



Chester County Food Bank
Fruit and Vegetable Prescription (FVRx)
Program
2017-2021 Report



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Chester County Food Bank

We mobilize our community to ensure access to real, healthy food.

Chester County Food Bank (CCFB) is a county wide, non-profit organization located in Exton, PA and has been in existence since 2009. CCFB works with over 150 agency partners to distribute over 3 million pounds of food annually to 10% of Chester County residents.

In 2021, 50% of the food distributed through CCFB partner agencies and programs was fresh produce. That number is achieved, in part, with two-on staff farmers and hundreds of volunteers in the Agriculture Program, which grows nearly 100,000 pounds of fruits and vegetables each year.

Much of that produce is distributed through the Department of Community Food Access & Education Programs, which work to empower adults, children and families to participate in their local food system by giving them the space to choose, grow, cook and learn about fresh, healthy foods. This is achieved in partnership with over 100 organizations throughout Chester County.

Fruit and Vegetable Prescription Program Goals

As one of the programs within the Department of Community Food Access and Education, the Fruit and Vegetable Prescription (FVRx) Program aims to:

- 1) Provide food insecure households and individuals in Chester County with increased access to fresh fruits and vegetables
- 2) Increase participants' consumption of fresh fruits and vegetables
- 3) Improve the overall wellbeing of participants
- 4) Advocate for, and educate on, food as medicine and ameliorative health





History of the Program

CCFB recognizes the role that proper nutrition plays in ameliorative health care. Therefore, Chester County Food Bank (CCFB) partnered with The Clinic, a local non-profit health clinic serving the underinsured and uninsured, to launch the Fruit and Vegetable Prescription (FVRx) program in 2017.

Launched as part of the Fresh2You Mobile Market program, CCFB staff and prescribers at The Clinic worked together to identify those in need of increased access to fresh food and enroll them in FVRx. The Clinic was the first and only prescribing partner that year and all prescriptions were redeemed at the Fresh2You Mobile Market truck, which traveled the county from June through November, providing fresh, seasonal produce from Chester and Lancaster Counties.

Pre and Post-surveys tracked a variety of biometric data, diet and lifestyle indicators, and food security statuses. In the first year, 100% of surveyed participants agreed or strongly agreed that they consumed more fruits and vegetables as a result of their participation in FVRx. Further, the percentage of participants who often worried that they would run out of food before being able to buy more dropped 17%. Also, 67% claimed that participating in FVRx lessened their stress levels and 92% said that it improved their health.

The following year, in 2018, FVRx added two more prescribing partners—the Coatesville VA and La Comunidad Hispana (LCH). That year, 85% of respondents reported eating more fruits and vegetables because of their participation in FVRx and the percentage of participants who claimed they never worried about running out of food before they could buy more increased by 27%. Moreover, the surveys saw a 15% increase in those who reported rarely feeling stressed, and 9% more respondents ranked their health as excellent.

In 2019, the enrollment process for FVRx was amended to include a Food Security Screening Tool, so that prescribers could more easily identify participants who qualify for the program. The program also added Community Health and Dental Care (CHDC) to its growing list of prescribing partners, for a total of 4 partners and 83 surveyed participants.



The percentage of respondents who reported never worrying about running out of food before being able to purchase more rose by 26%. In 2019, the pre and post surveys were also amended to include question regarding mental health. The percentage of those surveyed who always felt stressed dropped by approximately 71% and 86% reported their health as good or excellent.

The following year, in 2020, WIC and Community Volunteers in Medicine (CVIM) became prescribing partners. Up until this point, all clients met in person with their prescriber; enrollment documents and surveys were filled out on paper and faxed, emailed, or delivered in person to CCFB. However, the spread of the COVID-19 pandemic before the start of the Fresh2You market season this year caused drastic changes to the way in which the program was administered.

Following the first round of quarantine in March of that year, prescribing partners were unable to meet with their patients in person and all appointments were conducted virtually. With the hiring of the first FVRx Coordinator in July of 2021, online versions were made of all enrollment and survey documents, so that providers could still administer screenings and enroll new patients. Despite the best efforts of staff and prescribing partners, the pandemic took its toll; fewer participants were enrolled and market attendance dropped.

Despite these challenges, 74% percent of surveyed participants reported eating more fruits and vegetables as a result of their prescription that year, and 52% categorized their physical health as good or excellent. Further, only 5% of participants reported often worrying about running out of food before being able to purchase more.

