

Addressing Chronic Health Conditions Through Nutrition Education at Northside Food Pantry

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COVID posed challenges to many members of the community, and Churches Active in Northside (CAIN) was no different. CAIN is a local food pantry in the Northside neighborhood of Cincinnati. CAIN serves a vital role in that community in the struggle against food insecurity. It is a uniquely important resource to the Northside community because of the lack of a grocery store in their neighborhood. The neighborhood of Northside is a diverse and historic population that has been hit hard by poverty and food insecurity. CAIN serves to connect that community and challenge poverty by providing stable access to food and other resources to the people of Northside. Because of COVID further limiting peoples' access to food, CAIN increased the area that they provided service to beyond the Northside neighborhood. This further increased their demands for food, especially those often used by the various ethnic groups inside of the new service area. Prior to the covid-19 pandemic, most of CAIN's operations occurred in a small indoor space that people worked their way through. As COVID blew through the northside community, there were many effects that challenged the patrons in areas besides their health. For example, public transportation, once a reliable and essential resource used by many to get to CAIN, became unreliable and even dangerous as COVID transmission in the community peaked. At times, people had to wait for up to an hour to enter the food pantry. The pandemic also affected the translation services that CAIN had provided for years, volunteers and Spanish translators had a harder time getting to CAIN and safely volunteering. CAIN did its best to adapt to a constantly changing public health landscape by moving as much of their operation outside and providing education about COVID if asked. Despite CAIN's best efforts, COVID still had a negative impact on food accessibility in Northside.

We have seen that Food Insecurity and Food deserts are exacerbated by inflation. The loss of single neighborhood grocery store occurred in 2016. This lead to the loss of access to nutritious food, and with that there were higher rates of hypertension and cardiovascular disease. The access to reliable and affordable transportation has also been exacerbated by gas prices. In this community there are language barriers/proficiency as CAIN's population is mostly Spanish-speaking guests but not many Spanish-speaking volunteers/staff. We saw that guests weren't

sure how many food items of each category to take, which made it difficult for our research/project purposes. We also noticed more diversity increasing in languages that are difficult to accommodate – French, different dialects, etc.

Loss of employment/income for many guests lead to increased traffic in the food pantry which was also unfortunately exacerbated by COVID. CAIN used to limit guests to a certain zip code and have more requirements, but opened access due to COVID needs. In accommodating different cultural diets and food restrictions we tried to focus our intervention on the health needs of the community based on the most common chronic health conditions; access to food you are culturally familiar with and the ability of knowing how to cook. Although, many guests still felt confident navigating their own health, which was hopeful.

Medical students and physicians are uniquely positioned to understand the needs of Cincinnatians and their neighborhoods because of their roles engaging with individuals in their community. In our work with CAIN during the 2021-22 school year, we had the opportunity to talk to Northside residents about barriers they have to accessing healthy foods. One of the biggest barriers for the Northside community is the lack of grocery stores in the neighborhood. Northside has no grocery stores; thus, many residents rely on CAIN as a primary food source. Additionally, the lack of public transportation poses a barrier to accessing grocery stores in other neighborhoods of Cincinnati. Many residents we spoke with do not have cars and must rely on uber and other ride sharing services to get their groceries home. Building a grocery store in Northside or organizing public transportation to allow Northside residents to easily access grocery stores in other neighborhoods would help make healthy foods more accessible to residents.

Another way students and physicians can advocate for the needs of the community served by Churches Active in Northside is to inform the Cincinnati city government on the language barriers that pose challenges to improving health literacy and advocate for the food pantry visitors who do not speak English as their first language. Recently, the food pantry has been especially low on Spanish-speaking staff. As students and future physicians, we can advocate for the Cincinnati city government to provide translation and language services for the food insecure non-English speaking community at Northside. In addition, there are food nutrition label translation services that the Cincinnati city government can provide funding for to further address the language barriers around health literacy in the community.

Health literacy education is essential to implement in the public school system at an early age. Having children be able to understand and read nutrition labels and

implement them into their daily life can help reduce all the overwhelming health burdens that we see in adults in America. There is an obesity crisis in our country leading to the number one killer in men and women today, cardiovascular heart disease. If we taught our children what to look for and what to avoid when shopping for foods or even choosing foods at their cafeteria, we could reduce this health burden by such a great amount. Childhood obesity is also becoming a grave concern in our nation today, which will reduce the quality of that child's life at the time and increase the risk of their potential to develop varying cardiac diseases at an earlier age.

Our topic of food insecurity was in the context of Northside being a food desert. There once was a single neighborhood grocery store, called Save-A-Lot Grocer, but it closed in 2012, turning Northside into a food desert. Local residents have to travel over a mile radius to get to the nearest grocery store, and this has been true for the past 10 years. This is especially difficult given the fact that many of the residents at Northside don't have reliable access to transportation (see below for me). It has been exacerbated by inflation during the pandemic, because prices of food at grocery stores have also risen drastically, so there's even less access to non-processed nutritional foods. This is likely contributing to the higher rates of hypertension, cardiovascular disease, and other chronic health conditions that the guests at CAIN are experiencing.

Although CAIN has many resources for its guests, the health literacy of guests is below average. This is especially true for the guests who are Spanish speaking, as there are not many staff at the pantry who speak Spanish and can answer questions for the guests. The Spanish speaking population are not able to know exactly how many items they can take and were more confused by the labels than those guests who spoke English. This is because there was not good access to workers who also spoke Spanish. As a result of COVID, there were more Spanish speaking guests who visited the pantry, as this population was more likely to lose their jobs and take a bigger hit financially during the pandemic. Thus, the lack of enough resources for this population at the pantry was exacerbated due to COVID. CAIN could use more Spanish speaking workers and labels that are easy to read by the Spanish speaking guests. This would help increase the health literacy and experience of the guests, as well as improve the efficiency of the pantry.

