Understanding the Preferences and Needs of the People Served by the Greater Pittsburgh Community Food Bank

by

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Abstract

The Greater Pittsburgh Community Food Bank (GPCFB) is responsible for sourcing and distributing food to food insecure families and individuals in 11 counties across Western Pennsylvania. Demographic information is the only information systematically collected from individuals who use GPCFB services. I was hired in February 2018 to design, pilot, implement and analyze a large-scale survey to individuals at two GPCFB food distributions- food pantries and Produce to People. The survey included questions beyond demographics that would allow the Food Bank to better understand the people they serve. Questions garnered information on food preferences, nutritional needs, fruit and vegetable access, household chronic disease, and medical access. The purpose of this survey is to drive an internal Wellness Policy at GPCFB focusing on the wants and needs of the people served, and disrupting the quantity over quality approach historically taken by food banks. Results to the food and health questions will serve as justification for objectives of the prosed Wellness Policy. This survey is also the beginning of a "people first" initiative at the GPCFB. This initiative will increase the levels of community engagement at the Food Bank and involve the people they serve in future programming and decision making. The public health significance of this project is that increased community engagement results in more community choice which, in turn, leads to a stronger system interrupting the cycles of poverty and food insecurity. The Wellness Policy emphasizes the sourcing and distribution of foods that are part of a healthy diet that gives people the energy to

make decisions and improves the health outcomes of individuals and families. Survey administration took place over three months during the summer of 2018, reaching 25 food pantry distributions, 5 Produce to People distributions and 757 individuals in total. Survey results provide strong evidence for a new Wellness Policy and increased people-focused decision making at the Food Bank. Methods can be replicated on a smaller scale to continuously collect information and feedback from individuals using the Food Bank's services.

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1.0 Introduction

I was hired by the Greater Pittsburgh Community Food Bank (GPCFB) as the Health and Wellness Intern in February 2018. My role was to design, pilot, implement and analyze a survey exploring the wants and needs of individuals using various food bank services including pantry distributions and a produce distribution called Produce to People.

This survey had several purposes in the overall Food Bank agenda. First, GPCFB is pushing for more person-centered decision making, with the voices of those they serve at the center of new programs and policies. Second, spearheaded by the Health and Wellness Department, a new internal Nutrition and Wellness policy is being drafted to improve the overall quality of food distributed to individuals in Western Pennsylvania, based on preference and health needs. Finally, the GPCFB is striving for continuous evaluation of programs and services to ensure best practices, efficiency, sustainability, and constant improvement. This 2018 survey will serve as a basis for future evaluation by the GPCFB.

Prior to this survey, GPCFB only had demographic information from food pantries to describe and understand the population utilizing their services. Food bank employees wanted to know more about the people they serve in terms of their health and well-being, in addition to demographic data. What chronic diseases are prevalent among the households that use food bank services? What sort of access do individuals have to fresh fruits and vegetables? To medical services? What kind of foods do individuals prefer? What kind of food do individuals need their pantry to offer? Gathering more detailed information on the people they serve allows the GPCFB to continually make more human-centered decisions and consider their true needs in terms of programs and services. This new survey tool will allow for future quantitative data to include more

detailed information about the people they serve in terms of the categories described above. More comprehensive quantitative data would also allow for the design of future research tools within the food bank of both quantitative and qualitative nature.

Survey development was rigorous and thorough. Members of the Health and Wellness department spent two months discussing survey content, researching validated questions and previously used tools, communicating with coworkers as well as outside resources, and revising and editing survey questions. I collaborated with various departments within the Food Bank, as well as with outside experts on survey methodology, evaluation and food insecurity in order to ensure the survey design and questions asked were comprehensive. I also submitted this study to the University of Pittsburgh Institutional Review Board before initiating formal data collection. This was an important step as food bank employees wanted to ensure that the questions asked and the overall nature of the study was ethical. Survey administration occurred over the course of three months from June to August 2018.

2.0 Background

2.1 Food Insecurity and the Role of Food Banks

According to the Healthy People 2020 Midcourse Review, the prevalence of food insecurity across the United States has remained above 14% since 2008[1]. Food insecurity can be defined in several ways but is ultimately the insufficient consumption of nutritionally adequate or safe foods due to limited access, availability and resources[2-7]. A nutritionally adequate diet provides individuals with both macro and micro nutrients necessary to maintain energy throughout the day and allows the body to function healthfully. This means having enough food in terms of caloric intake, as well as essential vitamins, micronutrients and a healthy balance of macronutrients[2,4,6]. Complications of food insecurity can include chronic, diet-related diseases such as obesity, hypertension and Type II Diabetes when accessible foods are high in fat, sugar and salt and low in other essential nutrients[2,4,6]. Food insecurity is most prevalent in families with income level less than 100% of the poverty threshold, African American and Hispanic families, single parent families, and families with the most highly educated adult at less than a high school education[8]. The Healthy People 2020 Midcourse Review identifies three disparities associated with both chronic, diet-related diseases and food insecurity- income, race/ethnicity and education[1]. These three disparities are also social determinants of health that impact health outcomes at individual, community and population levels.

There are several systems in place in the United States to assist families and individuals experiencing food insecurity. The Supplemental Nutrition Assistance Program (SNAP), part of the United States Department of Agriculture, provides food-specific financial help to low-income

populations[9]. Those eligible for SNAP benefits must meet certain requirements related to income, resources and household size. SNAP makes up the largest food assistance program in the United States serving over 45 million low-income individuals[5]. Unfortunately, monthly SNAP benefits are often not sufficient in supporting the food needs of individuals and families and not all food insecure families even qualify for SNAP; this results in the necessity of other food resources such as food banks and food pantries[5].

The first food bank was established in the 1960s by a man named John Van Hengel[10]. Van Hengel was volunteering at a soup kitchen when an attendee proclaimed that food is often thrown out and wasted when it is still good enough to eat. This soup kitchen attendee identified the need for a place where food could be stored, similar to the way a bank stores money, and then distributed to individuals and families struggling to make ends meet[10]. From this realization, the first food bank was born. By the late 70's a network of food banks was established across the country. Van Hengel established an oversight network for food banks in the United States that eventually evolved into a large non-profit organization called Feeding America[10]. Feeding America exists today as a large hunger relief organization that oversees and distributes surplus food to food bank agencies across the country[5, 10,11].

Food banks in the United States solicit and distribute food to charitable organizations that provide immediate relief to food insecure individuals and families[3-5]. Part of the larger Emergency Food Network (EFN), food banks are typically meant to be temporary relief for a dire situation yet many people rely on food bank services for a majority of their food intake[3,5]. Stakeholders involved in the EFN include the United States Department of Agriculture; food donors such as retailers, farmers and wholesalers; philanthropic organizations and financial donors; and leaders in food distribution, including Feeding America[5,10,11]. Other important stakeholders include those involved

in the direct distribution of food: food pantry coordinators, staff, and volunteers, as well as the people served by food banks and food pantries. This second set of stakeholders makes up the community directly impacted by the programs, services, and policies of the emergency food network.

Feeding America has major influence in the EFN with nearly 80% of the country's food banks in its service range[9]. Its main responsibility is securing food from donors and distributing this food directly to regional food banks and food pantries[5,11]. The *2010 Hunger in America Study* by Feeding America found that families and individuals are using food banks as a long-term solution for monthly inadequacies in food supply, not just short-term emergency relief[5]. Thirty-six percent of survey respondents reported that they regularly attend a food pantry once a month[5]. The study also revealed that, of the pantry clients surveyed already enrolled in SNAP, 58% still attend food pantries on a frequent or recurring basis[5]. This calls for a shift in the way food banks define their mission. The mission of the food bank is to only address hunger rather than nutrition, since historically food banks were established to address short term and temporary needs. This means that food is distributed to those in need regardless of nutritional quality, under emergency circumstances[10-13]. As studies continue to show an increase in reliance on food banks and an increased prevalence in chronic disease, emergency food agencies must shift their mission to promote health as well[3,11-13]. This shift in food bank services across the board must occur internally as agencies realize and address their changing role in the EFN, as well as externally as there is a wide spectrum of stakeholders also involved in this network.

The role of food banks in communities puts them in a unique position to address and intervene on the chronic issues that exist among food insecure populations[3,4]. Food banks work behind the scenes to make choices about the food distributed to food pantries and other sites within

a community. These are places where people gather, sometimes more than once a month, creating a comfortable and familiar environment. Many times, individuals working the distribution at food pantries are receiving services as well. Often, foods available at these community sites are insufficient in meeting the nutritional needs of the population in need[3,4]. This is the result of a variety of factors including the newfound shift towards food banks as a main source of food, the limitations that come with receiving food from donors, limitations of keeping and distributing perishable foods, and the lack of nutrition education of both food bank staff and users[3].

