



Improving Health in Northwest Indiana Through Medically and Culturally Tailored Meals:

The Food is Medicine Health Issues and Challenges Program Report 2024



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This report assessed the impacts of FAITH CDC's Food is Medicine Program as reported by the first cohort of 83 participants with cardiovascular conditions and found the following:



Improved Nutrition Knowledge

All program participants reported improvements in healthy eating after participating in the Food is Medicine Program, which they attributed to the program's nutrition education.



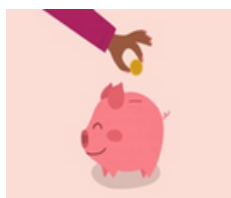
Healthier Dietary Habits

There was a 5% increase in the proportion of program participants incorporating fresh fruits into their meals, and an 8% increase in those incorporating fresh vegetables. The post program frequency of fresh fruit and vegetable intake increased.



Improved Self-Reported Health Metrics

The post-program survey revealed improvements in all self-reported health metrics. More specifically, 37.5 % of participants reported positive changes in laboratory values, 66.7% reported weight loss, 62.5 % reported stabilized Blood Pressure, and 27% reported a reduction in their cardiovascular medication dosage by their physician.



Reduced Economic Burden

Participants identified reduced economic burden as the third most significant program impact. 87.5% of participants were able to save money on groceries after participating in the program while 20.8% of those receiving federal assistance were able to stretch these funds and reallocate them to other priority needs.



Improved Healthy Food Access

Participants identified improved access to healthier food within their community as the most significant program impact, addressing their top ranked pre-program priority social driver of health.



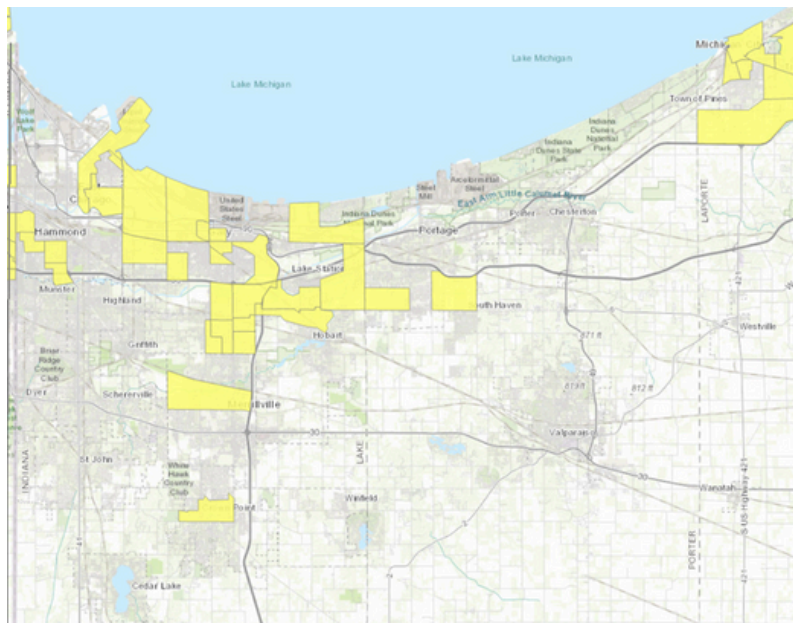
High Program Satisfaction

All participants expressed high satisfaction in the program and recommend it. The program concurrently addressed multiple food insecurity-related factors including economic burden, healthy food access, and nutrition knowledge. The "healthy and enjoyable culturally appropriate" meals were ranked as the program's second most significant impact. .

Background

In 2023, 18 million US households experienced food insecurity, a significant increase from 17 million households the previous year.¹ Food insecurity disproportionately affects racial and ethnic minority populations, individuals experiencing socio-economic disadvantage, and single-parent households.¹ Geographically, food insecurity is highest in cities, rural areas, the US South, and the US Midwest.¹ Food insecurity is a major social driver of health, associated with the development and exacerbation of chronic health conditions including heart disease, hypertension, and diabetes.^{2,3}

The City of Gary in Northwest Indiana is of particular interest in relation to food insecurity and associated health outcomes, given its history and sociodemographic context. Northwest Indiana has approximately 50 food deserts designated by the US Department of Agriculture (USDA; Figure 1), with nearly 130,000 individuals experiencing food insecurity.⁴ The 1970s economic decline in the US Midwest left significant socio-economic challenges and stark inequities in Gary and Northwest Indiana.⁵ Lake County, where Gary is located, is among the least healthy counties in Indiana in terms of health outcomes and social drivers of health.⁶ Gary is one of four federally designated Medically Underserved Areas in Northwest Indiana alongside Hammond, East Chicago, and Lake Station.⁷ Gary's poverty rate (33.1%) is twice that of Lake County (15.8%) and nearly three times that of Indiana (11.6%).⁸ However, Gary and the Northwest Indiana region also have several community assets such as Families Anchored in Total Harmony, Inc. (FAITH CDC), that have been leading initiatives to combat food insecurity and health inequities in the region.



Legend: USDA map indicating low-income census tracts (in yellow) where more than 100 housing units do not have a vehicle and are more than 1/2 mile from the nearest supermarket, or a significant number or share of residents are more than 20 miles from the nearest supermarket. Source: USDA Economic Research Service, ESRI.

