

Evaluation of the Colorado Nutrition Incentive Program (CNIP) 2022 Growing Season

January 2023

Evaluation Report

Kaiser Permanente Colorado
Institute for Health Research
Partners in Evaluation and Research Center



Transforming Food Systems

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This evaluation report was produced in collaboration with Nourish Colorado by the Partners in Evaluation and Research Center at the Kaiser Permanente Colorado (KPCO) Institute for Health Research (IHR). The Partners in Evaluation and Research (PiER) Center's mission is to implement collaborative and meaningful evaluation and research by designing projects that answer relevant questions; providing results that help organizations learn and take action; building the internal capacity of organizations to conduct evaluation. The evaluation team includes Elizabeth Tucker (primary author), Tobie McPhail, and Morgan Clennin (PI). For questions, please contact Dr. Morgan Clennin (morgan.n.clennin@kp.org) or Rakia Ranney (rakia@nourishcolorado.org).

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Learn more about PiER Center at: <https://www.pier-evaluation.org>
Learn more about Nourish Colorado at: <https://nourishcolorado.org/>
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EXECUTIVE SUMMARY

The Colorado Nutrition Incentive Program (CNIP) aims to create sustainable partnerships with the local agricultural system and federal food assistance programs like the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) and the Older Americans Act Congregate Nutrition Program. CNIP focuses on creating permanent nutrition security for Coloradans experiencing economic instability through access to locally produced, fresh, and nutritious fruits and vegetables.

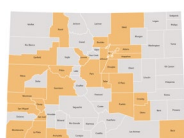
Key Achievements and Outcomes:

CNIP Reach

In 2022, CNIP was carried out successfully for a fourth growing season.



Over 1,300 produce shares
distributed



28 Colorado counties
participated in CNIP



~2,000 households
received CNIP produce



5,000-6,000 Colorado residents
reached through CNIP

CNIP Outcomes

Short-term outcomes were assessed across growers, local county agencies, and WIC participants.

Key evaluation findings include:



Helping At-Risk Families

67%

of WIC households reported being food insecure at baseline



Improving Health Behaviors

76%

reported their family increased consumption of fruits and vegetables because of CNIP participation



Impact on Growers

76 farmers/growers

supported by CNIP by opening new and untapped local markets and partnerships



County WIC Agency Support

94%

of county WIC agencies indicated their interest to continue CNIP participation

Opportunities

Opportunities to improve CNIP implementation are presented from multiple perspectives including WIC participants, growers, and local county agencies.

Key Strategies include:

- Develop Sustainable Infrastructure to Administer CNIP
- Strengthen and Expand Partnerships & Diversify Growers
- Build Participant Capacity & Improve Produce Knowledge
- Enhance Systems for Implementation, Communication, and Feedback Loops

The collective commitment and dedication across diverse partners to successfully implement CNIP has the potential to substantially improve access to local fruits and vegetables among Coloradans receiving food assistance benefits. Ongoing efforts are focused on implementing identified strategies to support CNIP sustainability and expansion.

INTRODUCTION

Food security is defined as availability and access to food for a healthy and active life. Nutrition security looks beyond just the quantity of food available and examines the quality of the food available. Affordability, accessibility, nutritional value, and food safety are all elements of nutrition security.

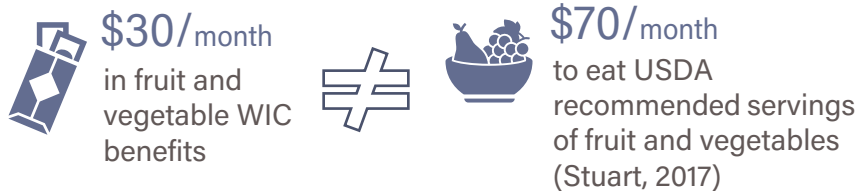
Eating healthy food is one of the most important actions mothers and children can take to remain healthy. Health outcomes related to food and nutrition insecurity include increased risk for obesity, higher rates of chronic disease in adults, as well as risk of developmental problems and mental health issues in children (Gundersen, 2015).

When people are food and nutritionally secure, they experience multiple positive physical and mental health outcomes (Angelino et al., 2019).

For families with barriers to access, fruit and vegetable intake is often well below recommended levels due to lack of accessibility and affordability.

Food Insecurity in Colorado

Federal food assistance programs like the Special Supplemental Women, Infants, and Children (WIC) program help to address food insecurity, but often do not provide enough assistance for families to purchase the healthy food they need.



Our current structures and systems do not support the most vulnerable in achieving the benefits of a healthy diet or local food systems and under-represented growers whose businesses recirculate dollars in local communities and support resilient food systems (Gallo, 2019).

The modern food system has built tremendous inequity into the supply chain for those who experience deep economic disadvantages, such as Black, Indigenous, and People of Color (BIPOC) and women. What is more, our federal food assistance system is piecemeal and difficult to navigate.



Photo credit: Switch Gears Farm

According to a 2016 study, families that were food insecure had health care expenses 20% higher than families who were food secure; this represents an annual difference of almost \$2,500 per year (Palakshaapa, 2016).