Food bank policies promoting nutrition are a strong way to support the mission of health within the emergency food community[11-13]. Aligned with the baseline mission of hunger alleviation, food banks traditionally distribute inexpensive, low-quality, shelf stable foods to those in need, taking a quantity over quality approach[13]. As awareness surrounding the link between food insecurity and chronic disease increases, so does the awareness that traditional food distribution practices of emergency food systems need to change. In 2013, researchers at the University of California Berkeley Center for Weight and Health, conducted a study assessing the stance of food banks in the U.S. on nutrition policies within their organization[13]. Survey results showed the majority of food banks support a nutrition policy, but few had actually implemented one[13]. The implementation of a nutrition policy at a food bank requires changes made to the procurement, handling and distribution of food, in addition to support and understanding from donors and partners[11-13]. In other words, a new policy requires an organizational and culture shift in order to be effectively implemented[13].

There are currently food banks across the country that have successfully implemented nutrition and wellness policies. The 2018 *National Food Bank Survey* administered to 196 food banks in the United States found that about one third of the respondents have nutrition policies[14].

Fourteen percent of food banks with policies completely ban unhealthy foods like soda and candy from their inventory[14]. The food banks with the healthiest inventories have a formal system for tracking the nutritional quality of foods received and distributed[14]. Traditional food bank tracking metrics measure meals or pounds of food distributed[14]. This completely ignores nutritional quality and allows success to be defined in terms of quantity, potentially deterring food banks from changing their system to calculate success as the quality of foods distributed[14]. A new metric of success requires buy-in from all stakeholders involved, especially board members and donors. The *National Food Bank Survey* results showed that across the table 30% of the food distributed by food banks is fruits and vegetables, but on average 25% of food inventory is still unhealthy beverages and snack foods[14]. Food banks that have policies completely banning empty calories from their inventory distribute twice as much fresh produce as unhealthy foods, while maintaining consistency in their stance on health when it comes to accepting or rejecting donations[14].

Nutrition policies that already exist within food banks outline similar goals around nutritional quality of foods and inventory tracking. The Central Texas Food Bank's nutrition and wellness policy, effective January 2016, works to improve the health of the food bank community and reduce food insecurity[15]. The actions put into place by this policy encourage the procurement and distribution of nutrient dense foods, such as lean protein low in saturated fat, fresh fruits, fresh vegetables, 100% whole grain, and low-fat dairy products[15]. The ultimate goal of this policy is that by the year 2020, 50% of the food distributed will be fresh fruits and vegetables[15]. The other side of this policy reduces the purchase, procurement and distribution of both savory and sweet snack foods, sugar-sweetened beverages and foods that are calorically but not nutrient dense[15]. The Food Bank Coalition of San Luis Obispo has similar structure and goals to their nutrition policy implemented in 2015, including the ultimate goal of fruits and vegetables being 50% of the food

distributed[16]. This policy addresses other areas including nutrition education of food bank staff and clients, and expansion of services to areas considered food deserts[16].

One of the biggest impediments to the implementation of nutrition policies, including full bans on items with empty calories, is what to do when these foods come from a donor. This is where open conversation, clear boundaries, and donor engagement and education becomes an important part of effective policy implementation[14]. Accepting unwanted foods from donors and then discarding them becomes a waste of time and money. Formulating a clear and constructive plan to work with donors is the best way to maintain these partnerships while continuing to do what is needed for healthier communities[14]. The 2018 *National Food Bank Survey* found that the majority of donors did not respond negatively when food banks educated them about the need to distribute more nutritious food, and that in fact, the amount of donations to food did not decrease because of policy changes[14].

2.2 Food Bank Policy Change in the Local Context

The GPCFB does not yet have a nutrition policy but is working to "establish and implement formal written policies addressing the nutritional quality of the foods and beverages procured and distributed by our Food Bank"[17]. The Wellness Policy Working Group, established in 2017, is a team of cross-departmental staff members collaborating on the details of this formal written policy. There are three important policy inputs outlined by the Wellness Policy Working Group including: 1. Scientific dietary guidelines, 2. Client's values, and 3. Food Bank's business needs[17].

Already, the GPCFB does not purchase sugar-sweetened beverages and limits acceptance of these types of donations. The food distribution breakdown at GPCFB is about 25% fruits and

vegetables. These two informal guidelines around food procurement and distribution are the basis for the GPCFB nutrition policy and align with the 2015-2020 Dietary Guidelines for Americans[18]. The current dietary guidelines emphasize the importance of choosing nutrient-dense foods in every food group, and the need for increased overall consumption of fruits and vegetables across the country[18]. A shift towards whole grain, lean protein and low-fat dairy product consumption is also recommended[18]. These guidelines serve as the basis for GPCFB nutrition policy input number one.

Policy input number two is of great importance to GPCFB and the Wellness Policy Working Group. Prior to establishment of this working group, there had not been an opportunity for Food Bank clients to share their values in terms of food preferences, wants, and needs based on health. Operations distributed food with a homogenous population in mind, and did not consider the impact that age, sex, family size and health status might have on food wants and needs. The purchase, procurement, and distribution of food was based on quantity over nutritional quality, something the Wellness Policy Working Group is striving to change. The first step to understanding food preferences of those served by GPCFB was to administer a survey to individuals at food pantry and Produce to People distributions (a direct food bank to person distribution). This type of survey administration has provided food banks across the country with strong insight into the needs of households benefitting from services.

The Food Bank of Central New York administered a survey to the population served, specifically asking about food preference. Survey results showed that pantry users preferred to receive meat products, fish, fruits and vegetables over unhealthy foods like soda, candy, and snacks[19]. These results happened to be contrary to the perceptions of some staff members at the Food Bank of Central New York, highlighting the importance of client input in the decision-making process. A survey by the Northwest Food Partners Network in Chicago, IL, found that

pantry users wanted more nutritious choices, with specific requests for turkey, eggs, cooking supplies, fat-free items, fruits, and vegetables[20]. In addition to understanding client food and nutrition preferences, it is imperative food banks have a comprehensive understanding of the health of the people they serve as diet is directly related to several health conditions.

Every four years, Feeding America conducts a large-scale study of their agencies and clients who use these agencies[21]. One main objective of the *2014 Hunger in America* study was to understand the health and vulnerability of those using Feeding America agencies[21]. Not surprisingly, survey results showed high levels of chronic disease among the Feeding America network. One-third of survey respondents, 33% of households, reported at least one member with diabetes; 58% of households had at least one member with high blood pressure[21]. These are high percentages when compared to the prevalence of chronic disease across the United States. In 2015, the CDC reported that 9.4 percent of the U.S. population has diabetes while about 32% of adults have high blood pressure or hypertension[22,23]. This chronic disease data further supports the need for food banks across the United States to address health as part of their responsibility to ending hunger and food security.

The GPCFB is using a food pantry client survey, with influence from the *2014 Hunger in America,* and other successful food bank surveys, to gain a more holistic understanding of the people they serve. The survey will ultimately drive the nutrition and wellness policy by backing changes with information collected directly from the population that will benefit from new policy. In February 2018, I was hired through an internship at the Greater Pittsburgh Community Food Bank as the Principal Investigator overseeing this survey and evaluation project. This project will set into motion systematic changes at the GPCFB that address and intervene on social determinants of health impacting the population they serve.

The goals of this survey project at the local level are to understand the nutritional preferences and health needs of individuals who use the GPCFB services, across the 11-county service area. This is outlined in more detail in the following research questions.

3.0 Methods

3.1 Research Questions

1. What are the nutritional preferences and needs of individuals who use the Greater Pittsburgh Community Food Bank's services?

2. What is the general health status of the population using the Food Bank's services? What chronic, diet-related diseases are prevalent?

3.2 Design and Procedures

In conjunction with the Health and Wellness Department at the Greater Pittsburgh Community Food Bank (GPCFB), I designed the 2018 Greater Pittsburgh Community Food Bank Client Survey to answer the research questions above, as well as to provide information for the Food Bank's developing nutrition and wellness policy.

The overall study design was mixed-methods and cross-sectional. The main tool was a 41-item, 13-page survey self-administered survey instrument. The survey instrument was designed using previous GPCFB survey instruments, survey instruments from other food banks in the United States, the *2014 Hunger in America* survey by Feeding America, and general demographic questions. Previous GPCFB surveys were informal in nature and did not yield reliable results so these past questions were considered and then modified. A literacy professional from Literacy Pittsburgh (formerly Greater Pittsburgh Literacy Council) reviewed survey questions and gave recommendations on reading level, clarity, word choice, and question length. The first iteration of

the survey was piloted at a Produce to People distribution that occurred at the GPCFB in Duquesne, PA on April 12, 2018. Sixty surveys from this event were input into excel, cleaned, coded, and analyzed. Modifications were made based on brief conversations during the event as well as on patterns in question responses. All questions were approved by the University of Pittsburgh Institutional Review Board before formal survey administration took place, and the study was determined "exempt". Official survey administration began on June 13, 2018.