Figure 1. USDA Map of Food Deserts in Northwest Indiana

FAITH CDC is a non-profit community-based organization working on creating social, economic, and environmental equity in Gary and Northwest Indiana through community engagement and enrichment.⁹ FAITH CDC implements several programs within the pillars of social, environmental, economic, and food justice.⁹ The Health Issues Challenges: Food is Medicine Program, one of FAITH CDC's four food justice programs, was launched in July 2023 to deliver medically- and culturally-tailored meals to individuals with chronic conditions in partnership with local urban farmers, health care systems, and physicians.¹⁰ This program comprises:

1. Weekly distribution of **medically- and culturally-tailored meals** by case managers,
2. **Nutrition and health education** by a Nurse Practitioner and Chef
3. Self-administered **health assessments** (e.g., BP monitoring, pre-post surveys) to monitor program outcomes.



Key Findings

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01

Participant Demographics

This report presents the post-program survey results from Food is Medicine’s first program cohort collected between January 2024 through May 2024, and narratively compares these findings to the pre-program survey results collected from the same participants prior to the program in July 2023.

The first Food is Medicine cohort comprised 83 participants. Figures 2-5 show participants’ demographic characteristics. The program participants were predominantly Black/African American (91%; n=84), non-Hispanic (98%; n=88), female (57%; n=52), and 65 years and older (67%; n=62).

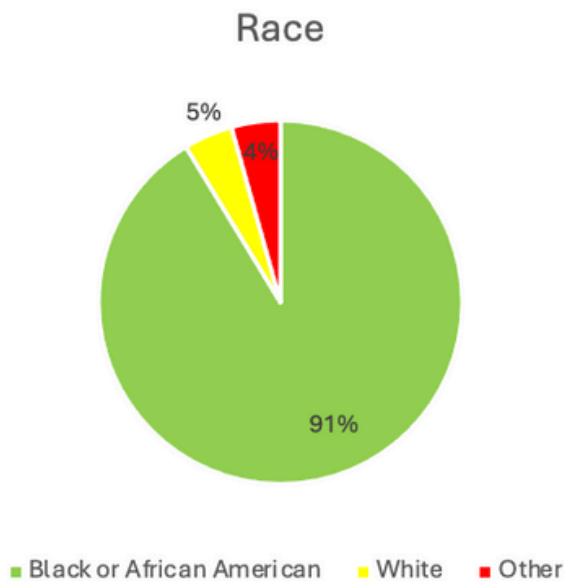


Figure 2. Participants' Race

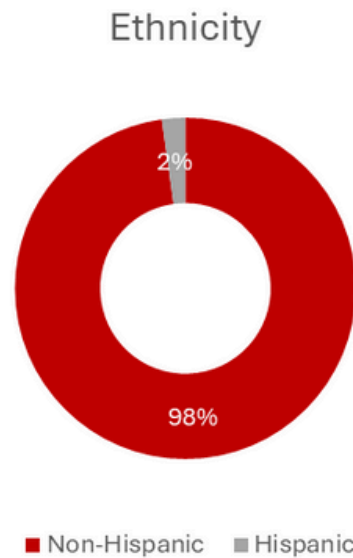


Figure 3. Participants' Ethnicity

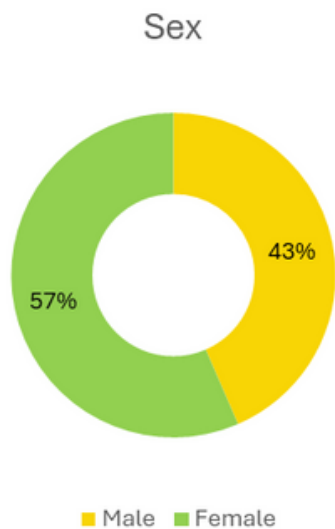


Figure 4. Participants' Sex

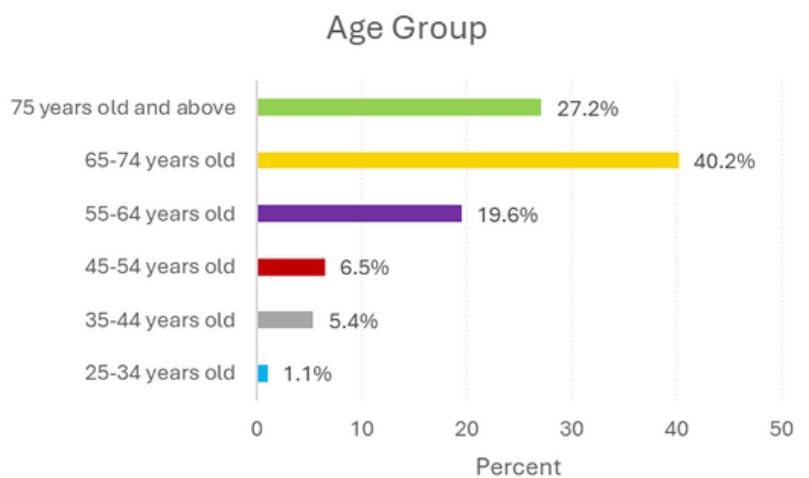


Figure 4. Participants' Age

02 Improved Nutrition Knowledge

Figure 6. shows that all program participants reported improvements in knowledge on healthy eating after participating in the Food is Medicine Program, with the majority (66.7%; n=16) reporting great improvements in knowledge. Participants’ qualitative data attributed this knowledge change to the program’s nutrition education sessions.