Today, one in three Coloradans report food insecurity, with 43% of non-white and Latinx Coloradans continuing to report that they struggle to put food on the table (Hunger Free Colorado, 2021).

NOURISH COLORADO and the COLORADO NUTRITION INCENTIVE PROGRAM (CNIP)



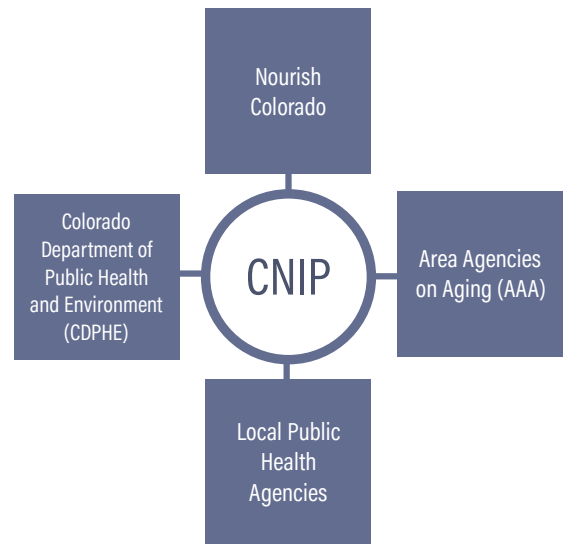
Nourish Colorado is a non-profit organization in Denver that works to transform Colorado’s food system to ensure all Coloradans have equitable and abundant access to nutritious foods from sustainable sources.

Through advocacy for better policies, statewide initiatives, and partnerships with communities, Nourish Colorado is championing a future-forward food system that nourishes all Coloradans. Nourish Colorado provides and implements the **Colorado Nutrition Incentive Program (CNIP)** to improve access to local and fresh produce among WIC families.

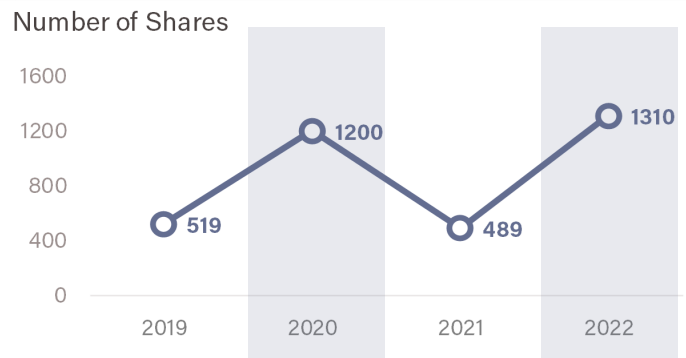
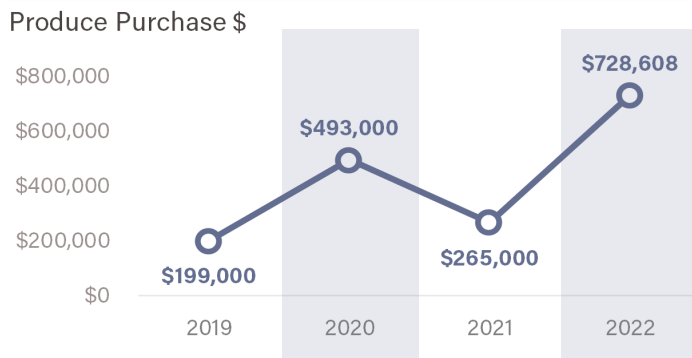
Colorado Nutrition Incentive Program (CNIP)

The implementation of CNIP is overseen by a collaboration between Nourish Colorado (lead), the Colorado Department of Public Health and Environment (CDPHE), local public health agencies, and Area Agencies on Aging (AAA). CNIP aims to create sustainable partnerships with local agricultural systems and federal food assistance programs like WIC and the Older Americans Act Congregate Nutrition Program.

CNIP focuses on creating permanent nutrition security for Coloradans experiencing economic instability through access to locally produced, fresh, and nutritious fruits and vegetables. Piloted in 2019, CNIP has been implemented on a broader scale from 2020 to 2022.



Rising inflation from 2020 to 2022 has nearly doubled the amount of funding necessary to purchase a similar number of food shares.



IMPLEMENTING the COLORADO NUTRITION INCENTIVE PROGRAM (CNIP)



Photo credit: Mountain Freshies, Honey Acre Farm

1

RECRUIT AGENCIES & DEVELOP GROWER PARTNERSHIPS

Colorado Nutrition Incentive Program (CNIP) recruits Colorado (CO) County WIC and AAA agencies to participate.

Nourish Colorado and organizational partners find local growers and Community Supported Agriculture (CSA) providers and distributes payments for produce shares.

2

IDENTIFY WHO TO SUPPORT

CO County WIC & AAA Agencies implement CNIP in their counties and identify potential households to support through CNIP from larger pool of WIC participants.

3

ENROLL PARTICIPANTS IN CNIP

CO County WIC and AAA agency staff recruit eligible participants (households and individuals enrolled in WIC & older adults living in participating counties) through email, friend referrals, and social media (Facebook) to enroll* in CNIP at no cost.