In 2021, FVRx added 2 new prescribing partners (Penn Family Medicine of Southern Chester County and ChesPenn) as well as two partner CSAs (Two Gander Farm and Forge Hill Farm). A small number of CSA shares were offered to FVRx participants at partner WIC offices as an alternative to Fresh2You Mobile Market redemption. All told, FVRx enrolled 224 members. The following sections of this report focus on the results of the 2021 season.



2021 Season Survey Data

I. METHODOLOGY

First, we analyzed the demographic that we serve by examining our Fruit and Vegetable Prescription (FVRx) participants' responses to the 2021 Enrollment and Pre Season Survey questions. (Please note that we only surveyed participants who redeemed their prescription at our Fresh2You Mobile Market. Of our 8 prescribing partners (The Clinic, ChesPenn, LCH, the Chester County Health Department WIC Office, Community Volunteers in Medicine, Penn Family Medicine of Southern Chester County, the Coatesville VA Medical Center, and Community Health and Dental Care), 5 pre surveyed their participating FVRx patients in 2021 before the start of the market season in June. All responses were entered into Survey Monkey and analyzed on both Survey Monkey and Excel Spreadsheets. The following data presents participants' responses to the surveys, with results presented in percentages rounded to the nearest whole number. Our data covers 5 key areas: physical health, mental/emotional health, financial security, food insecurity, and additional demographics.

I. ANALYSIS

i. Physical Health

Respondents had an average body mass index (BMI) of 30.6 and an average blood pressure of 122/74. Further, they had an average A1 cholesterol level of 7.4%. Moreover, when asked their opinion of their own health, only 6% of participants regarded their health as excellent. 33% reported their health as good, 45% as fair, and 16% stated that their health was poor.



ii. Mental and Emotional Health

When asked to describe their mental health, the largest group of respondents (46%) reported their health as good. 30% reported theirs as fair, 13% reported excellent, and 10% reported their mental/emotional health as poor. Further, patients were asked to rate their stress levels, reporting how frequently they felt stressed in the last 2 weeks leading up to the survey. The largest group reported feeling stressed sometimes (36%), followed by rarely (21%), most of the time (19%), always (16%), and never (7%). Lastly, participants were asked to state their self perceptions of their weight; respondents most frequently stated that they perceived themselves as overweight (35%), followed by normal/healthy weight (29%), underweight (20%), and obese (16%).

iii. Financial Security

Next, patients were asked a variety of questions about their finances and financial situation. When asked if they had enough resources to purchase the produce they wanted (with cash, card, SNAP/EBT, WIC, or other tender), a full 73% reported that they only sometimes had enough. 15% reported that they never had enough, and only 12% reported that they often had enough. Despite these limited resources, only 3% were enrolled in WIC and 33% enrolled in SNAP/EBT. The greatest number of participants reported annual household incomes between \$15,001 and \$25,000 (28%), followed by income between \$25,001 and \$35,000 (25%), income below \$15,000 (18%), income above \$45,000 (16%), and income between \$35,001 and \$45,000 (13%). As determined by comparing their annual household income with their household size, a full 92% of respondents were living at or below 200% of the Federal Poverty Line.

iv. Food Insecurity

When asked how frequently throughout the last year they were concerned about running out of food before being able to get more, the largest group of respondents (43%) answered sometimes. 37% answered never, and 20% answered often. Of these participants, 12% did often run out of food before being able to get more, while 34% sometimes did. 54% reported never running out. When asked about their fresh fruit consumption in the week leading up to the survey, 39% ate fresh fruit once per day, 22% ate fresh fruit less than once a day, 21% ate it twice a day, 10% never ate fresh fruit, and 7% ate fresh fruit 3 or more times a day. Similarly, 37% ate fresh



vegetables once a day, 27% ate them less than once a day, 19% had them twice a day, 9% had them 3 or more times a day, and 7% never had fresh vegetables. For those who did eat fruits and vegetables, 20% reported often eating a variety, while 72% percent reported only sometimes eating a variety, and 8% reported never eating a variety.

Additionally, participants were asked how often in the previous month they had skipped meals due to a lack of food. While 60% reported that they never skipped meals, 31% reported that they sometimes did, and 9% reported that they often did. However, only 23% of them visited a food pantry in the past month. Further, 30% stated that they were not easily able to travel to a place that sold fresh produce.

v. Demographic Data

Next, prescribers collected a variety of general demographic data. 60% of participants identified as female, 40% identified as male, and none identified as non binary or other. 6% were aged 18-25, 10% were aged 26-35, 22% were aged 36-45, 16% were aged 46-55, 31% were aged 56-64, and 14% were aged 65 or older. Lastly, the largest group of respondents identified as Hispanic or Latinx (43%), followed by white (35%), black (16%), Native American or Pacific Islander (2%), and Other (6%).