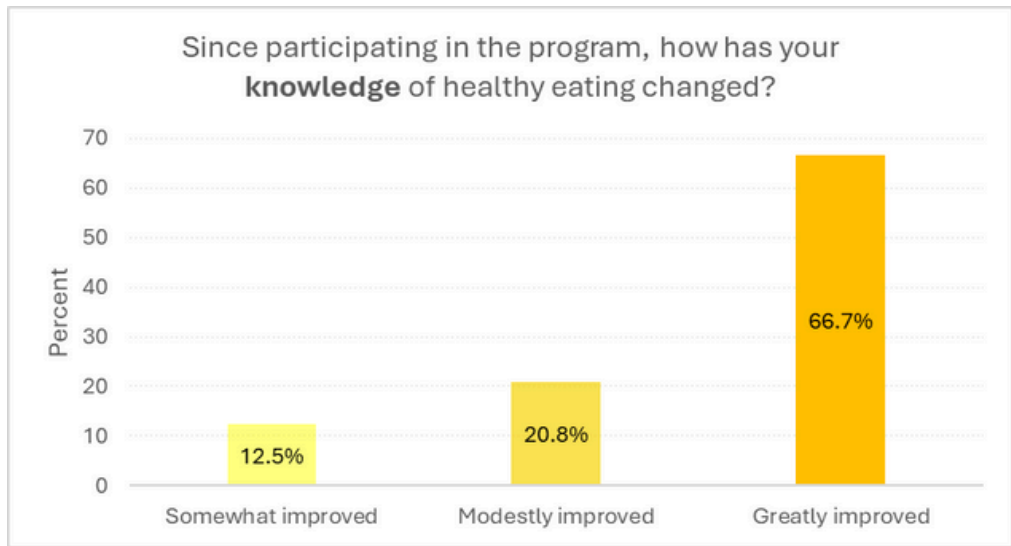


Figure 6. Post-Program Change in Knowledge



“If you haven’t been able to get adequate meals, this program helped you eat better and educate [sic] you on better eating habits.”
 -Participant #39

03 Healthier Dietary Habits

Figure 7. shows participants' post-program frequency of fresh fruit intake. All program participants reported incorporating fresh fruits into their meals after participating in the program, reflecting a 5% increase from the pre-program survey. There was an improvement in the frequency of fresh fruit intake after participating in the program, with 33.3% (n=8) incorporating fresh fruits "often" in the post-program survey (Figure 7) as opposed to 16.7% in the pre-program survey (measured as "once a day" or "several times a day" in the pre-program survey).

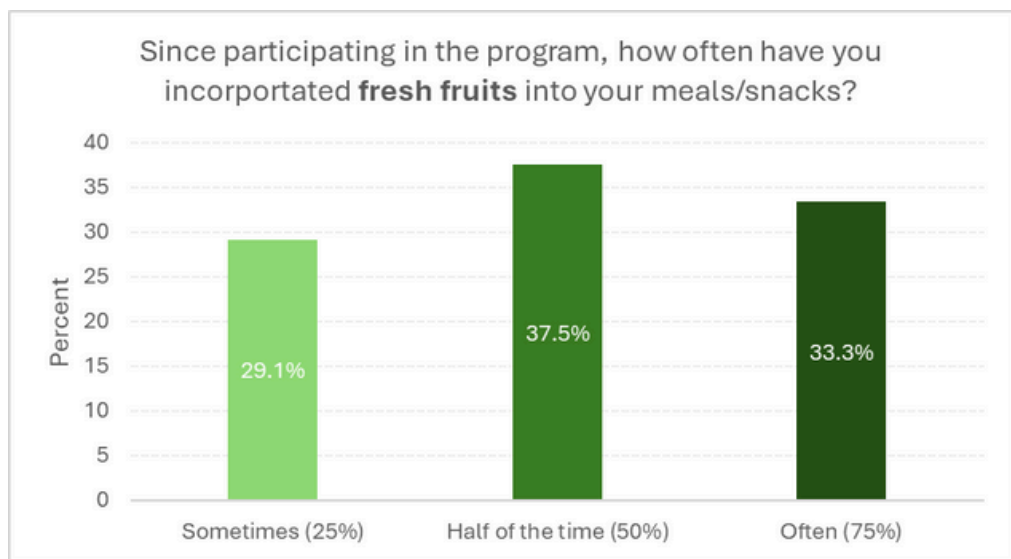


Figure 7. Post-Program Frequency of Fresh Fruit Consumption



"Getting prepared meals is a great help. [The program] helped to starting eating more vegetables and less process food"
-Participant #11

Key Findings

Figure 8. shows participants' post-program frequency of fresh vegetable intake. All program participants reported incorporating fresh vegetables into their meals after participating in the program, an 8.2% increase from the pre-program survey. There was an improvement in vegetable intake frequency after participating in the program, with 22.7% (n=5) incorporating fresh fruits "often" (Figure 8) as opposed to 4.4% in the pre-program survey (measured as "once a day" or "several times a day" in the pre-program survey).