*Limited resources affected how many interested people could participate. Counties used creative techniques to spread available produce to additional families:

- Maintained waitlists in case a spot opened or there was extra produce
- Distributed CSA's every other week or provided vouchers for specified dollar amounts to buy produce from farmer's market instead of receiving full CSA share

4

PRODUCE DISTRIBUTED TO PARTICIPANTS

Locally grown and sourced produce (fruits and vegetables) is dispersed to CNIP participants as Community Supported Agriculture shares (CSA) (produce boxes or bags) during the CO growing season (June to October).

- Each CSA typically includes a weekly or bi-weekly produce selection with enough produce to feed a family of four.
- Produce is distributed by home delivery and pickup from local farmer's markets and farms.
- Produce varies by grower, time of year, and factors such as weather and growing altitude.

WIC provides federal grants to states for supplemental foods, health care referrals, nutrition education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children up to age five who are found to be at nutritional risk (USDA WIC).

EVALUATING the COLORADO NUTRITION INCENTIVE PROGRAM (CNIP)

Purpose

The PiER Center worked collaboratively with Nourish Colorado to develop the evaluation plan, evaluation questions, and methods to ensure relevancy, utility, and feasibility.

The overarching goal of the 2022 CNIP evaluation was to design and implement a utilization-focused evaluation to:

- Assess the reach and outcomes of the 2022 CNIP initiative on:
 - participating WIC households
 - local growers and farmers
 - county WIC agencies
- Identify facilitators and barriers to program implementation and expansion.

To accomplish this aim, the following evaluation objectives were co-developed with Nourish Colorado:

CNIP Reach	Document the reach of the 2022 CNIP program by county, local farmers and growers, and participants.
Participant Outcomes	Evaluate participant-level outcomes including changes in fruit and vegetable consumption and food security.
Grower Outcomes	Assess how CNIP participation impacted local farmers and growers' access to new markets and financial viability.
Opportunities	Identify facilitators and barriers to sustained CNIP participation and expansion among agencies, local growers, and participants.

Methods

A mixed methods evaluation approach was used (Figure 3) to explore program reach, outcomes, and facilitators and barriers to program implementation.

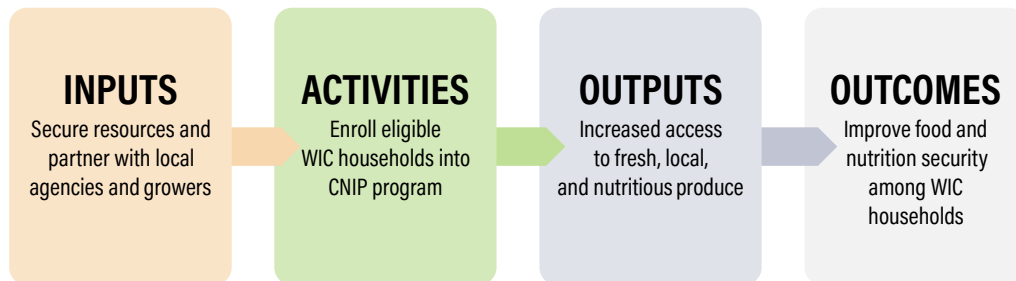


Figure 3. Logic Model: Colorado Nutrition Incentive Program, WIC Households

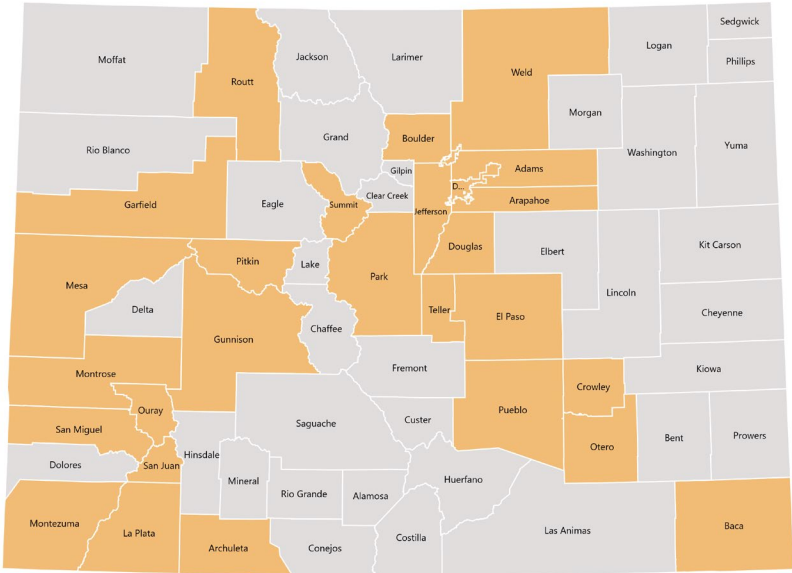
The evaluation team worked with Nourish Colorado to identify the appropriate short-term and intermediate outcomes and the anticipated long-term impact of their work. This design and approach allowed evaluators to address evaluation objectives.