3.3 Data Collection

There are over 200 food pantries in the GPCFB network across 11 counties and 17 Produce to People distributions across this same service area. Surveys were administered in 26 network pantries and at 5 different Produce to People distributions. Four counties in total were reached: Allegheny, Butler, Beaver and Lawrence. Counties directly staffed by the Food Bank were chosen due to resource constraints and general feasibility. During the sampling process, pantries in Allegheny County were organized by neighborhood and chosen based on geographic representation of each area ensuring neighborhoods in the north, south, east, and west of the city were covered. Size was also considered when choosing pantries. Those serving an average of 60 households per month or more were considered for selection. The goal was to cover as much of the service area as possible with limited time and staff. Produce to People distributions were chosen based on geography. Beaver and Lawrence counties have a larger rural population than Allegheny County, and it was more feasible to collect data from one large Produce to People distribution than several smaller pantry distributions.

All pantries chosen during the selection process received an "opt-out" only email for their participation in survey administration. Emails were sent directly to the main pantry coordinator, who was either a paid staff person or a volunteer. Produce to People distributions were attended with the knowledge and cooperation of the staff in charge of the event.

Survey participants were recruited through convenience sampling by research staff and Food Bank interns assigned to collect data at each food distribution site. Each pantry and Produce to People distribution style is ultimately up to the event coordinator and depends on the layout of the facility, time of day, and the number of individuals served. Research staff and interns had to be flexible when administering surveys at each location. Pencils and clipboards were provided by the Food Bank for respondents to complete surveys while standing and waiting in line. At both food pantries and Produce to People, individuals are usually lined up before food distribution begins. This was the best time to approach individuals for survey recruitment. Participants were recruited either individually or in groups. Anyone interested in taking the survey was given the 13-page packet, a clipboard and a pencil. A short verbal script was shared to inform participants of the purpose of the survey and that is was optional and confidential. The front page of the survey detailed this script giving potential participants clear and thorough information about the project. The survey took between ten and thirty minutes to complete.

The last page gave participants the opportunity to share additional thoughts and provide their contact information for a follow-up phone interview, described in the "Qualitative data collection" section below.

Three interns were recruited to assist me and Food Bank staff with survey administration and data collection. Interns were trained in survey administration and ethics according to IRB requirements. Ethics training was prepared in the form of a PowerPoint presentation with

assistance from professionals at the University of Pittsburgh's Clinical and Translational Science Institute. I presented a 90-minute PowerPoint, complete with ethics history, examples and review questions to interns who then submitted ethics training completion forms to CTSI.

3.4 Measures

The three main measurement domains captured in the 2018 GPCFB Client Survey were food, health and general demographics. More specifically, these domains were broken down into emergency food use, food preferences and needs, fruit and vegetable access, chronic disease status and overall household health status, medical and doctor access, household make-up, SNAP participation, general demographics, and interest in programs and services.

The survey started with ten questions about food. Nine were quantitative and yielded nominal or ordinal variables. One question was qualitative and was coded and analyzed separate from the rest of the survey questions. Emergency food use was measured using questions adapted from the informal 2017 GPCFB survey and the *2014 Hunger in America* survey by Feeding America. Questions asked about where respondents bought or received food for their household, how often they attend food pantries, and how long food pantry food lasts. Food preference questions contained one qualitative "fill in the blank" question and a quantitative "choose all that apply" question. The quantitative question was designed using the food categories from the *2014 Hunger in America* survey. The qualitative question preceded the quantitative question to garner unprompted food preferences from respondents. Results were compared to understand the top categories of food that respondents both want and need. Food access questions asked about how

often fruits and vegetables were consumed, and about potential barriers to adequate consumption, such as cost. The complete 13-page survey can be found in Appendix A.

The structure of the health questions was adapted from the *2014 Hunger in America* survey. They asked "Do you or anyone that lives with you have the following health conditions? Please check either yes or no" about several chronic, diet-related diseases, including pre-diabetes, diabetes, hypertension, heart disease, kidney disease, high cholesterol, and weight status (underweight or overweight). The second health question of similar format was adapted from the 2017 GPCFB survey and asked "Do any of the following prevent you or someone you live with from eating some foods? Please check either yes or no." Other health and medical questions asked about doctor recommended diet, primary care access and usage, and general individual health.

Demographic questions were adapted from previous GPCFB surveys and the *2014 Hunger in America* survey. SNAP enrollment was measured with a yes or no question, with reasons for "no" responses outlined in a sub-question designed by the SNAP department at GPCFB. Other demographic questions included gender, race, age, number of children per household, number of adults per household, disability status, transportation use, and internet access. The final quantitative question gauged interest in services provided by the Health and Wellness Department at GPCFB. The last page was open for individuals to respond to "Is there anything else you would like the food bank to know?" This question was not coded for analysis due to timing and resources constraints, though anonymous responses were shared with the Network Development Department that oversees relationships between the Food Bank, food pantries and the population served. All questions on this survey yielded nominal or ordinal level of data.

3.5 Data Recording and Analysis

Survey responses were uploaded to Qualtrics by the researchers and interns. Each member of the research team had access to a reusable Qualtrics link that recorded input surveys. This type of survey input was chosen to reduce human error and increase efficiency. All participant identifiers were removed once data was securely uploaded to Qualtrics. Upon completion of survey administration, at the end of August 2018, data was transferred from Qualtrics to Excel for cleaning and analysis. Excel and SPSS were used to store data and perform statistical analysis.

3.6 Qualitative Survey Follow-Up

This component of the research study was designed upon completion of the quantitative component. Qualitative interview questions were devised based on preliminary quantitative survey results, with input from the Health and Wellness Committee during a quarterly meeting. The qualitative tool was a five-question interview conducted over the phone. Each question had a follow-up question that acted as a probe, except for the last question. Questions were original and, due to time and resource constraints, were not piloted with the target population beforehand. All qualitative interviews were recorded and transcribed by hand, but due to timing and resource constraints, were not formally coded. Transcriptions were analyzed for emerging and common themes across questions to be shared in a timely way with the Food Bank for quality improvement and policy development justification.

The first qualitative question asked: “Can you talk a little about the foods you get from your food pantry?” This question intended to give space to participants to offer positive or negative

feedback on the foods they get from their food pantry. This question also corresponds with the two main food questions in the quantitative sections of the survey. Interviewees were probed to elaborate on ways the foods they receive are meeting their needs, and the ways they are not. If interviewees used the words "healthy" in the response to this question, they were asked what healthy means to them.

The second question asked interviewees about their use of GPCFB newsletters and recipe cards, as well as how often they cook at home. The purpose of this question was to gain a baseline understanding of cooking habits across the Food Bank population. Cooking habits of the people who use food bank services is a topic that Food Bank staff would like to know more about in general.

The third question was designed to share survey results with interviewees as well as to gauge reactions to the high prevalence of chronic disease among survey respondents. The question cited the percent of people who answered "yes" to household diabetes and high blood pressure. Interviewees were then asked to share any ideas as to how the Food Bank should address high levels of chronic disease and how to best help the people they serve given this information.

The fourth question asked interviewees how they would react if the food bank stopped accepting "unhealthy" items high in sugar, salt, and fat in order to provide more "healthy" items. This question was designed in gauge initial reactions to this trade off. Those who responded negatively to the first part of the question received the follow-up question: "Because we have limited space and money, we have to make choices about the food that we provide. If we want to offer more healthy foods, that might mean that we have to limit less healthy foods that are high in sugar, salt and fat. Would you support that decision?" This follow-up question provided some context to interviewees and allowed them to think about the question in a different way.

Interviewees were then asked “why or why not” to explain their thoughts on a food tradeoff after receiving this follow-up question. The final question asked interviewees about the best way to get information and feedback on food bank matters in the future.

All participants were given the opportunity to answer questions to the best of their ability. Probes for each question differed slightly based on the direction of the conversation to ensure responses were complete and relevant.

4.0 Results

4.1 Quantitative

Of 43 pantries contacted in Allegheny County, eight opted-out and ten never responded, resulting in 25 participating pantries. The Lighthouse Pantry in Butler, PA was the only pantry surveyed outside of Allegheny County. Five Produce to People distributions were attended with the knowledge and cooperation of the staff in charge of the event.

The Surveys were administered in pantries and at Produce to People in Allegheny County, in one pantry in Butler County, and Produce to People only in Beaver and Lawrence counties. All surveys were administered by Food Bank-trained employees, interns and volunteers, except at The Lighthouse Pantry in Butler, PA where the survey was administered by the pantry coordinators and volunteers. It is important to note that the one pantry-administered survey had 44 participants, a high number of participants in a food pantry setting compared to other pantry distributions. The following table details the type of distribution, survey administrator, and number of respondents per county:

Table 1 Locations and modes of survey administration

County	Type of Distribution	Who Administered Survey	# of Respondents
Allegheny	Produce to People - Sheraden	Food Bank interns	58
Allegheny	Produce to People - Southside	Food Bank interns	55
Allegheny	Food Pantry (25)	Food Bank interns	486
Beaver	Produce to People – Beaver Falls	Food Bank interns	41
Beaver	Produce to People – Aliquippa	Food Bank staff	13
Butler	Food Pantry – The Lighthouse	Pantry staff	44
Lawrence	Produce to People – New Castle	Food Bank interns	25
Missing	Unknown	Unknown	36

Surveys administered in Allegheny County represent more urban and suburban households, while surveys administered in Beaver, Butler, and Lawrence counties represent more suburban and rural households.