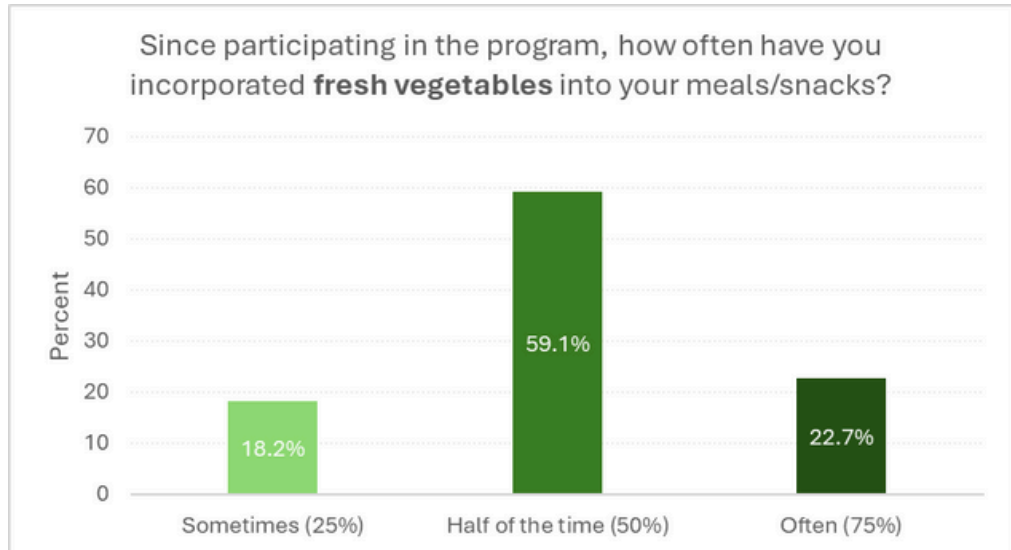
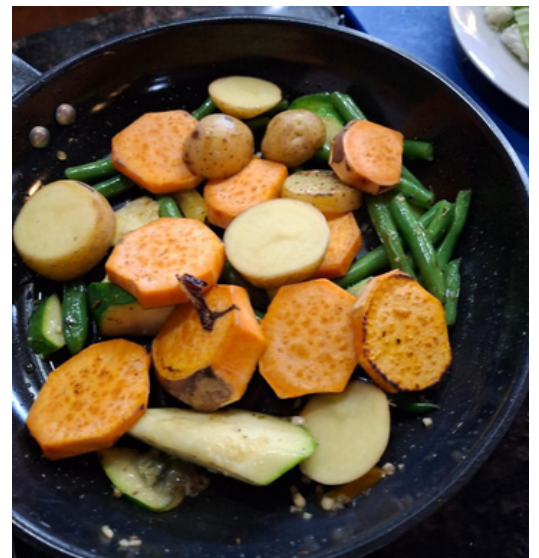


Figure 8. Post-Program Frequency of Fresh Fruit Consumption

"The program helped me eat better and hopefully it will help others"
-Participant #8



04 Reduced Economic Burden

Figure 9. reveals that 87.5% (n=21) of participants were able to save money on groceries as a result of participating in this program. This reflects a reduced economic burden for some participants since prior to the program, 68.2% of participants did not have enough food or money to purchase food during the past month while 63.3% had to reduce their meal size or skip a meal due to not having enough food or money during the past month prior to the program.

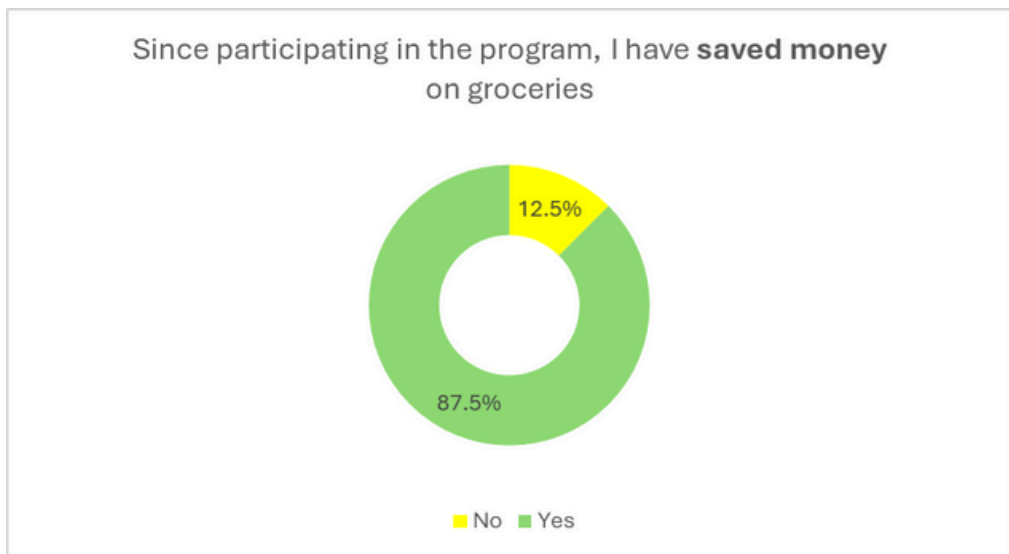


Figure 9. Post-Program Savings on Groceries

*“Beneficial program, helps with expenses and gives you knowledge of what eating healthy entails”
-Participant #17*

Key Findings

Prior to the program, 25% (n=23) of participants were receiving SNAP, EBT, or other federal food assistance. **Figure 10.** shows that 20.8% (n=5) of participants receiving federal food assistance programs were able to stretch these funds, reallocating them to other groceries (n=3) and bills (n=2) such as rent and utilities.