III. DISCUSSION

vi. Barriers to Food Access

Many factors potentially affect our participants' access to fresh, healthy produce and eligibility for state and federal programs. First, not all participants may have reliable transportation. This reality severely limits the distance they can travel to purchase food as well as the amount that they can purchase to carry home, if they are walking or taking public transit. Further, English is a second language for many participants, which may make self advocacy in professional and social service settings intimidating and challenging. Moreover, to be eligible for SNAP/EBT or WIC enrollment, a household must have an income at or below 130% or 185% of the federal poverty



line, respectively. However, Chester County is the wealthiest county in the state of Pennsylvania, making the cost of living exorbitant in comparison to other regions of the nation (24/7WallSt). Residents may live above 185% of the federal poverty line while still not making enough to comfortably afford the cost of living in Chester County.

vii. Statistical Significance

Our sample size does vary depending on the question, as our survey response rate was below 100%. Therefore, the previous data summarize all answers from respondents, not answers from all program participants. In the future, we could adjust our surveying methods to increase our sample size and conduct a full statistical analysis of our data to calculate the confidence level.



Case Study: *The Clinic's* Pre Season and Post Season Survey Data

IV. METHODOLOGY

Due to the aforementioned challenges presented by COVID-19, The Clinic was the only prescribing partner that was able to complete both pre season and post season surveys. They conducted telehealth and in person appointments with FVRx members to gather all necessary data, recorded it on paper copies of the surveys, and faxed copies of all surveys to CCFB. FACE staff then entered the raw data into Survey Monkey and used both Survey Monkey and Excel Spreadsheets to examine the resulting information.

V. ANALYSIS

viii. Physical Health

After participation in the FVRx program, our respondents showed an average drop in BMI of 2 points, from 35 to 33. Further, 17% of those pre surveyed reported their physical health as excellent, 28% reported it as good, 44% reported it as fair, and 11% reported it as poor.

Following involvement in FVRx, 14% of those post surveyed reported their physical health as excellent, while 57% reported it as good, 24% reported it as fair, and 5% categorized it as poor.

ix. Mental and Emotional Health

17% of pre surveyed participants described their mental health as excellent, 50% claimed it was good, 28% said it was fair, and 6% said it was poor. In their post surveys, 43% of participants ranked their mental health as excellent, 41% rated it as good, 14% rated it as fair, and 3% ranked it as poor.

Further, when pre surveyed about their recent stress levels, 11% reported always feeling stressed, while 28% reported feeling stressed most of the time, 33% reported sometimes, 17% reported rarely, and 11% reported never. Following participation in FVRx, 11% reported always feeling



stressed, 11% reported feeling stressed most of the time, 49% reported feeling stressed sometimes, 16% reported feeling stressed rarely, and 14% reported never feeling stressed.

x. Financial Security

100% of pre surveyed participants were living at or below 200% of the federal poverty line, as compared to 92% of post surveyed participants. Additionally, only 22% of pre surveyed participants were enrolled in SNAP/EBT, whereas 27% of those post surveyed were enrolled. Further, only 6% of those pre surveyed were enrolled in WIC, as compared to 18% enrolled in WIC in the post surveys. Further, when asked if they had enough cash, debit, SNAP funds, or other tender to purchase the produce they wanted, 12% of pre surveyed participants responded that they often did, 71% replied that they sometimes did, and 18% replied that they never did. In the post surveys, however, 20% of participants responded that they often had enough, while 63% replied that they sometimes had enough, and 17% stated that they never had enough. 25% of pre surveyed participants had household incomes below \$15,000, 33% had incomes between \$15,000 and \$25,000, 33% had incomes between \$25,001 and \$35,000, and only 8% had incomes between \$35,001 and \$45,000.

xi. Food Insecurity

21% of pre surveyed participants stated that, in the last year, they often worried about running out of food before being able to purchase more. 68% said that they sometimes worried, and 11% stated that they never worried. However, in the post surveys, 11% of participants responded that they often worried, while 54% replied that they sometimes worried, and 35% replied that they never worried. In the pre surveys, 16% of participants did often run out of food before being able to purchase more, 47% sometimes ran out, and 37% never ran out. Of those post surveyed, no one reported often running out of food anymore, 54% reported sometimes running out, and 46% reported never running out. When asked if they had gone to a food pantry in the past month, 44% of those pre surveyed had, as compared to 47% of those post surveyed. Additionally, 53% of pre



surveyed participants replied that they could easily travel to a store or market that sold fresh produce, as compared to 80% of those post surveyed.