Decision makers, Nourish Colorado, local WIC agencies, and other stakeholders can use these findings to:

1. track the reach of the CNIP program and its impact on participating WIC families and local growers
2. identify opportunities and strategies to improve CNIP delivery, implementation, and expansion to increase access to locally grown produce among WIC families

2022 COLORADO NUTRITION INCENTIVE PROGRAM REACH FINDINGS

CNIP was implemented in **28 Colorado counties** with support from **76 local growers** that distributed **1,310 produce shares** (\$728,608 invested) to over **1,987 households** during the 2022 growing season.



WHO WAS INCLUDED IN THE DATA:

- 28 CNIP participating Colorado county WIC agencies
- 11 growers and food aggregators (non-profit and for-profit) in eight counties including Denver, El Paso, Jefferson, Mesa, Park, Pitkin, San Juan, and Teller counties

HOW DATA WAS COLLECTED:



November 2022 survey collected program participation and implementation activities in CNIP participating counties (See Appendix A for list of survey questions/metrics)



Secondary data obtained from Colorado WIC Data Dashboard



Interviews

COUNTIES

28 of Colorado's 64 counties (44%) participated in CNIP

This included:



24

county or public health WIC departments (represents 26 counties)



1

government entity



1

community food hub

Participating counties were:



11 urban counties



17 rural counties

- 4 mountain counties
- 9 front range counties
- 4 southern counties
- 11 western slope counties

Collectively **serves 74,000 WIC recipients** (~ 17,650 households)

2022 COLORADO NUTRITION INCENTIVE PROGRAM REACH FINDINGS



76 local growers or farmers provided produce to CNIP participants (WIC and older adult households)

Provided to CNIP Participants:



~29 (avg)

Produce CSA Shares
(range 2-160)

Growers and aggregators used a Community Supported Agriculture (CSA) share model to foster access and mutual support.



Weekly or Bi-Weekly
Distribution



May to October
2022 Growing Season

Growers Business

In addition to CSAs, their business and financial models included grants and distribution to:

- food banks
- restaurants
- natural grocers
- farmer's markets

They employed between 2 and 15 employees, and some used large groups of volunteers during the busy growing season.



Over half of the producers interviewed have worked with Nourish for two or more years.



CNIP PARTICIPANTS

CNIP distributed fresh produce to approximately **1,987 WIC and older adult households**. Based on available data¹, we estimate that CNIP reached nearly 6,000 Coloradans (range 2,980 – 8,940 individuals).

The total number of participants reached through CNIP is likely higher as:

- some households stopped participating during the season and were replaced by different households (*many counties maintained waitlists*)
- many participants reported sharing unused or surplus produce with neighbors, family, or other members of the community.

¹Reach estimates based on average household size and number of participating households. Each WIC household is estimated to include 4-5 people, 2-3 of whom are children. Older adult households typically have 1-2 members. (Source: Nourish Colorado)

Table 2. Study Population Characteristics

Population Characteristics	State	CNIP Participating Counties
Total Population (2019, N)	5,839,926	5,007,265
Persons in Poverty (%)	9.7%	11.2%
Persons reporting Food Insecurity (%)	8.3%	10.3%
Persons enrolled in WIC (per month) (%)	1.4%	1.6%

Source: U.S. Census Bureau 2021, Colorado WIC Data Dashboard, 2021 Colorado Health Access Survey, Feeding America

2022 CNIP REACH OPPORTUNITIES

CNIP Expansion (1-3 years)

Goal: Expand and sustain resources to purchase available produce for WIC families.

- **Dedicated Funding Stream.** Advocate for policy change to increase amount of WIC-allocated fresh fruits and vegetables and systems change to reduce barriers for local and small growers to increase access to produce to feed their communities.
- **Address Seasonality.** Identify and test promising strategies to support year-round distribution of and access to local produce (e.g., winter season, capital infrastructure funding).
- **Meet CNIP Demand.** WIC households not enrolled in CNIP were surveyed (n=48). An overwhelming majority expressed interest in participating.

96% Interested in participating in produce box program in the future

23% On a waitlist to be added to the program if space opened

Short-term CNIP expansion is limited by financial resources and capital investments. Additional financial resources could result in an immediate **25% increase** in WIC households served by CNIP.

Combining county WIC agency ability to provide administrative support to additional families, producer desire to meet food needs of Coloradans, and WIC household interest, there is strong backing for CNIP expansion from all the constituents involved.

CNIP Sustainability (5-10 years)

Goal: Co-create community-led systems level solutions to enhance CNIP implementation, expand access to fresh fruits and vegetables among WIC families, and transform local food systems.

Importantly, there are systems-level barriers that must be addressed before CNIP can be successfully expanded and sustained over time. It will be critical to work with communities and partners to understand the structural barriers and identify solutions to address them.