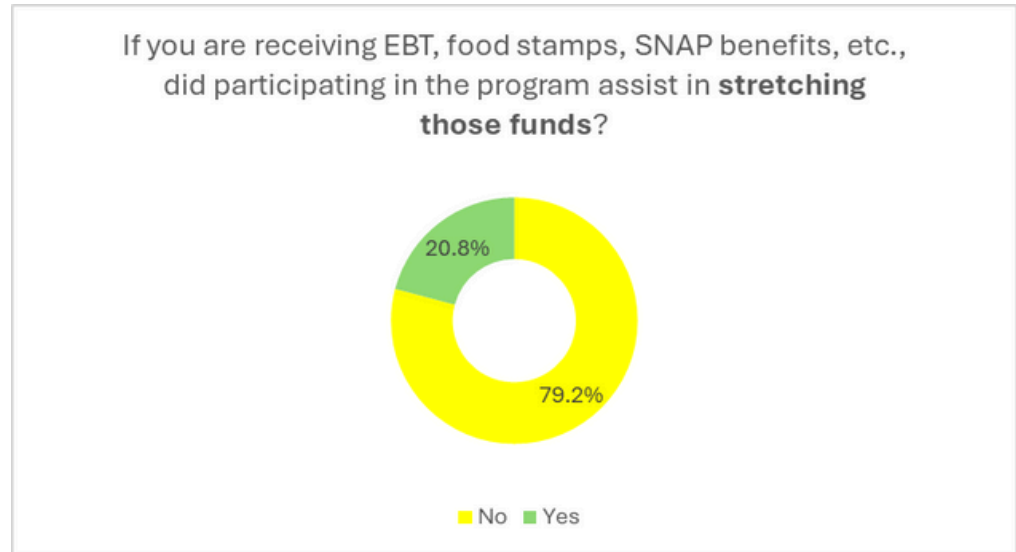


Figure 10. Post-Program Ability to Reallocate Funds Among Program Participants Receiving SNAP, EBT, or Other Federal Assistance



05 Improved Self-Reported Health Metrics

Figure 11. shows that 37.5% (n=9) of participants reported positive changes in laboratory values related to their cardiovascular health condition after participating in this program.

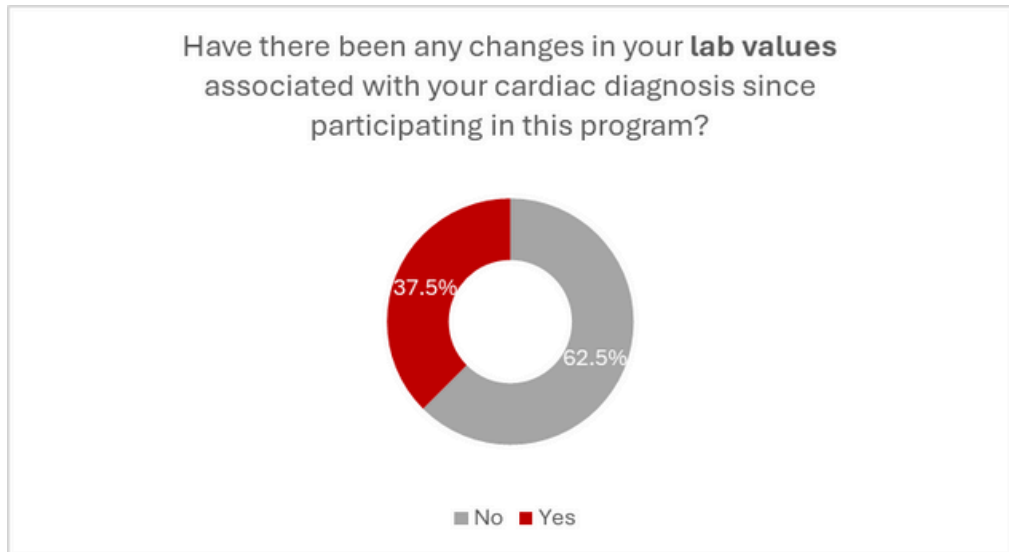


Figure 11. Post-Program Self-Reported Changes in Cardiovascular Health Laboratory Values

*“Helpful with losing weight, good portion of food, but not too much”
-Participant #34*

Key Findings

Figure 12. shows that 66.7% (n=16) of participants reported weight loss following participation in the program. Of those reporting weight loss, 50% (n=8) lost 5-10 pounds while 18.8% (n=3) lost greater than 10 pounds. Participants' qualitative data attributed weight loss to the program's healthier food options, food portions, and nutrition education.