The unemployment effects of COVID are now being compounded by global inflation, especially for necessities like groceries. CAIN provides a destination for guests to get nutritious food for themselves and their families without judgment. People's financial situations are fluid and can be unpredictable – CAIN offers a resource for those struggling. If inflation and cost of living continue to rise, CAIN

could see an influx of food insecure guests. They require resources and collaboration with the community to meet the needs of their patrons and their families.

One way that food insecurity impacts the population served by our community that is possibly overlooked is by an incongruence between what food is available and the population’s cultural diets and food restriction. We tried to focus our intervention on the health needs of the community based on the most common chronic health conditions, but these dietary guidelines do not always align with the cultural food practices of the population. Under the strain of covid and financial hardship, people in the community of Northside may find it more difficult to meet their cultural dietary needs, possibly adding to the stress of food insecurity that they may already face.

Table 1 summarizes the response to the Likert-style questions which asked guests to rate their satisfaction with various aspects of CAIN’s services on a scale from 1 (strongly disagree) to 5 (strongly agree). Overall, guests seem to be very satisfied with CAIN’s services as the number of responses which indicated that they “strongly agree” with the statements far outweighs every other response category. The question which prompted the most diverse responses was whether or not the guests would find it helpful if CAIN provided healthy recipes at each visit, though still the majority of respondents stated that they strongly agree that this would be helpful to them.

Table I: Barriers to access for various services in the area stratified by service.				
Service	Barrier to Access			
	Transportation	Inconvenience	Unaware of Services	Expense
Food pantry	14	1	1	0
Meal program	8	0	3	0
Nutrition	6	1	3	1
Mental Health Services	8	0	3	1
Addiction Services	5	0	3	0
Homelessness Services	5	0	3	0
Flu Shot	5	1	2	0
Total	51	3	18	2

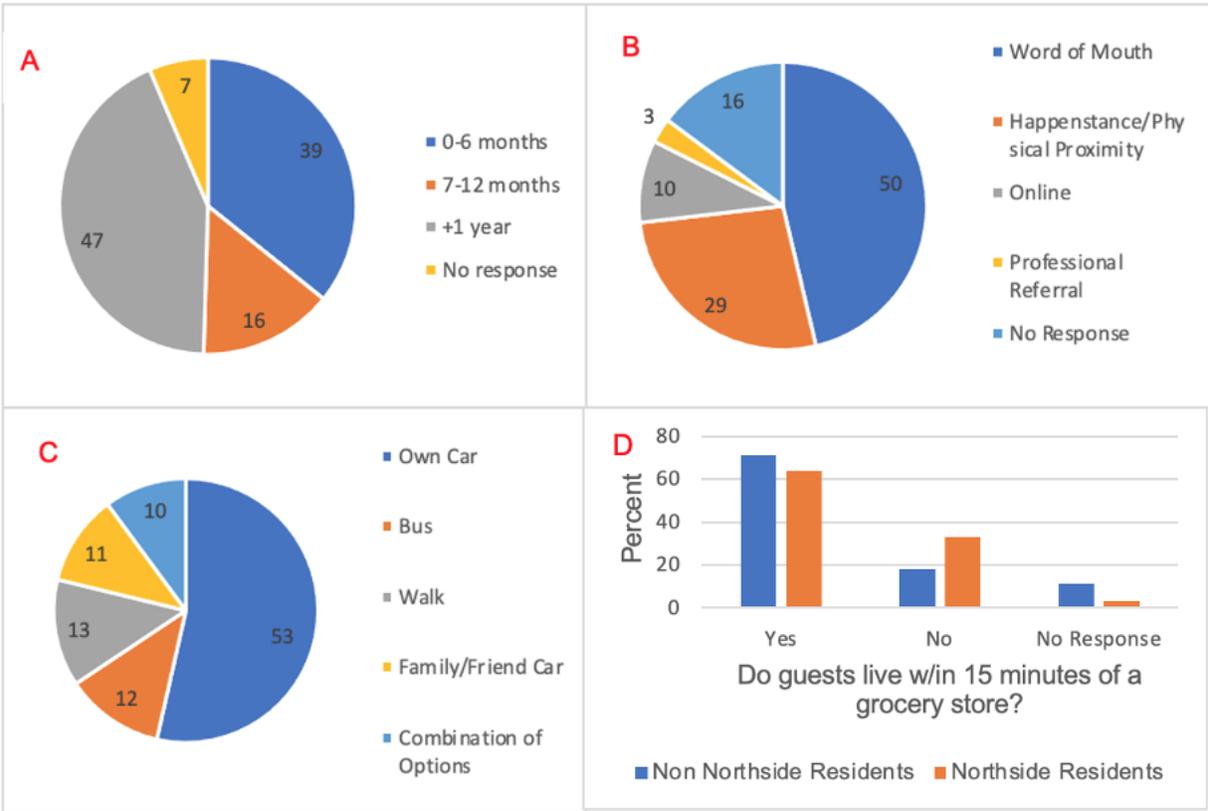


Figure 1: Responses from CAIN guests regarding their interactions with CAIN, including how long they have been a guest of the pantry (a), how they heard about CAIN (b), their primary mode of transportation(c), and whether or not they live within 15 minutes of a grocery store stratified by whether or not they live within Northside (d).

Resources:

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