Demographics

There were 757 survey respondents in total. Respondents were recruited through convenience sampling—those approached during recruitment who agreed to participate in the survey counted as a “respondent”. The majority of respondents were female, white and over the age of 55. About one third of respondents had a household size of one, 20% had a household size of two and the average household size was 2.7. The following table shows the breakdown of survey respondents by gender, age and race.

Table 2 Demographics: Age, N=724

Age Range	Frequency	% of N
18-24	6	0.8
25-34	46	6.4
35-44	89	12.3
45-54	128	17.7
55-64	255	35.2
65 or older	200	27.6

Table 3 Demographics: Gender, N=720

Gender	Frequency	% of N
Female	521	72.4
Male	198	27.5
Other	1	0.1

Table 4 Demographics: Race, N=707

Race	Frequency	% of N
African American or Black	247	32.6
Asian	5	0.7
Caucasian or White	405	57.3
Hispanic/Latino	10	1.4
Native American	6	0.8
Hawaiian/Pacific Islander	1	0.1
Other	33	4.7

Over half of respondents, 51.9%, reported one or more household members with a physical disability. Of the 719 respondents who answered the question "Do you or any household member receive SNAP benefits (food stamps)", 62% answered yes. The most common reason respondents reported for not having SNAP benefits was "I was denied because I was over the income"—24.5% of respondents reported making spending tradeoffs for child or grandchild expenses over food expenses.

Food: Preferences, need, access

In response to the qualitative question "Please list 5 foods that are hard for you to get" there were 567 write-ins for "produce". There were three responses for "soda" and 13 for "drinks", totaling less than 20 write-ins for sugar sweetened beverages. The graph below shows the breakdown of written responses after they were analyzed and sorted into 22 categories.

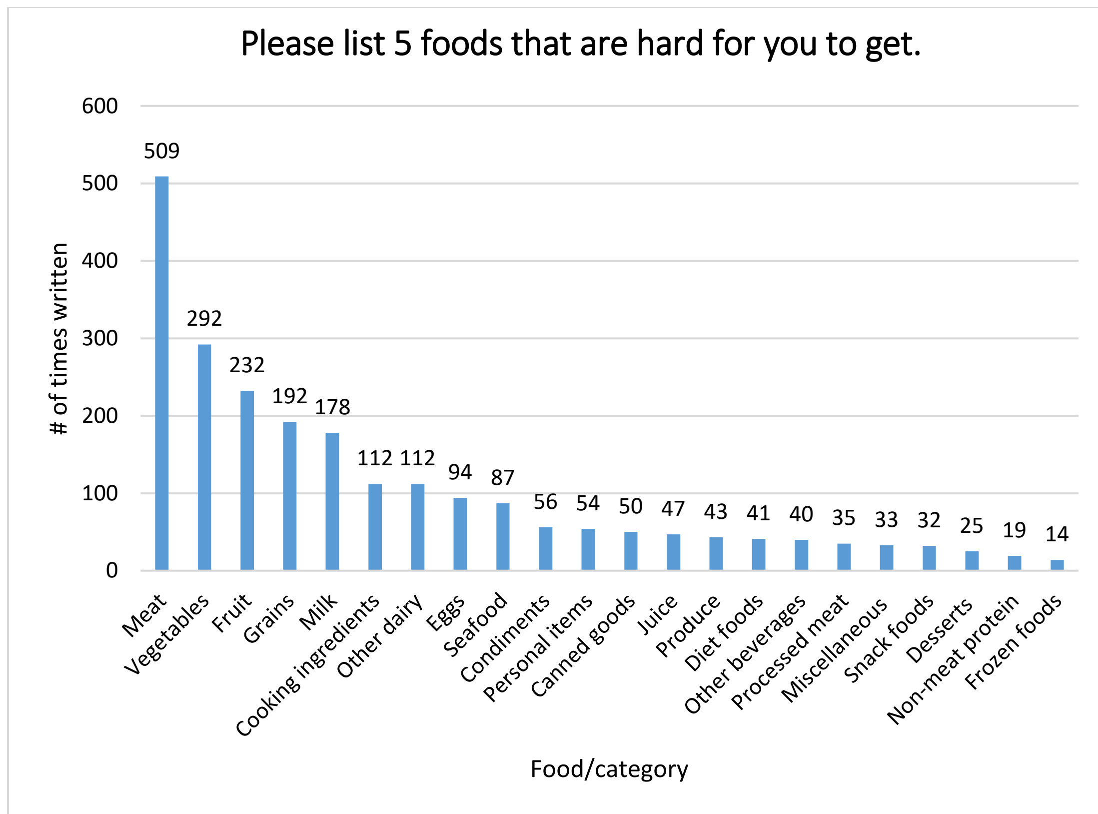

Figure 1 Qualitative food question

The "meat" category included chicken, beef, ground meat and pork; "grains" included whole grains, bread, pasta, rice, and cereal, "cooking ingredients" included oil, butter, flour and sugar; "personal items" included cleaning supplies, baby supplies, and household products; "other dairy" included cheese and yogurt; "other beverages" included coffee, tea and water; "processed meat" included bacon, lunch meat and hot dogs; "non-meat protein" included beans, nuts, peanut butter, and tofu.

The following graph shows response breakdowns to the question "Please check **5** foods that you need your pantry to offer". There was a total of 27 choices of which respondents were instructed to choose five. For respondents who chose more or less than five responses, their answers were adjusted to equal five when calculating total counts

using a formula in Excel. This was done to ensure every respondent had equal weight in their answer to this question.

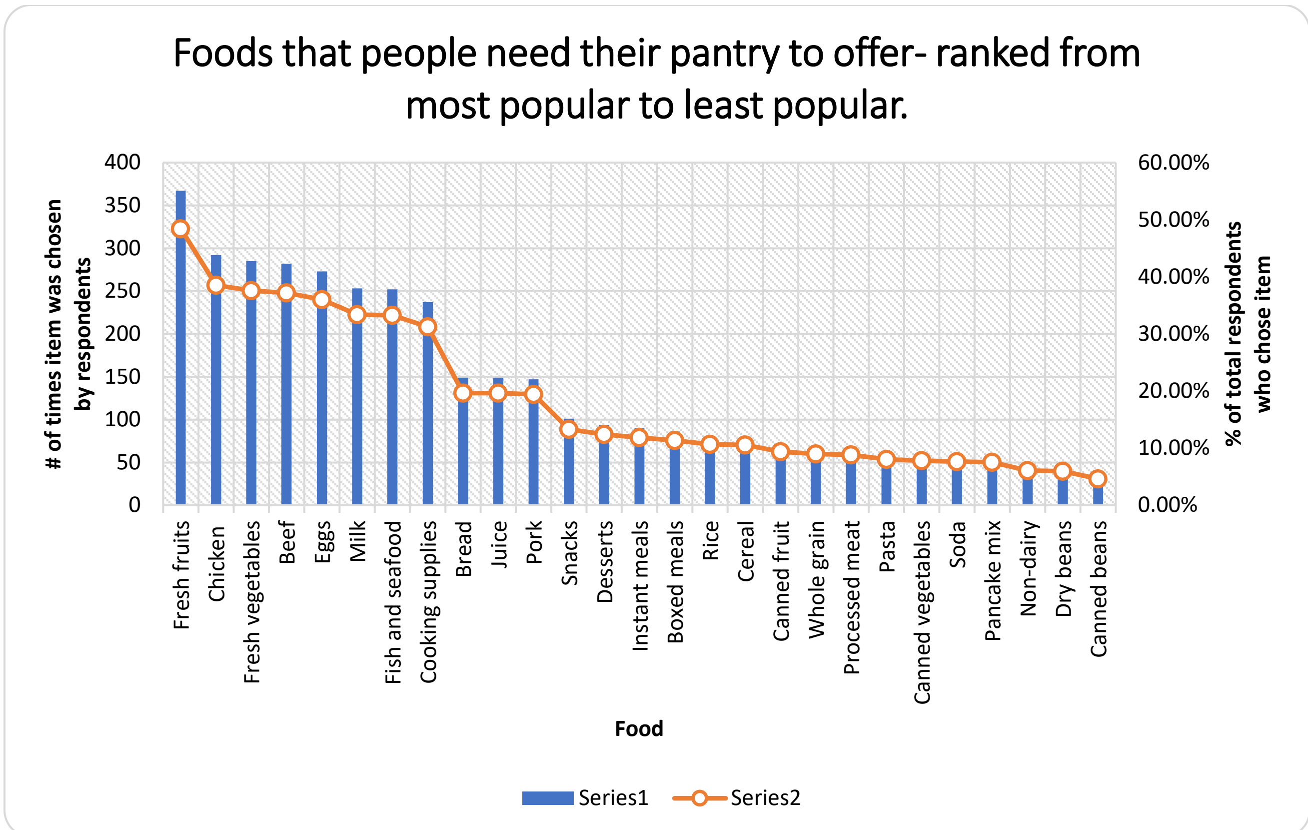

Figure 2 Quantitative food question

Overall, respondents reported a lack of access to fruits and vegetables. While over 90% of respondents answered "yes" to "Are fruits and vegetables easy for you to prepare", 58.8% of respondents reported fruits and vegetables are hard for them to get, and 85.8% said fruits and vegetables cost too much for them to buy.