2022 COLORADO NUTRITION INCENTIVE PROGRAM PARTICIPANT FINDINGS


WHO WAS INCLUDED IN THE DATA:

Main Group: Adults receiving WIC benefits, enrolled in CNIP, and received produce shares in a subset of participating counties (Boulder, Broomfield, Denver, El Paso, Pueblo, Teller, Weld)

- 105 participants responded to the 1st survey (May) and 61 responded to the 2nd survey (November)
- Survey respondents with complete data for the 1st and 2nd surveys had their data linked to look at key evaluation measurements

HOW DATA WAS COLLECTED:

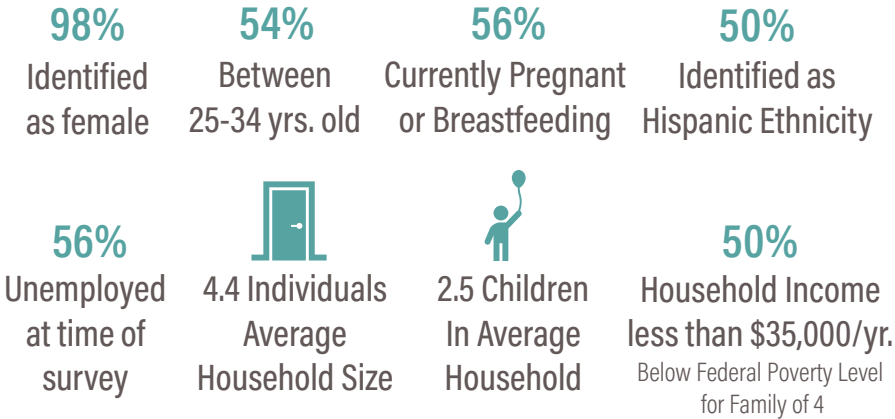
 **2 online surveys** (May and November) given in both English and Spanish asked participants in the main group to document their households' fruit and vegetable consumption, food security, and exposure to CNIP (See Appendix B for list of survey questions/metrics.)

 All respondents were offered a \$20 incentive for their survey participation



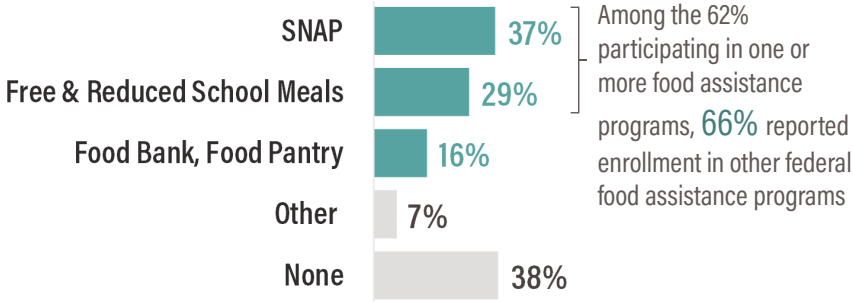
Who were CNIP participants?

Among the CNIP participants surveyed (n=105):



Food Assistance Program Participation (n =105):

Nearly 62% of participants surveyed reported participating in one or more food assistance programs (plus WIC and CNIP).



64% of WIC households participating in CNIP reported being food insecure² in the past 30 days.



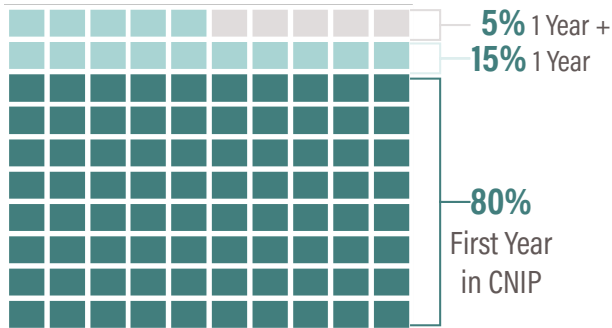
2 in 5 respondents reported they do not receive support from other food assistance programs beyond WIC

²Participant indicated they did not have enough food in the past 30 days, and/or it was sometimes or often true that they worried about food running out, food didn't last and there wasn't money to buy more, or it was hard to get enough healthy food.

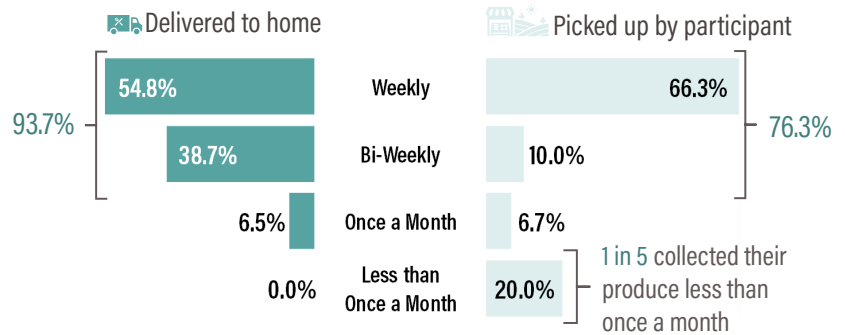
2022 COLORADO NUTRITION INCENTIVE PROGRAM PARTICIPANT FINDINGS

CNIP Participation and Exposure

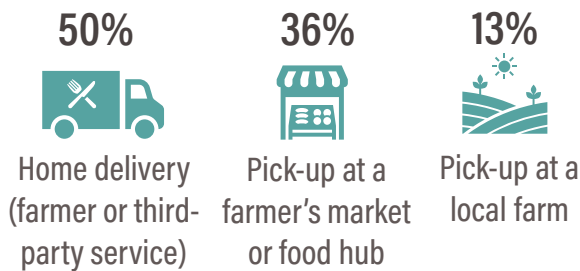
Participants were overwhelmingly new to CNIP:



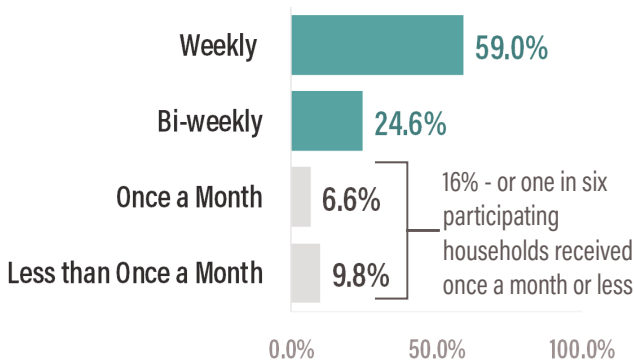
A greater portion of participants who had their shares delivered received produce on a weekly or bi-weekly basis compared to participants that picked up (n = 61)



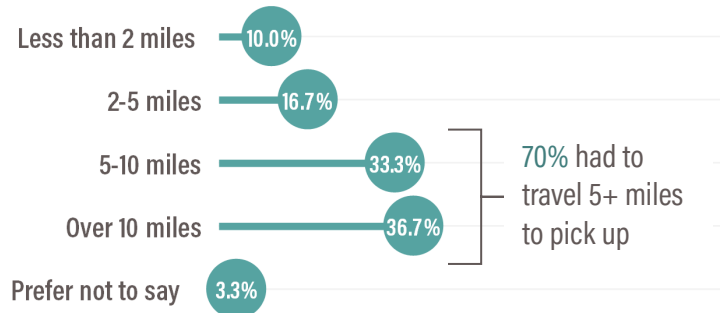
Produce shares were distributed to WIC households participating in CNIP via:



Among CNIP participants, nearly 84% reported receiving their CSA produce on a weekly or bi-weekly basis (n = 61)



Most participants that picked up produce from local farms, farmer's markets, or food hubs had to travel ≥5 miles to the pickup location (70%) (n = 30)



Home delivery of the produce to WIC participants may reduce barriers to program participation.

"I found it to be a great experience, learn to prepared, ate vegetables that I would have never been brave enough to venture in because of the cost and risk of not knowing how to prepare it and that my family would not like. In addition, picking up at the market allowed my little one to have some play and interaction with other kids. I felt very blessed to have taken part in the program. Thank you!"

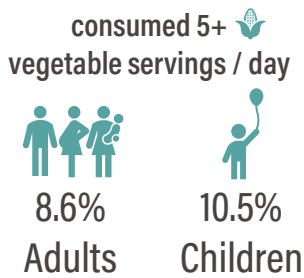
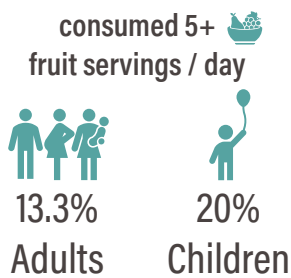
- CNIP Participant

Variation in program delivery (weekly vs. bi-weekly) was expected as some counties rotated weekly produce distribution between two groups of participants resulting in bi-weekly exposure.

2022 COLORADO NUTRITION INCENTIVE PROGRAM PARTICIPANT FINDINGS

Purchase and Consumption of Fruit and Vegetables

Prior to CNIP participation, most respondents reported low consumption of fruits and vegetables for their family – well below the USDA’s recommended intake.

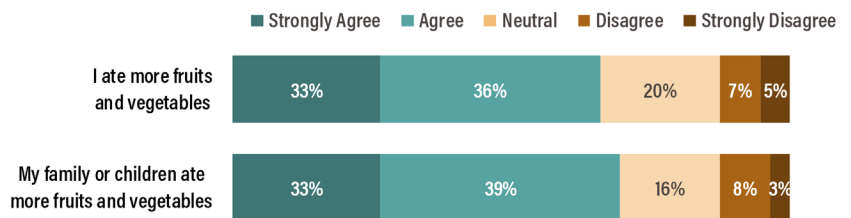


“We really enjoyed our weekly produce pickup this summer. My kids, 2 and 4, were always excited on pick up day and were very involved in unpacking the bag. There were a few new items throughout the summer that we had not eaten before and it was fun to experiment. This program also guaranteed that we always has fresh produce at home and the excitement helped in enhancing my kids willingness to try everything that came in the produce box. Thank you for this program!”

-Pueblo, CO CNIP Participant

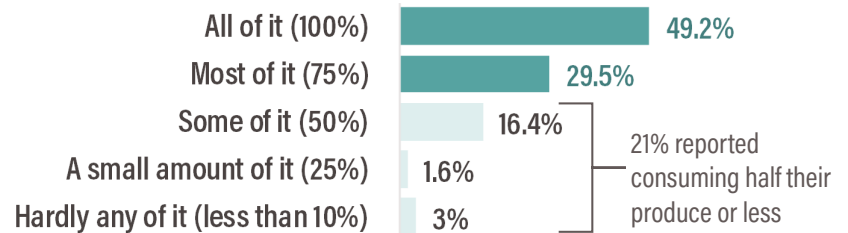
85% of CNIP participants stated they would like to participate in the coming year.