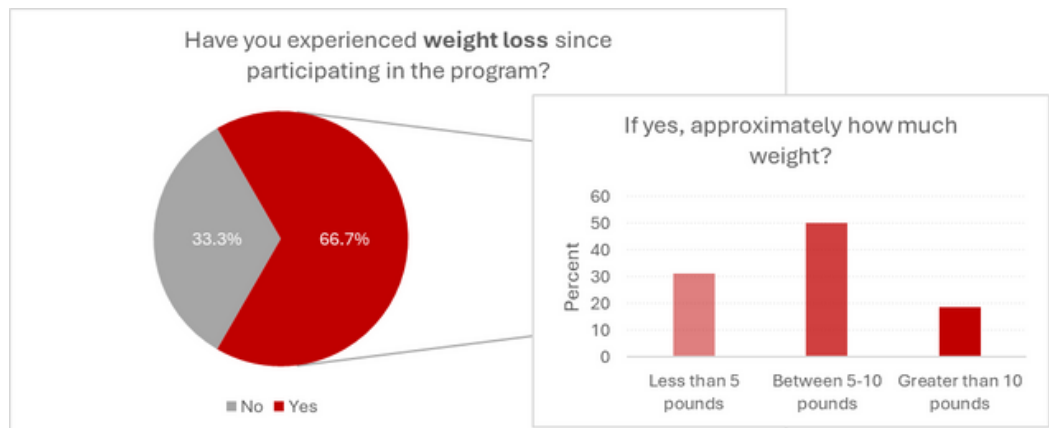


Figure 12. Post-Program Self-Reported Weight Loss

*“Help changed [sic] eating habits and there has been positive changed [sic] with BP and medication”
-Participant #19*

Figure 13. shows that overall, 97.1% (n=22) of participants reported some improvements in their blood pressure since participating in this program, with 62.5% (n=15) reporting stabilized blood pressure and 29.2% (n=7) reporting blood pressure within normal ranges.

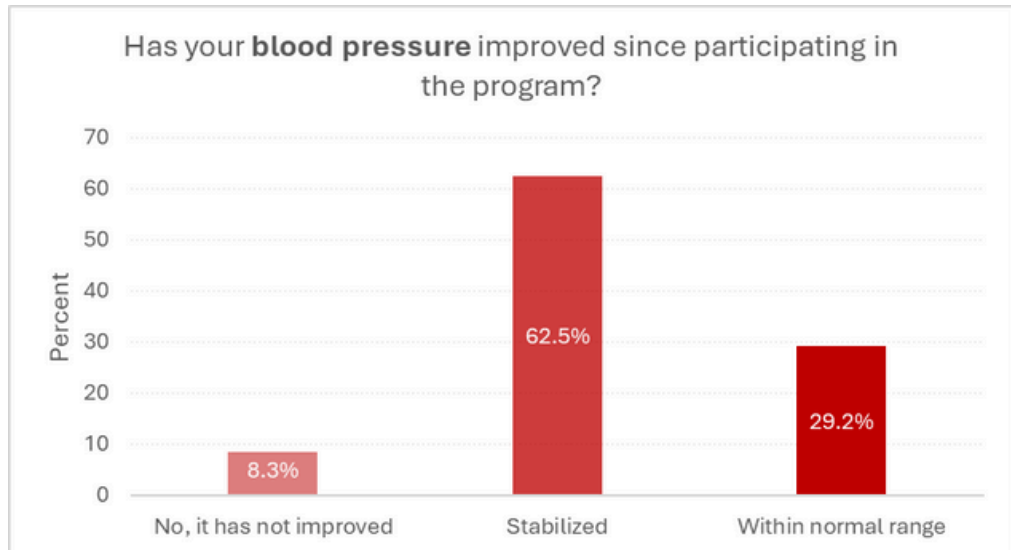


Figure 13. Post-Program Self-Reported Changes in Blood Pressure

Figure 14. shows that 25% (n=6) of participants reported a reduction in their cardiovascular medication dosage by their physician following participation in this program.

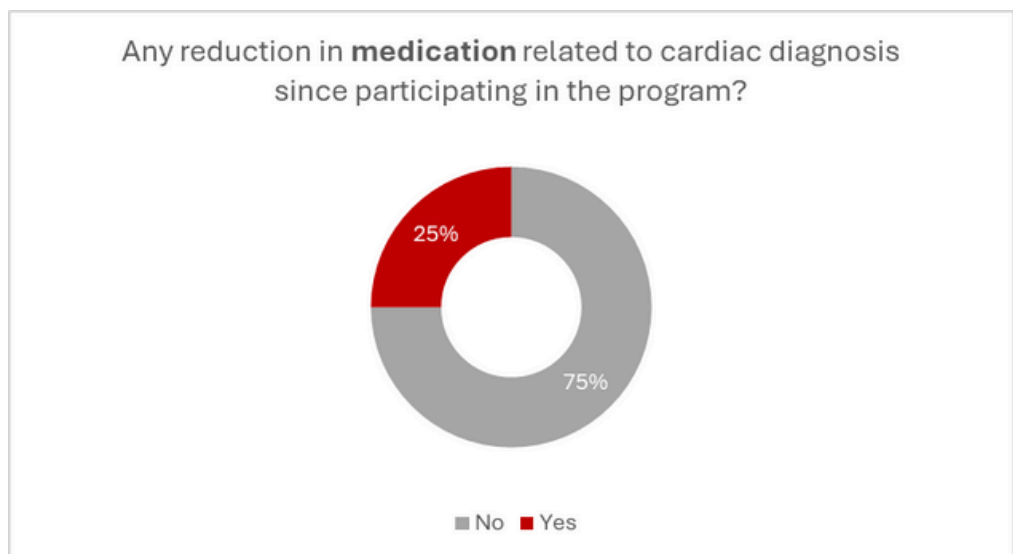


Figure 14. Post-Program Self-Reported Changes in Cardiovascular Medications

06 High Satisfaction with Program Components and Impacts

Overall, participants expressed high satisfaction with the program's components and impacts. As shown in **Figure 15.**, participants ranked the most significant program impacts as 1) improved access to healthier food within their community (45.8%), followed by 2) the provision of healthy and enjoyable culturally appropriate meals (37.5%), and 3) economic savings (20.8%). The post-program survey's most significant impact of improving access to healthier food options addressed participants' top (64.5%) pre-program priority of access to healthy food as the most useful for improving their health and wellbeing among other social drivers of health.