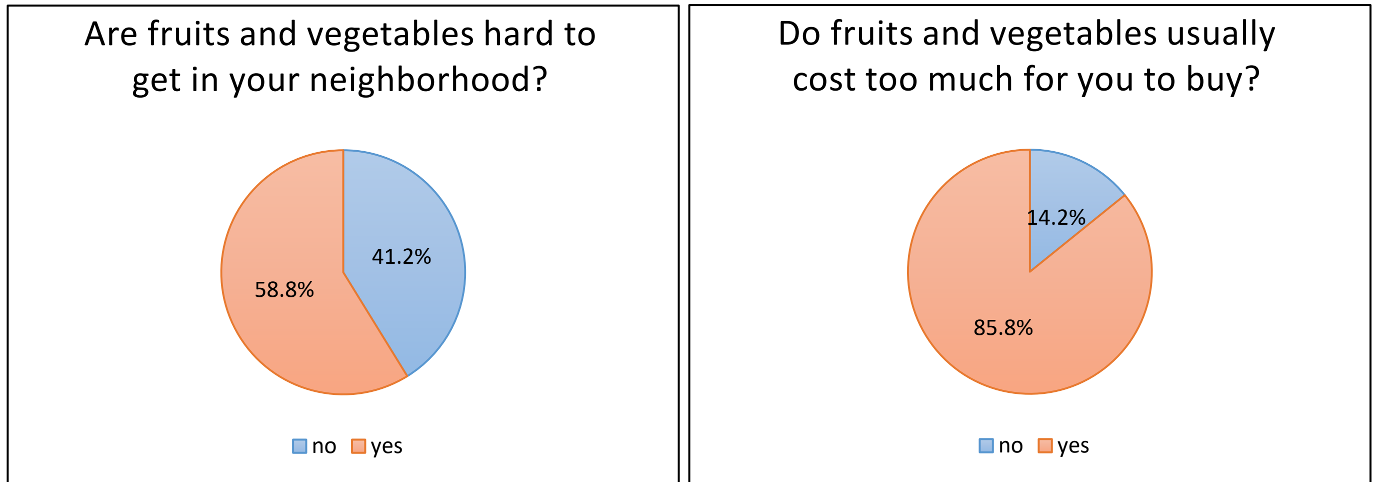

Figure 3 Food access question

Health

The average number of household diseases was 2.3 with a standard deviation of 1.6; 16.7% of households reported no health conditions, 58.4% of households reported 1-3 health conditions and 24.9% of households reported 4 or more health conditions. Of 668 individuals who answered the question "Has a doctor or nurse ever told you or someone you live with to change your diet?", 62% answered "yes".

The main health question asked, "Do you or anyone that lives with you have the following health conditions?" and respondents chose either "yes" or "no" for the corresponding chronic condition. Conditions included high blood pressure/hypertension, overweight/obesity, diabetes, heart disease, kidney disease, prediabetes, and underweight. The graph below shows results from this question in terms of respondents who marked "yes" for each condition.

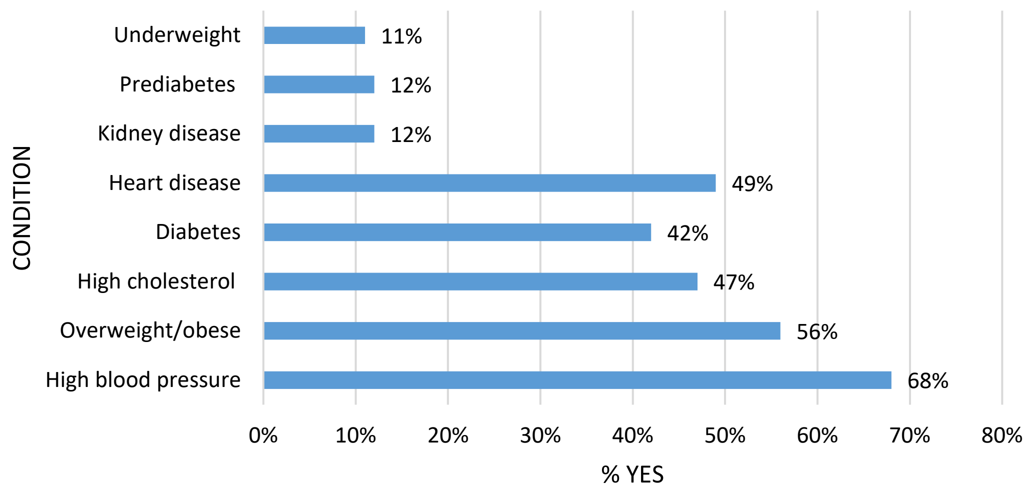

Figure 4 Chronic disease question

4.2 Qualitative

Of the 757 respondents, 260 or about 34%, filled out the last page with their information, agreeing to be contacted for a follow-up phone interview. Due to time and resource constraints, the interviewer attempted to reach 78 individuals to complete the interview. Twenty individuals completed the phone interview, 19 opt-ed out, and 39 were unable to be reached. Of the 20 interviewees, 12 were female and 8 were male. Interviews ranged from just over four minutes to over seventeen minutes long. Interviews were transcribed and analyzed for common themes but were not coded. This is due to the pilot-like nature of interview development and administration, as well as time and resource constraints.

The majority of interview participants were happy with the services provided by their local food pantry or Produce to People distribution. While individuals certainly had suggestions for improvement, many were thankful to get any help at all. The most common response to the first

question was that, for the most part, individual and household needs are being met by pantry options. When probed to respond further about how their needs are not met, many individuals indicated more fresh foods at their pantry including fruits, vegetables, meats and bread is necessary. Another common complaint was the physical quality of the foods. Interviewees shared concern over receiving fresh foods that only last a couple days before rotting, or canned goods that are within a week of expiration.

In response to the question regarding how the food bank should address chronic disease issues among food bank users, there was a variety of suggestions. Several interviewees believed the Food Bank is already doing what it can to help individuals with chronic disease by distributing healthy food items such as fruits, vegetables, lean meats and low-sodium canned goods. These interviewees also believed that chronic disease management is the responsibility of the affected individual in terms of maintaining proper medication, doctor's visits, and a healthy diet—not the responsibility of the Food Bank. Other interviewees suggested food distribution sites set up testing center where individuals can obtain their chronic disease status and receive medication and support. This was often a suggestion that respondents offered to address the burden of high medical costs and barriers to transportation among food pantry users with chronic disease.

The question about food tradeoff in terms of the food bank spending money on healthy items instead of less-healthy items, gained a variety of initial reactions but ultimate support when interviewees were probed with more context to the question. Initial reactions to the food bank providing more healthy foods in lieu of less healthy foods spanned from total rejection to immediate acceptance. Many individuals responded somewhere in the middle, stating that they really have no say in the food bank's choices and would respond accordingly if changes were made. When I explained that the food bank has limited space and money, and therefore needs to

make decisions about what kind of foods to purchase and distribute, nearly 100% of interviewees supported money spent on healthy foods instead of less healthy foods.

The final question of the phone interview asked participants the best way to get their feedback, and other food bank users feedback, in the future. Participants were supportive of surveys and phone calls as ways to share their thoughts and opinions. Many individuals suggested some sort of survey that could be taken home and returned to their food pantry.

5.0 Discussion

5.1 Public Health Context

This survey was the first comprehensive and rigorous data collection of the population using GPCFB services since the year 2000. A quantitative approach was taken to establish a baseline understanding of the individuals and households served by the Food Bank that can be replicated in future data collection and compared from year to year. Currently, direct comparisons of this information cannot be made across previous Food Bank surveys as questions and methods differ greatly. In past surveys, questions did not have coded responses leaving interpretation of open-ended questions up to researchers. This created problems with the validity and reliability of results. This 2018 survey will serve as a baseline for future data collection as it has clear, codable answers and formal methods for administration.