A majority of CNIP participants (69%) reported their own and other members of their household’s (76%) daily consumption of fruits and vegetables increased because of participation in the program.



Following participation in CNIP, 43% of households increased their own purchases of local produce through farmer’s markets and CSA shares.

Nearly 4 in 5 CNIP participants reported consuming all (49%) or most (30%) of their weekly produce allotment.



Among households that consumed half their produce or less (21%), the most common reasons cited for not consuming were:

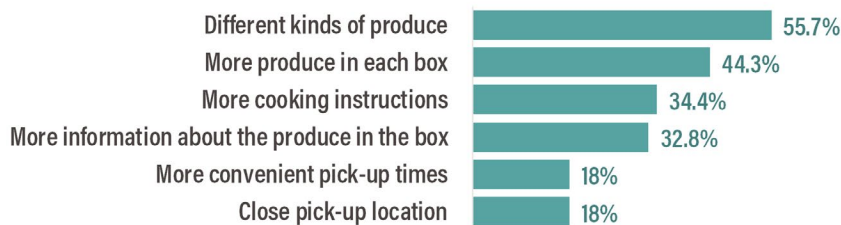
- 46% did not know what the produce was or how to cook it
- 31% did not like the produce provided
- 31% felt like there was too much to consume (leftovers or not enough people in the household to consume)

The most common use of leftover food was sharing produce with others (85%), which likely increased the overall reach and impact of CNIP (data not available).

With respect to the contents of the produce box, **74% of participants were satisfied with the amount** of produce received **and 88% were satisfied with the quality** of the produce.

2022 CNIP PARTICIPANT OPPORTUNITIES

How could the produce box program be improved? (Select all that apply) (n=61)



Over half of participants said that increasing produce variety and adding more fruit would increase their consumption.

One-third of participants wanted more information about the included produce as well as instructions on how to prepare it.

Produce Variety

Strengthen Grower Partnerships

Establish a network of grower partnerships to diversify produce availability and create support for local growers to improve CNIP delivery – working together to create a local food economy to mitigate food insecurity.

First, we must gauge growers' interest in establishing cross-farm partnerships to expand farmer networks and diversify produce availability; and identify infrastructure supports to sustain network (e.g., single aggregator vs. hub/spoke model; cross county collaborations).

Diversify Growers

Strategically recruit growers to improve diversity and geographic scope in underserved areas lacking access to fresh healthy foods and provide education (e.g., apprenticeships for young farmers and farmers of color).

Produce Knowledge

Improve Produce Knowledge

Provide continued and ongoing education to improve knowledge of produce and capacity to cook with produce by sharing culturally relevant and easy recipes that align with contents of the weekly produce share.

Communication Approach

Identify types of information that would be most helpful and how participants would like to receive this information; Engage participants to co-develop materials and strategies.

“It would be really nice to have some suggested basic recipes that use a lot of the vegetables the farmers provide. Since produce I was unfamiliar with and had a hard time figuring out how to incorporate it into our weekly menu.”

Delivery & Pick Up Accessibility:

Delivery and pick-up options varied by county and was a key driver of product access.

Equitable Distribution Approaches

Explore varying approaches to distributing produce shares to participants – aiming to minimize participant burden and maximize produce distributed to WIC families (e.g., identifying central and convenient distribution sites, delivery service, wider pick up windows).

“I had to drive about an hour and get there within the time window which was a challenge since I work full time.”

2022 COLORADO NUTRITION INCENTIVE PROGRAM GROWER FINDINGS

WHO WAS INCLUDED IN THE DATA:

- A list of local farmers, food aggregators, and growers participating in the CNIP program during the 2022 growing season was obtained from Nourish Colorado.
- Eleven interviews were conducted with growers and agricultural aggregators who provided fresh produce to CNIP participants across Colorado.

HOW DATA WAS COLLECTED:



Interviews

(See Appendix C for list of interview questions/metrics)

A semi-structured interview was used to understand:

- Grower experience working with Nourish CO and WIC families, any impacts on their business or markets served, and ideas for program growth, sustainability, and larger food system impact.
- Interviews were recorded to supplement interviewer notes.
- A thematic analysis of interview recordings and notes was used to elicit learnings from grower experiences and outline grower suggestions for program growth and improvement.



All participants were offered a \$40 incentive for their interview participation



Grower Impact and Perspectives

76 growers across 28 Colorado counties provided produce to CNIP participants. Nourish Colorado has worked to maintain and steadily increase the number of growers engaged in CNIP.

Growers and aggregators shared numerous benefits from working with Nourish for one or more years. Participants became more involved (e.g., more partners, Nourish board participation) and expanded their operations and distribution, especially those working with Nourish for multiple years.

CNIP supports local farmers and growers by opening new and untapped local markets and partnerships

The interviewees shared a high degree of enjoyment and values-alignment with Nourish as well as deep satisfaction with their ability to reach underserved community members such as the WIC participants and older adults.