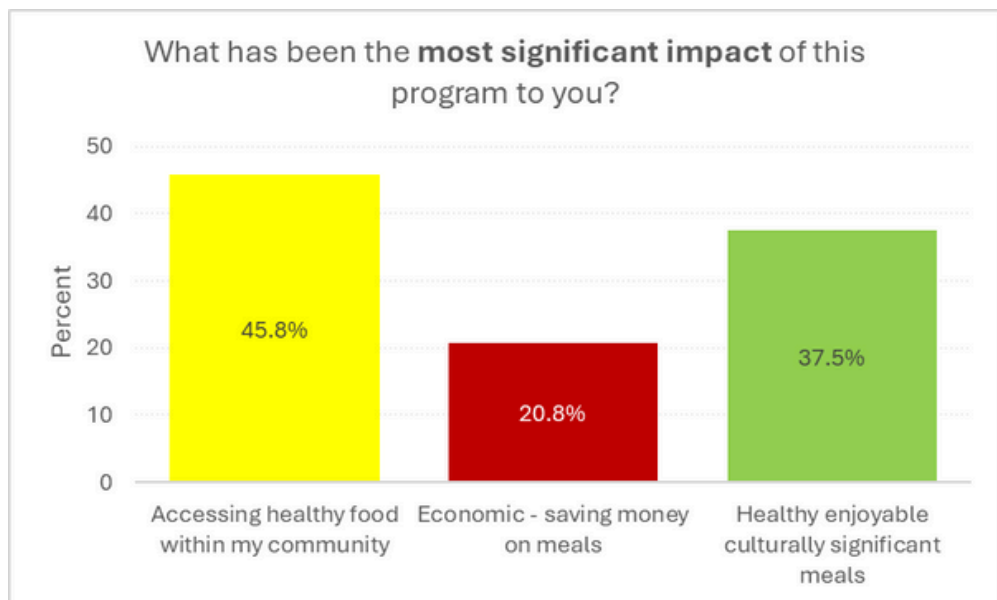


Figure 15. Post-Program Perceptions of the Most Significant Program Impacts

*“Healthy food helps when you have nothing to eat and you get a meal a day”
-Participant #5*

Overall, **Figure 16.** shows that to most (70.8%) participants, the program concurrently addressed multiple factors related to food insecurity including economic burden, healthy food access, and nutrition knowledge.

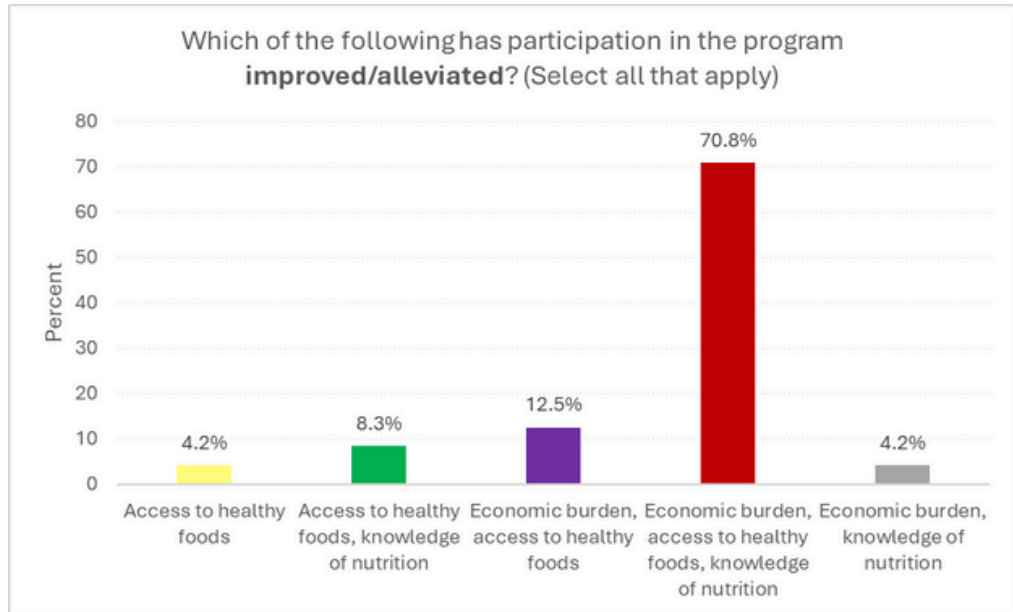


Figure 16. Factors Alleviated by Program Participation

Overall, 95.5% (n=42) of participants believed that the medically and culturally tailored meals were both enjoyable and conducive to good health (**Figure 17**).