This survey is also part of a "people first" movement at the Greater Pittsburgh Community Food Bank that directly includes community voices in the decision-making process in order to intervene on the social determinants of health impacting community members. A "people first" initiative ensures that true health needs are being met. The typical visualization of a food bank or food pantry conjures images of people waiting in line to receive non-perishable items in boxes and cans from volunteers donating their time to those in need[24,25]. The whole scenario is give-and-take, with very little interaction, depth or nuance. Critics of the emergency food system argue that food banks are not addressing the root causes of hunger- poverty, oppression, racism, and social injustice. Instead, through partnerships with the government, powerful corporations and financial donors, food banks have become normalized and institutionalized, acting as an emblem of charity

but really just perpetuating food insecurity[24,25]. People without lived experience of hunger, poverty and oppression are the main decision makers in the food bank institution[24,25]. Without voices and input from individuals with direct experience, food banks will never be the solution, they will simply act as a "band-aid" on the problem of hunger indefinitely[25]. Author and food security expert, Andrew Fisher, summarizes this in his book Big Hunger: The Unholy Alliance Between Corporate America and Anti-Hunger Groups. He states that the current approach, initially established for emergency food needs, has become mainstream, yet only "solves hunger for today", leaving people in the same situation every month[25].

Several changes need to be made to the system to interrupt this cycle of charity and initiate progress towards true hunger alleviation. Food banks and the entire charitable food system must address and understand the social determinants of health that lead to hunger[24]. Decisions must be made in collaboration with community partners and community members, not by individuals with no lived experience of the issues at hand[24]. This collaboration will allow food banks to be most effective and make more of an impact through directed and sustainable decisions. Many food banks across the United States, including the Greater Pittsburgh Community Food Bank are starting to consider advocacy, equity and justice as part of their organizational culture and mission. Embracing their role in the greater system of social justice is a necessary step for food bank leadership towards being a major player in the improvement of the overall health and well-being of communities throughout the country[24]. The food bank is an establishment across the United States that has the potential to be a powerful community advocate for social change.

The Greater Pittsburgh Community Food Bank defines four organizational commitments: 1. Nutrition Quality, 2. Food Safety, 3. Sustainability, and 4. Diversity, Equality and Inclusion[26]. The push for community voices and human centered policies and decisions certainly aligns with

the fourth commitment. Engaging the community in human-centered decision making and deferring to community members as the true "experts" is something public health professionals strive to make an important part of their work[27]. The Closing the Hunger Gap Conference is a yearly conference for hunger relief and food justice advocates across the country, including leaders from food banks and food pantries. A key recommendation for food banks moving forward that came out of the 2015 conference is that increased community engagement in policy making and decision making is essential, not increased charity[24].

The Spectrum of Public Participation is a tool that food banks can use to understand what actions need to be taken to better integrate the people they serve- the true experts, into programming and decision-making. The International Association for Public Participation established this framework for community engagement which involves five levels of community engagement: inform, consult, involve, collaborate, and empower[28]. The Spectrum lists the "public participation goal" and organization's "promise to the public" for each of level to be reached. The Spectrum closely aligns with the public health practice of Community Based Participatory Research, as it outlines a spectrum where professionals and community members are integrated in the research process in order to correctly identify the true needs and solutions of a community[27-29]. CBPR is a process with nine principles, all of which are implementable into the food bank system: recognizes the community as a unit of identity; builds on strengths and resources within the community; facilitates a collaborative, equitable partnership in all phases of research, involving and empowering and power-sharing process that attends to social inequities; fosters co-learning and capacity building among all partners; integrate and achieves a balance between knowledge generation and intervention for the mutual benefit of all partners; focuses on the local relevance of public health problems and on ecological perspectives that attend to the multiple determinants of

health; involves systems development using a cyclical and iterative process, disseminates results to all partners and involves them in a wider dissemination of results; and involved a long-term process and commitment to sustainaibilty[29]. Involving the community that uses the food bank in decision making- through the Spectrum of Public Participation, human-centered design and influence from CBPR, will ensure needs are truly being met resulting in a more efficient system- and means to interrupt the complex cycle of food insecurity.

In order for the Greater Pittsburgh Community Food Bank to address the inequities across the food insecure population, it is essential that first the community is engaged in decision making at every level, and second, that changes are made directly based on the wants and needs of the community. Feeding America has been working to provide a framework for community engagement and involvement in organizational processes within food bank. This framework is called a feedback loop. A feedback loop is a low burden method to obtain and quickly implement feedback in social systems, such as food banks[30]. From 2015-2018, Feeding America partnered with the Urban Institute to design, pilot and make recommendations for best practices in feedback loop implementation[30]. Through this pilot, three stages of feedback loops were defined: “listen”, “reflect” and “act”[30]. The “listen” phase is a way for food banks to get feedback from the people they serve without putting too much burden on them. This can be done through the administration of short surveys and questionnaires to individuals at their local food pantries. The “reflect” phase is the discussion of feedback from phase one with a small group of the people served and among members in the organization- in this case, food pantries and food banks. The third and final phase is the “act” phase. In this phase, the feedback loop is closed through the implementation of feedback-based changes with the organization[30].

Based on the success of the potentially burdensome 13-page, 41 question survey I administered at various food pantry and Produce to People distributions for this project, I believe feedback loops would be easily implementable into the GPCFB evaluation framework. Many individuals were happy to share their thoughts and opinions on both the survey and in the telephone interviews. A much shorter questionnaire with actionable questions would likely elicit comprehensive feedback from GPCFB users. It would also be feasible to find individuals to speak with during the "reflect" phase of the feedback loop—even through a simple phone call or conversation at a food pantry or other event. In a way, the survey and phone interviews I administered followed the structure of a feedback loop as questions were asked and individuals were contacted for a deeper explanation of results. A conscious effort to implement feedback loops would be a valuable way to shape future programming and decisions making at the GPCFB.

5.2 Survey Results

The 2018 Greater Pittsburgh Community Food Bank Survey, both the quantitative and qualitative components, falls in the "consult" level of the Spectrum of Public and incorporates the first principle of CBPR: "Recognizes the community as a unit of identity"[28,29]. The survey and interview garnered one-time feedback from Food Bank users in order to drive a specific activity and to lay the groundwork for Food Bank staff to gain a more comprehensive understanding of the community they serve. Individuals who completed surveys and interviews were briefly informed of the purpose of the survey but were not fully aware of the plan for a new Health and Wellness Policy and what it would mean for them. Though relatively low on the Spectrum of Public Participation, this consulting step is essential to the GPCFB's progression towards a completely

community engaged system, where those being served are also in the position to make decisions and recommendations.

Results from this 2018 survey and phone interviews certainly provide support for a nutrition policy at the GPCFB, as well as for continued engagement with the individuals who use the food bank's services. Results also support the need for a cultural shift away from hunger alleviation to whole-person health. Both the quantitative and qualitative components serve as a solid baseline for future engagement of food bank users as well as a starting point for more human-centered design and decision making at the organizational level.

It is already widely known by the staff at the Greater Pittsburgh Community Food Bank that fruits and vegetables are expensive and cost too much for people to purchase consistently. Survey findings, showing nearly 86% of respondents reporting that fruits and vegetables usually cost too much to buy, provide evidence for the need for existing services such as Produce to People and Green Grocer, as well as the proposed policy goal that 50% of the food sourced and distributed is produce by the year 2020. Survey findings show that household food needs include foods that are fresh, high in nutritional value, and part of a healthy diet. Respondents consistently indicated fruits, vegetables and fresh meat as their highest priority household needs, and chose these items over lower quality foods such as snacks, desserts, and boxed meals. These findings provide strong evidence for the first two objectives of the proposed Wellness policy: increased distribution of fruits and vegetables to 50% of food distributed by 2025, and limiting added sugar through controlling the distribution of sugar-sweetened beverages and products with sugar as the first ingredient.

Other foods were requested at a consistent rate between the quantitative and qualitative food survey questions. Meat, eggs, seafood, milk/dairy, cooking supplies and grains were most

chosen categories for both questions. These are foods that comprise a healthy diet when consumed together in moderation and fall right in line with USDA dietary guidelines[18]. The high demand for cooking supplies suggests that individuals want the ability to cook at home, on their own. This is something that was also heard many times in the telephone interview, and certainly a topic that could be researched in the future.

The telephone interviews also revealed the need for increased distribution of produce. Nearly 100% of phone interview respondents mentioned the need for produce at their food pantry at least one time, and many valued healthy items over unhealthy items. Even individuals who talked about drinking soda, eating candy, and wanting more dessert options, identified and supported the need for more and improved produce choices.

The foods that individuals want and need from their food pantries and the GPCFB are foods high in nutritional value that are unaffordable or hard to get elsewhere. This falls in line with the food bank implementing the proposed policy to source and distribute foods of higher nutritional value, and to implement a tracking structure that measure quality over quantity. Providing the foods that people say they want and need will ultimately result in a more efficient system, with less wasted food, time and money.