Moreover, 11% of those pre surveyed stated that they often skipped meals due to a lack of food, 44% sometimes skipped, and 44% never did. In the post surveys, 6% often skipped meals, 28% sometimes did, and 67% never did. Additionally, when asked how many times a day they consumed fresh fruit, 6% of those pre surveyed said they never did, 22% said they consumed fruit less than once a day, 17% said they consumed fruit once, 33% ate fruit twice, and 22% had fruit three or more times. In the post surveys, no one said they never ate fresh fruit, 3% said they ate it less than once a day, 35% ate fruit once a day, 35% ate fruit twice a day, and 27% said they ate fresh fruit three or more times. When asked the same question about daily vegetable consumption, none of those pre surveyed stated that they never consumed fresh vegetables, 11% stated that they did less than once a day, 44% said they did once a day, 22% said twice a day, and 22% said three or more times per day. When post surveyed, no participants stated that they never ate fresh vegetables, 3% did less than once a day, 23% said they did once a day, 37% said twice a day, and 37% said they did three or more times daily.

Additionally, 29% of pre surveyed participants reported often eating a variety of fresh fruits and vegetables, while 65% said they sometimes did and 6% said they never did. During the post surveys, 50% of participants responded that they often ate a variety, while 47% did sometimes and only 3% never did. When asked if they were eating more fresh produce as a result of their Fruit and Vegetable Prescription during the post surveys, 91% of participants stated that they were.

xii. COVID

Lastly, post surveyed participants were asked two questions about the effects of COVID-19 on their family. 57% experienced losing a job or having decreased wages because of COVID-19, and 75% of participants reported that COVID-19 made their finances tighter.



VI. DISCUSSION

xiii. Physical Health

Notably, surveyed participants showed an average decrease in BMI of 2 points. Further, the percentage of participants who ranked their health as good rose by 29%, while the percentage of those who stated that they were in poor health fell by 6%.

xiv. Mental and Emotional Health

When asked to describe their mental health, 26% more participants stated that their mental health was excellent (rather than good, fair, or poor) after participation in the FVRx Program. When asked about their stress levels specifically, 17% fewer participants stated that they were stressed most of the time, and 16% more claimed that they were only stressed sometimes (rather than always, most of the time, rarely, or never).

xv. Financial Security

8% fewer participating households were living at or below 200% of the federal poverty line in the post surveys. Further, 8% more participants reported often having enough money or other legal tender to purchase the produce that they wanted, 5% more were enrolled in SNAP/EBT than before, and 12% more were enrolled in WIC.

xvi. Food Insecurity

Some of our most significant findings deal with the food security statuses of our participants. After participating in the FVRx Program for June through November 2021, the percentage of those who reported never worrying about running out of food rose by 24%. Further, the percentage of people who often did run out of food dropped by 16% down to 0 participants—no one reported often running out of food following enrollment in FVRx. Further, 23% more participants never skipped meals due to lack of food.

When asked about their fresh fruit consumption, the percentage of those who never ate fresh fruit on a daily basis dropped 6% down to none—everyone ate some amount of fruit every day. 25% more participants reported eating fruit at least once every day in the post surveys, and 30% more



reported eating vegetables at least twice a day, as well. 21% more respondents stated that they often consumed a variety of fruits and vegetables and 27% more participants said that they could easily travel to a store or market at which they could purchase fresh fruits and vegetables. Remarkably, 91% of participants stated that they ate more fruits and vegetables as a direct result of receiving their prescription.

xvii. Statistical Significance

Further, our survey rate may be below 100%, as some participants may not have been surveyed by the Clinic during the post survey period or may have skipped certain questions. Additionally, we have limited biometric data to compare from the pre and post surveys, as the Clinic was conducting virtual telehealth visits during these periods of the COVID-19 pandemic; therefore, we don't have the necessary blood pressure and A1C% readings to conduct a comparison. As a result, the previous data summarize all answers from respondents from The Clinic, not answers from all program participants. Discrepancies in the reported percentages could also occur due to 1) respondents selecting more than one answer in response to a question (e.g. identifying as two ethnic or race groups), as well as 2) rounding each percentage calculation to the nearest whole number.

In the future, we could adjust our surveying methods to increase our sample size and conduct a full statistical analysis of our data to calculate the confidence level.