic location, there may be differences in household and provider perspectives based on demographics, population density, variety of services, and government policies.

I was unable to pilot the interview schedule due to time constraints of the study. This resulted in asking interview and probing questions inconsistently. Additionally, there were times I skipped questions if I felt that I already received an answer. This was partially out of discomfort with the interview schedule and feeling like I did not want to take up too much of my subjects' time.

I also realized near the end of writing this thesis that the concept of *food insecurity* was not really understood by the providers. It was confused with hunger, or my definition was not the same as their perception of the problem. Clearing this up may have elicited different answers, or may have added clarity to their perspectives of food insecurity and their clients. Additionally, Hamelin et al. only asked providers questions about satisfaction and appreciation. Limiting the scope of provider interviews may have been beneficial

Data analysis was difficult for this study because it was my first time attempting content analysis and because of the inconsistency I asked questions. Comparing answers was nearly impossible, and it is likely that I made some false assumptions in attempts to make sense of the data. However, in some cases findings were similar to other studies, but this could also be a biased result from performing the literature review prior to writing the results.

Seasonality was another inhibiting factor. It was often near or below zero degrees in Pittsburgh when I recruited participants. This may have reduced the effectiveness of fliers if clients went to food programs during warmer weather.

Finally, this whole project was done on a rapid time table. I do not think I enough theoretical understanding of food insecurity or how to setup the project. I think focusing on the effectiveness of just food pantries, or just farm stands, or on one smaller piece of this puzzle would have yielded more clarity. I think I tried to accomplish too much in the amount of time given to complete the project.

Although this work could be better, I learned a considerable amount about the research project and the complexities of food insecurity. This thesis also revealed interesting insights for further research, especially the masking effects of appreciation and the status of food in our culture

Bibliography

- Allen, Patricia. "Reweaving the Food Security Safety Net: Mediating Entitlement and Entrepreneurship." *Agriculture and Human Values* 16, no. 2 (1999): 117-129.
- Andrews, Margaret. "More Americans Relied on Food Assistance During Recession." *Amber Waves: The Economics of Food, Farming, Natural Resources and Rural America* (2010). Last accessed 12/1/2013 http://www.ers.usda.gov/amber-waves/2010-december/more-americans-relied-on-food-assistance-during-recession.aspx#.UpvuVsTs 6Q
- Berg, Bruce Lawrence, and Howard Lune. *Qualitative Research Methods for the Social Sciences*. Vol. 5. Boston: Pearson, 2004. 338-373.
- Carlson, Andrea, M. Lino, W-Y. Juan, K. Hanson, & P. P. Basiotis. *Thrifty Food Plan,* 2006. (CNPP-19). U.S. Department of Agriculture, Center for Nutrition Policy and Promotion. (2007). Last Accessed 4/15/2014 at http://www.cnpp.usda.gov/Publications/FoodPlans/MiscPubs/TFP2006Report.pdf
- City of Pittsburgh Committee on Land Use and Economic Development. Pittsburgh Code Ordinances Title 9 – Zoning. (2011). Last Accessed 9/15/2013 https://pittsburgh.legistar.com/LegislationDetail.aspx?ID=775953&GUID=4E3A6EF6-99FB-4818-BFEF-8C9A17611A3D
- Daponte, Beth Osborne. "Private Versus Public Relief: Use of Food Pantries Versus Food Stamps among Poor Households." *Journal of Nutrition Education* 32, no. 2 (2000): 72-83.
- Dean, Stacy, and Dottie Rosenbaum. "SNAP Benefits Will Be Cut for All Participants in November 2013." *Center on Budget and Policy Priorities* (2013): 1-9. http://www.cbpp.org/cms/?fa=view&id=3899
- Dong, Diansheng, and Ephraim Leibtag. "Service-Price-Reducing Coupons Have a Dual Effect on Fruit and Vegetable Purchases." USDA Economic Research *Amber Waves* (2013). Last Accessed 7/14/2014 http://www.ers.usda.gov/amber-waves/2010-september/price-reducing-coupons-have-a-dual-effect-on-fruit-and-vegetable-purchases.aspx#.U9_ZmPn4dPY
- Feeding America. "Map the meal gap." *Feeding America* (2011). Last Accessed 4/15/2014 http://feedingamerica.org/hunger-in-america/hunger-studies/map-the-meal-gap.aspx
- Furness, Bruce W., Paul A. Simon, Cheryl M. Wold, and Johanna Asarian-Anderson.

 "Prevalence and Predictors of Food Insecurity Among Low-income Households in Los Angeles County." *Public Health Nutrition* 7, no. 06 (2004): 791-794.