The summer 2017 survey revealed high levels of chronic disease in respondents' household. This finding was validated with results from the 2018 survey. Household chronic disease rates from the 2018 survey are alarming compared to chronic disease at the state and national levels. Diabetes rates in both Allegheny County and Pennsylvania were at 10% in 2015 according the to Allegheny County Health Survey (ACHS) and the Behavioral Risk Factor Surveillance Survey (BRFSS), respectively[31,32]. Forty-two percent of food bank respondents reported at least one household member with diabetes. The rate of high blood pressure from the

survey was 68%- two times higher than high blood pressure rates reported from the ACHS and the BRFSS which were 34% and 33% respectively[31,32]. The ACHS and BRFSS results cannot be directly compared to the food bank survey results as the first two surveys measured individual health and the food bank survey measured household health. It is expected that measurement of chronic disease at the household level would yield higher numbers than measurement at the individual level. That being said, the number of respondents reporting household diabetes and high blood pressure is of great concern to an agency responsible for providing food for families. Another concerning takeaway from the health section of the survey was the number of households with comorbidities, or more than one chronic disease. Managing multiple chronic diseases at both the individual and household levels can be difficult as it requires a restricted diet and conscious lifestyle changes. In a movement towards health and human-centered decision making, the Greater Pittsburgh Community Food Bank should consider the high prevalence of diet-related chronic disease among those they serve in policy objectives, future programs and their ultimate mission as an organization.

Telephone interview participants offered thoughtful and interesting ideas around the Food Bank and partner food pantries offering services related to chronic disease, that reduce financial and transportation barriers to those in need. While these ideas are not exactly immediately actionable into the Food Bank's programming, they certainly support the need for increased community perspective surrounding future programs and services.

The results from both the food and health questions on the survey provide evidence that individuals and families both want and need foods of higher nutritional value- to cook at home, feed their families, and maintain a healthy lifestyle in the face of high chronic disease prevalence. In general, respondents favored nutritionally dense foods over those with empty calories.

Respondents want and need foods that have positive health benefits and provide energy for day to day decision-making. This is strong evidence to support the goals of the nutrition policy and certainly supports the internal changes the GPCFB is striving to make. Survey results can also be shared with donors, funders, and other partners as evidence for changes in the types of food being donated and accepted, as well as justification for a larger policy shift.

5.3 Next Steps

The GPCFB is already taking the necessary steps towards moving the nutrition policy forward, creating healthier food pantries, and engaging with clients and communities in a way that lets those in need have their voices heard. After the 2018 GPCFB Client Survey, staff members of the Health and Wellness department applied findings to a draft of the nutrition policy and began to speak with food pantry coordinators about the policy itself. Food pantry coordinators were engaged to get their feedback and stance on the proposed nutrition policy to be implemented by the GPCFB. Pantry coordinators make up an important group of stakeholders in the overall decisions and programs of food banks. While the client survey collected feedback from individuals served by the Food Bank and food pantries, the voices of the important community of food pantry staff were still missing. Realizing this, the Health and Wellness department organized conversations with several pantry coordinators across the GPCFB network. This is still an ongoing process but many coordinators are receptive to a nutrition policy as long as it does not interfere with their own food distribution.

The Health and Wellness department as also implemented a condensed iteration of the survey as part of a healthy pantry initiative. This secondary survey administration will provide

interested pantry coordinators with information about the wants, needs and health of the people they serve directly. Pantry coordinators will use this information to make more mindful choices about the foods they purchase from the food bank, the foods they distribute, and the way their pantry is organized. This initiative is in addition to the nutrition policy and allows changes to be made to the system on the community level of the food pantries, as slower change occurs at the organizational level of the Food Bank.

It would be beneficial for the Health and Wellness department to engage the people the serve in a more face-to-face setting than the survey or phone interviews I conducted. Key informant interviews and focus groups were activities we discussed during survey development, especially during the pilot phase, but unfortunately did not have the time or resources to follow through with these. That being said, in order for the Health and Wellness department, and other departments within the Food Bank, to gain the most comprehensive feedback possible, it is important that the people they serve are engaged in a setting where they have the opportunity to fully share their ideas and opinions on services.

In response to produce needs across their service area, GPCFB established several programs that deliver produce directly to areas considered food deserts or food swamps. Green Grocer is a mobile van that distributes produce to areas with little to no access to fresh produce. While individuals have to buy food from this van, prices are low compared to regular grocery stores and Farmer's Markets. Green Grocer and Produce to People are important programs in increasing the amount of fresh fruits and vegetables distributed to those in need. Survey results support the continued implementation of these programs, along with an increase in produce-specific services.

A glaring demographic result from the 2017 and 2018 Food Bank Client survey was the lack of participants in the young adult category- age 18 to 26. Young adults, age 18-24, made up less than one percent of survey respondents in the 2018 survey, and even the next age category, 24-34, was only six percent of respondents. This was something explored by the Community Voices project conducted by the GPCFB in 2018 in the form of focus groups with young adults across the Food Bank service area. This will continue to be explored by the newly implemented qualitative research team.

In addition to taking a deeper look into the wants and needs of different age groups, another possible next step for analysis of survey results is to look for general patterns in different populations. For example, do households with three comorbidities have different needs from households with only one chronic disease present? What about households with more than four comorbidities, what about those with only two? How do the needs of households with children differ from those with only adults? How do two parent households differ from single mother households and single father households? The survey data describes the large population of over 750 respondents. Further analysis of this data provides the opportunity to truly understand the diverse needs of several subgroups within the people served by the food bank, which in turn could help drive tailored services and programming.

Overall, the GPCFB is taking concrete steps towards improving systems and services to better suit the needs of the population they serve. Policy objectives are drafted with survey results as justification for board members to review and discuss. The new Nutrition and Wellness policy is slated to take effect in May, pending on board approval. The policy has three phases of goals per each objective. These are defined as short, medium and long-term goals.

6.0 Limitations

There are several limitations to this mixed methods research and evaluation project. Pantry and Produce to People distribution sites were chosen based on size, geography, and availability of research team. Smaller pantries were excluded from sampling and in rural counties only Produce to People distributions were attended. It is possible that individuals who attend Produce to People value fruits and vegetables more so than the general GPCFB population served, potentially skewing the results of the food questions. Smaller pantries and pantries in rural counties may have different populations with different needs than survey respondents. Participants were recruited to complete the quantitative component through convenience sampling at their local food pantry. Individuals present at the food pantry on the days and times that survey were distributed may be systematically different from those who were not present. Individuals able to show up an receive food for themselves and their families may also be different from individuals who are not in charge of food pick-up. Surveys were distributed and administered before food distribution started. This means that individuals who did not show up early to the distribution were often excluded from participating in the survey. Those who are able to show up early to food distribution may differ significantly from those who are unable. The survey was designed to be self-administered and while a few respondents asked for help reading the questions, it is possible that individuals with poor literacy chose not to participate in the survey.

When distributing and administering the surveys we were careful to explain to potential participants that their responses would be anonymous and confidential. It is still possible, though, that people were afraid to make negative comments about the Food Bank through social-desirability bias as well as fear of losing access to Food Bank resources.

Survey respondents who agreed to participate in the phone interview may have different thoughts and ideas that those who did not agree to participate. It is likely that social desirability bias is present in the interviewees' responses, especially when prompted to share their thoughts and opinions on health food and food bank practices.

The population that uses food bank services is constantly changing. This survey project only captured a snapshot of the population using food pantries and Produce to People in the summer of 2018. This could be a completely different population in the winter, spring and following summer.

There were several limitations regarding all qualitative components of the project. Due to time and resource constraints, qualitative survey questions and telephone interviews were not formally coded. Telephone interviews occurred at the end of my internship, and there was not enough lot of time to develop and pilot the tool, or transcribe, code and analyze results. Emerging themes were used as part of Wellness policy justification.

7.0 Conclusion

This thesis is the culmination of an eight-month paid internship with the Greater Pittsburgh Community Food Bank located in Duquesne, PA. I was hired to apply the skills I learned through my public health coursework to design, pilot and implement a rigorous and comprehensive survey to the population served by GPCFB. Elements of the survey were used to provide justification for an internal Wellness Policy at the Food Bank. Policy objectives were designed to improve the quality of food distributed through programs and services, using the voices of the population served as a basis for changes. Survey development was a multi-step process that required collaboration with internal departments as the food bank as well as external experts in food security, survey design, evaluation and ethics.

Using the voices of the population served is part of a new movement in food banks across the country that strives to engage the community in programming and decision making. This "people first" concept will allow food banks to make decisions that support the health needs of food secure individuals. This will give these individuals and their family members the ability to improve their overall health and make day to day decisions that guide them to a more stable life.

Appendix A Survey

Greater Pittsburgh Community Food Bank would like to improve the quality of foods that we distribute in food pantries. Our job is to source food for your pantry and we want to know what types of food you need. We are conducting a research study to help us decide what foods to get. We are asking you to help us by filling out this short 10-minute survey.

If you would like to participate, this survey will ask questions about where you get your foods, what types of foods you eat, the health status of you and your family, and some demographic information about you and your family (such as age, race, number of family members). There are no foreseeable risks to participating in this study. Based on the results of this study we hope to provide more of the foods you want and need at your local food pantry. There is no direct benefit for study participation, and no compensation for participation.