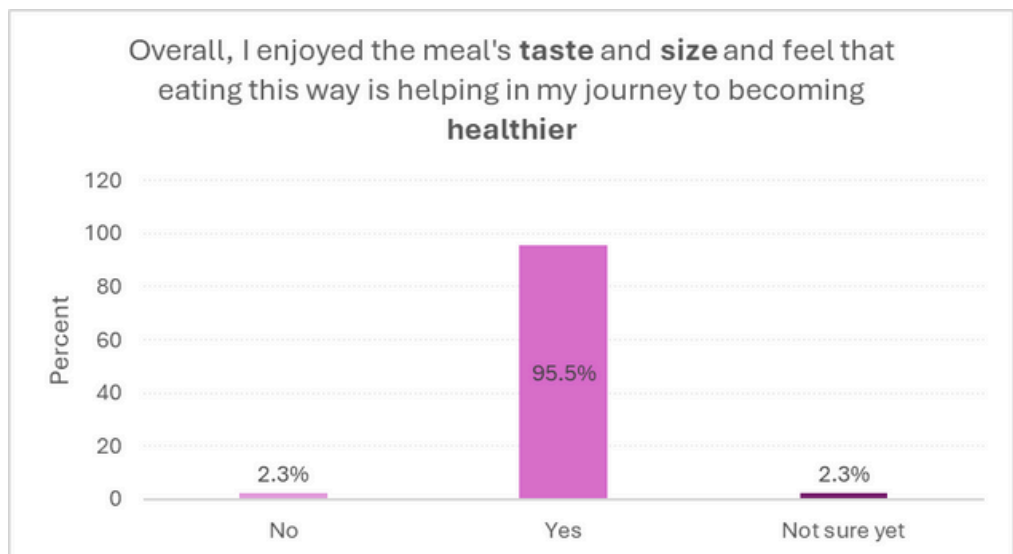


Figure 17. Overall Post-Program Perception of Meal Quality

Key Findings

As a result of the program's perceived impacts, all post-program survey participants reported they would recommend the program and participate again if it were offered in the future (**Figures 18-19**).

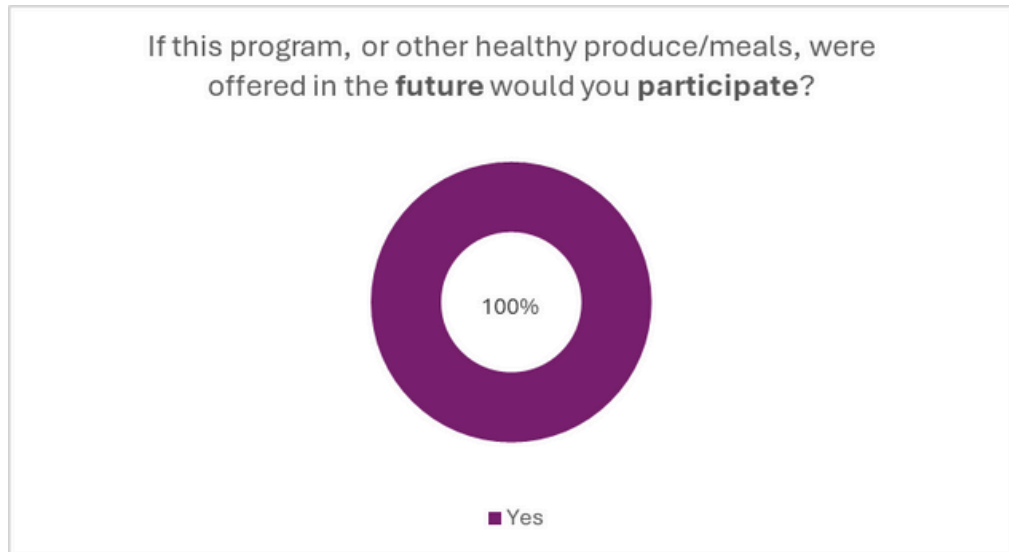


Figure 18. Post-Program Intention to Participate in the Future



Figure 19. Post-Program Intention to Recommend the Program

*Good program, give healthy and tasty meals and has helped improve my health
-Participant #25*

Conclusion

This report presented pre-and-post program survey results on the impacts of FAITH CDC's Food is Medicine Program as experienced by the first cohort of participants with cardiovascular conditions. Participants reported improved nutrition knowledge, healthier dietary habits, improved self-reported health metrics, reduced economic burden, and improved healthy food access as a result of their participation in this program. Participants unanimously expressed high satisfaction in the program. Findings suggest that providing culturally appropriate, medically tailored meals enhances accessibility, acceptability, enjoyment, and adherence. In addition, incorporating interactive (hands-on) nutrition education sessions into medically tailored meal programs can potentially enable behavior change and improved health outcomes.

These early findings suggest that Faith CDC's Food is Medicine Program is positioned to serve as a model within and beyond Northwest Indiana on how Community Based Organizations (CBOs) can leverage community, health system, government, and academic partnerships to identify and address food insecurity among individuals with chronic health conditions in urban Medically Underserved Areas.



The program experiences and findings support the following recommendations to address food insecurity among individuals with chronic health conditions:

Recommendations

01

Policy Recommendation

Invest in community-driven approaches to food insecurity through sustainable funding to CBOs given their status as accessible, trusted, and sustainable community resources with contextual knowledge on local need and cultures

02

Policy Recommendation

Promote policies that incentivize the elimination of urban food deserts and enable local food production in urban communities

03

Policy Recommendation

Support policies to increase food subsidies and health insurance coverage for health system and community-partnered food prescription programs

04

Policy Recommendation

Promote health system-based routine food insecurity screenings with referrals to sustainable community resources

05

Policy Recommendation

Support community-health system-academic partnerships to address critical research and practice gaps

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