- Glanz, Karen, James F. Sallis, Brian E. Saelens, and Lawrence D. Frank. "Nutrition Environment Measures Survey in Stores (NEMS-S): Development and Evaluation." *American Journal of Preventive Medicine* 32, no. 4 (2007): 282-289.
- Greater Pittsburgh Community Food Bank. "Hunger Profile by County: Allegheny County." *Greater Pittsburgh Community Food Bank* (2013): 1-2. http://www.pittsburghfoodbank.org/pdf/allegheny.pdf
- Gray, David E. Doing Research in the Real World. SAGE, 2009.
- Grow Pittsburgh. "What's Happening: The Allegheny Grows Program has Assisted in Starting Community Gardens in 9 Municipalities Since it began in 2010." (2012). Last Accessed September 15, 2013 at http://www.growpittsburgh.org/the-allegheny-grows-program-is-now-accepting-applications-for-2014/
- Hamelin, Anne-Marie, Céline Mercier, and Annie Bédard. "Perception of Needs and Responses in Food Security: Divergence Between Households and Stakeholders." *Public Health Nutrition* 11, no. 12 (2008): 1389-1396.
- Hamelin, Anne-Marie, Céline Mercier, and Annie Bédard. "Discrepancies in Households and Other Stakeholders Viewpoints on the Food Security Experience: A Gap to Address." *Health Education Research* (2009): 401-412.
- Hamelin, Anne-Marie, Céline Mercier, and Annie Bédard. "Needs for Food Security from the Standpoint of Canadian Households Participating and Not Participating in Community Food Programmes." *International Journal of Consumer Studies* 35, no. 1 (2011): 58-68.
- Kato, Yuki. "Not Just the Price of Food: Challenges of an Urban Agriculture Organization in Engaging Local Residents." *Sociological Inquiry* 83, no. 3 (2013): 369-391.
- Kendall, Anne, Christine M. Olson, and Edward A. Frongillo Jr. "Validation of the Radimer/Cornell Measures of Hunger and Food Insecurity." *The Journal of Nutrition* 125, no. 11 (1995): 2793-2801.
- Kumar, Supriya, Sandra C. Quinn, Andrea M. Kriska, and Stephen B. Thomas. "'Food is Directed to the Area": African Americans' Perceptions of the Neighborhood Nutrition Environment in Pittsburgh." *Health &Place* 17, no. 1 (2011): 370-378.
- Leung, Cindy W., Elena E. Hoffnagle, Ana C. Lindsay, Hayley E. Lofink, Vanessa A. Hoffman, Sophie Turrell, Walter C. Willett, and Susan J. Blumenthal. "A Qualitative Study of Diverse Experts' Views about Barriers and Strategies to Improve the Diets and Health of

- Supplemental Nutrition Assistance Program (SNAP) Beneficiaries." *Journal of the Academy of Nutrition and Dietetics* 113, no. 1 (2013): 70-76.
- Mabli, James, Rhoda Cohen, Frank Potter, and Zhanyun Zhao. *Hunger in America 2010 National Report Prepared for Feeding America*. No. 6497. Mathematica Policy Research, 2010.
- McCullum, Christine, David Pelletier, Donald Barr, and Jennifer Wilkins. "Agenda Setting Within a Community-based Food Security Planning Process: The Influence of Power." *Journal of Nutrition Education and Behavior* 35, no. 4 (2003): 189-199.
- Molnar, Joseph J., Patricia A. Duffy, LaToya Claxton, and Conner Bailey. "Private Food Assistance in a Small Metropolitan Area: Urban Resources and Rural Needs." *J. Soc. & Soc. Welfare* 28 (2001): 187-209.
- Murray, Zachary. "Strategies for Access to Healthy Foods in Allegheny County. A Menu for Food Justice." *Just Harvest.* (2013). Retrieved September 20, 2013 from http://www.justharvest.org/index.php/component/content/article/65-food-deserts/231-amenu-for-food-justice-community-forum-and-report-release
- Centers for Disease Control and Prevention. "Census tract level state maps of the Modified Retail Food Environment Index (mRFEI)." Accessed May 15 (2013). ftp://ftp.cdc.gov/pub/Publications/dnpao/census-tract-level-state-maps-mrfei TAG508.pdf
- National Research Council. "Food Insecurity and Hunger in the United States: An Assessment of the Measure." *Panel to Review the U.S. Department of Agriculture's Measurement of Food Insecurity and Hunger*. Washington, DC: The National Academies Press (200): 1-156.
- Nord, Mark, Margaret Andrews, and Steven Carlson. "Household Food Security in the United States, 2004." *USDA-ERS Economic Research Report* 11 (2005).
- Ploeg, M. ver, Vince Breneman, Tracey Farrigan, Karen Hamrick, David Hopkins, Phil Kaufman, Biing-Hwan Lin et al. "Access to Affordable and Nutritious Food: Measuring and Understanding Food Deserts and their Consequences. Report to Congress." In *Access to Affordable and Nutritious Food: Measuring and Understanding Food Deserts and their Consequences*. USDA Economic Research Service, (2009).
- Rose, Donald. "Economic Determinants and Dietary Consequences of Food Insecurity in the United States." *The Journal of Nutrition* 129, no. 2 (1999): 517S-520S.
- Seidman, Irving. *Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences*. Teachers College Press, 2012.

- Smith, Chery, and Hannah Miller. "Accessing the Food Systems in Urban and Rural Minnesotan Communities." *Journal of Nutrition Education and Behavior* 43, no. 6 (2011): 492-504.
- U.S. Department of Agriculture. "Implications of Restricting the use of Food Stamp Benefits." A Summary. (2007). Retrieved July 17, 2014 http://www.fns.usda.gov/sites/default/files/arra/FSPFoodRestrictions.pdf
- U.S. Department of Agriculture. "Food Security in the United States: Measuring Household food security." Retrieved September 8, 2013 http://www.ers.usda.gov/Briefing/FoodSecurity/measurement.html. Link is dead
- U.S. Department of Agriculture. Food Security in the United States: Measurement. (2013). Retrieved September 8, 2013 http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/measurement.aspx#.Upvrq8Ts_6T: Concerning the USDA definition of food security.
- Walker, Renee E., Craig S. Fryer, James Butler, Christopher R. Keane, Andrea Kriska, and Jessica G. Burke. "Factors Influencing Food Buying Practices in Residents of a Lowincome Food Desert and a Low-income Food Oasis." *Journal of Mixed Methods Research* 5, no. 3 (2011): 247-267.