All responses will be confidential and anonymous. Your data will be shared with the Greater Pittsburgh Community Food Bank and may be shared with researchers for future projects, but all data will be shared without your identity. Optional contact information will be immediately detached and separated from any survey responses. Your participation in this survey is voluntary and you may stop at any time. This study is being conducted by Michelle Delahanty. She can be emailed at mdelahanty@pittsburghfoodbank.org or called at 412-460-3663 extension 216.

<u>Section 1</u> asks about what foods are important to you

1. Where do you get your food? Check all that apply:

- Super center (like Walmart or Costco)
- Grocery store (like Giant Eagle or Aldi)
- Food pantry
- Produce to People
- Soup Kitchen
- Farmer's market
- Home or community garden
- Corner store or convenience store
- Fast food restaurants (like McDonalds or Subway)
- Other__________

2. How many times a month do you get food from a food pantry?

- less than 1 time a month
- 1 time a month
- 2 times a month
- 3 times a month
- 4 times a month
- more than 4 times a month

3. How many days worth of food do you get from one visit to the food pantry?

- Less than 1 day
- 1 day
- 2 days
- 3 days
- 4 days
- 5 or more days

4. Please list **5** foods that are hard for you to get. Please list **only 5**.

____

____

____

____

____

5. Please check **5** foods that you need your pantry to offer. Please check only **5**

- Pork
- Cooking supplies
- Canned vegetables
- Fresh vegetables
- Processed meat (hot dogs)
- Canned beans
- Chicken
- Desserts
- Eggs
- Whole grain foods
- Instant meals (Cup of Noodles, Ramen)
- Fish and seafood
- Rice
- Fresh fruits
- Pancake mix
- Juice
- Non-dairy milk
- Pasta
- Cereal
- Canned fruits
- Boxed meals (Hamburger Helper, Rice-a-roni)
- Dry beans
- Milk
- Soda
- Snacks
- Bread
- Beef

6. During an average week, how often do you eat fresh fruits and vegetables?

- Every day
- Most days
- Once or twice a week
- Never

7. Are fresh fruits and vegetables hard to get in your neighborhood?

- Yes
- No

8. Do fresh fruits and vegetables usually cost too much for you to buy?

- Yes
- No

9. Are fresh fruits and vegetables easy for you to prepare?

- Yes
- No

10. Think about the place where you live. Which items do you have?
Check all that apply.

- Stove
- Oven
- Slow cooker/crock pot
- Microwave
- Refrigerator
- Can opener
- Freezer
- Blender
- None of these

<u>Section 2</u> asks questions about health.

1. Do you or anyone that lives with you have the following health conditions? Please check either yes or no.

	Yes	No
Diabetes	O	O
Pre-diabetes	O	O
High blood pressure/hypertension	O	O
Heart disease	O	O
High cholesterol	O	O
Overweight or obese	O	O
Underweight	O	O
Kidney Disease	O	O

2. Do any of the following prevent you or someone you live with from eating some foods? Please check either yes or no.

	Yes	No
Teeth/Dental problems	O	O
Trouble swallowing	O	O
Diabetes	O	O
High blood pressure	O	O
Food allergies or sensitivities	O	O
Digestive issues (heartburn, nausea, etc)	O	O

3. Has a doctor or nurse ever told you or someone you live with to change your diet?

- Yes
- No

4. In the past 12 months did you have to choose between buying food and paying for any of these things? Please check either yes or no.

	Yes	**No**
Education (tuition, loans)	O	O
Housing (rent, mortgage, home repairs)	O	O
Transportation (bus, gas, car repairs)	O	O
Medication	O	O
Medical expenses (doctor, emergency dept)	O	O
Utilities (gas, electric, phone, water)	O	O
Personal Care	O	O
Child or grandchild expenses	O	O

5. Is there a doctor or doctor's office you **usually** go to when you are sick or need advice about your health?

- Yes
- No

6. Have you ever had any trouble finding a doctor or health care provider who would see you?

- Yes
- No
- I haven't tried to see a doctor

7. In general how is your health?

- Very good
- Good
- Fair
- Bad
- Very bad

<u>Section 3</u> will ask a few questions about you and the people you live with. This section is optional, but we appreciate you providing us this information to help us better serve your community.

1. What **best** describes your race/ethnicity?

- African American or Black
- Asian
- Caucasian or White
- Hispanic/Latino
- Native American
- Hawaiian/Pacific Islander
- Other: ___________

2. What is your gender?

- Male
- Female
- Other: __________

3. How old are you?

- 18 - 24
- 25 - 34
- 35 - 44
- 45 - 54
- 55 - 64
- 65 or older

4. How many children under age 18 live with you?

- None
- 1
- 2
- 3
- 4
- More than 4

5. How many adults 18 or older live with you?

- None
- 1
- 2
- 3
- 4
- More than 4

6. Do you or any household member receive SNAP benefits (food stamps)?

- Yes
- No

IF NO: Why **don't** you receive SNAP benefits (food stamps)?

- I was denied because I was over the income
- I was denied because my paperwork was not complete
- I was denied because I did not complete the phone interview
- I was cut-off from benefits because of work issues
- I do not know how to sign up for benefits
- I do not want SNAP benefits
- Other___________

7. Are you or anyone you live with physically disabled?

- Yes
- No

8. How do you usually get to the food pantry? Please choose **one**.

- o Car – drive yourself
- o Car – ride with friends/family
- o Bus
- o Walk
- o Bike
- o Wheelchair
- o Access van or car
- o Other___________

9. How often do you have internet access?

- o Always
- o Sometimes
- o Never

<u>Section 4</u> asks what you would like to learn more

1. Do you want to learn more about any of these topics? Please check either yes or no.

	Yes	**No**
Quick meals	O	O
Child nutrition	O	O
Heart healthy foods	O	O
Diabetes friendly foods	O	O
Meal planning	O	O
Shopping on a budget	O	O

Section 5 is for your thoughts, stories or comments. Thank you for taking this survey. You will help us serve you better.

1. Is there anything else you would like the food bank to know?

If you have any further questions or comments, feel free to contact Michelle Delahanty at mdelahanty@pittsburghfoodbank.org, or Erin Kelly at ekelly@pittsburghfoodbank.org. You may also call the Food Bank at 412-460-3663 and ask for Michelle Delahanty or Erin Kelly.

Thank you again for your participation!

If you would like to participate in a voluntary follow-up phone interview at a later date (to be determined) or offer further suggestions, please provide a phone number or email address where you can be reached. The purpose of this phone interview will be to get more information on areas where the survey did not give us enough of the information we need. Phone interviews will take no more than 15 minutes to complete.

If you wish to participate, please fill in the information below and tear this sheet off of your survey.

Name: ________________________________

Phone number: _________________________

Best time of day to call: __________________

Email address: __________________________

Appendix B Phone Interview Script

*=interviewer note

"Hello may I speak with _________________?

My name is Michelle and I am calling from the Greater Pittsburgh Community Food Bank, how are you today?

I got your information from the survey you answered at ____________________ (survey location) on ___________________ (date/time). Do you have time to participate in a 5-10 minute phone interview?"

*IF NO: "Thank you anyway. We appreciate your time and participation in this year's health and wellness survey. Have a nice day!"

*IF YES: "Thank you so much for agreeing to answer some questions over the phone. Is now a good time to talk, or should we reschedule for another time?"

Reschedule for date:_______________ and time:_____________ OR continue:
"Like I said this conversation should take about 5 minutes. Please stop me at any point if you have questions or need clarification. You may end this conversation at any time and you do not have to answer every question. Do you have any questions before we start?"

Great let's get started with number 1.

*IF the phrase "healthy foods" is mentioned at any time ask: "How do you define healthy?"

1. "Can you talk a little about the foods you get from your food pantry?"
Probes- In what ways are they meeting your needs and in what ways are they not meeting your needs?
*make sure responses are related to food. Ask follow-up questions if necessary.
*if necessary explain that the Food Bank provides food to pantries and P2P

2. "Do you ever use the recipe cards or the recipes in the Food Bank's newsletter"
*how often do you cook at home?

3. "From our survey we found that 68% of the households we serve have high blood pressure and 42% have diabetes. Given this information, do you have any ideas about how we can we best help the people we serve?"
*IF necessary follow-up with: "How should the Food Bank go about doing that?"

4. “How would you react if you learned the Food Bank will stop providing unhealthy foods, such as foods high in sugar, salt, and fat?” (candy, cakes, other desserts...)

*IF negative response: “Because we have limited space and money we have to make choices about the food that we provide. If we want to offer more healthy foods, that might mean that we have to limit less healthy foods that are high in sugar, salt and fat. Would you support that decision? Why do you feel that way?”

*Provide examples of less healthy foods if necessary: soda, candy, etc.

5. “This is the last question. In the future what is the best way for the Food Bank to get feedback on questions like these?”

“Thank you so much for taking the time to answer these questions. Is there anything else you would like to add or share?”

“We greatly appreciate your feedback. Have a nice day!”

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