Key benefits they named:

- meeting community needs for access to high quality produce, while gaining support for early growing season financial needs
- increasing opportunities for community partnership and funding
- improving access to critical infrastructure and logistic support for produce distribution
- building a culture of respect for local farming

Expansion:

Growers were able to expand their markets and community reach, increase engagement with vulnerable populations and the community, and expand growing and the quantity of CSAs they were able to offer.

“The certainty of knowing we have potentially 21 folks who are going to come and we have the money from Nourish to buy the food ... it’s certainty in a system where there is much uncertainty.”

- Participating Grower

Funding:

Being paid up-front through the program allowed growers the financial stability at the start of the season to plan their production and purchase inputs. Being paid full market price for their shares led to significantly positive financial impacts for the growers/aggregators.

2022 CNIP GROWER OPPORTUNITIES



Grower and Aggregator Identified Opportunities for Improvement

Overall, growers' enthusiasm and positivity for their partnership with Nourish was clear and they valued continuing to be a part of CNIP's growth and learning.

Some opportunities included:

Grower-Participant Communication:

- Grower ability to obtain participant emails on a timely basis from county WIC agencies to share important information about produce. Due to privacy concerns, not all emails could be acquired.
- More resources and outreach for Spanish speakers and education for and recruitment of diverse farmers (e.g., apprenticeships for young farmers and farmers of color).

Infrastructure and Capital Investment:

- Shared grant writing or fund development to address limitations in capital funding for expensive equipment such as trucks, refrigeration, and storage at strategic regional locations, as well as land for growing.
- Scalability efforts could be improved by strategically recruiting growers and improving geographic scope of food delivery in underserved areas and populations that lack access to fresh foods.
- Support with food safety regulation/oversight could lead to expanded partnerships with schools and higher quality food and access for vulnerable groups.

Thinking big, one aggregator talked about scaling CNIP with the vision of building a local food economy to mitigate food insecurity.

"CO has so many small farmers who have nutritious food and yet we have such high rates of food insecurity, COVID really showed us that charitable food is not sustainable, food banks are not sustainable, global food chains are not sustainable but what is sustainable is local economies and local food economies..."

Grower-Funder Communication:

- Earlier mutual communications and MOUs for planning, especially around the number of CSA shares that would be needed for WIC families as it allows growers to plan and allocate produce.
- A few growers producing at capacity said they could increase the shares available to WIC participants with earlier notice.

Feedback Loops:


- Most growers indicated a strong desire for feedback from participants in addition to participants requesting more information from growers.
- Growers mentioned they would welcome any information from participants that would help improve the produce box program, along with suggestions and questions about how to utilize the produce provided.
- Participants also indicated a desire for added information from growers about the food, revealing an important opportunity for both sides through further coordination of feedback.



2022 COLORADO NUTRITION INCENTIVE PROGRAM COUNTY WIC AGENCIES

WHO WAS INCLUDED IN THE DATA:



- WIC agencies that help administer the program
- County WIC agencies from 18 counties responded

HOW DATA WAS COLLECTED:

 **One online survey** distributed at the end of the growing season

 Wonderful program, especially since we have a grower who does deliveries. Truly appreciate the funding from Nourish that allows us to offer this to our WIC families! 

94% of responding counties indicated their willingness to participate in the program again in the future.

 We already had a farmers market program going for the last 13 years. The produce box program from Nourish increased what we were able to provide to families by 3X!!!! It went over very well once we got rolling and was very appreciated by families and our local markets and growers. We are all in next year if possible!! 

- First year County WIC Agency

County WIC Agencies' Perspectives

78% of the counties had participated in CNIP previously.

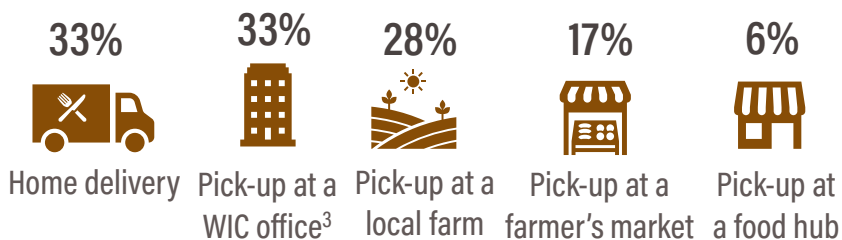
Participant Recruitment

County WIC agencies primarily recruited through:

- **72%** Individual Conversations
- **56%** Email
- **22%** Social Media

Grower Engagement and Satisfaction

Each agency established its own system for connecting growers with households. Some WIC agencies used multiple methods.



How Satisfied are WIC Agencies with...



CNIP Saturation

Among **39% of counties surveyed (n=18)**, the most common reason cited related to their ability to increase program participation was number of families interested in CNIP. Counties that identified this factor are smaller counties that have reached all (or nearly all)

eligible WIC households in their geographic area. Sustainability practices and strategies to maintain CNIP participation (among growers and WIC participants) and support institutionalization of CNIP delivery should be prioritized.

³Counties offering pick up at the WIC office did not overlap with counties included in the participant survey.

2022 CNIP COUNTY WIC AGENCIES OPPORTUNITIES

Administrative Support and Capacity

Lack of available resources to implement CNIP (or administration limitations) was the most common reason cited by county WIC agencies related to their ability to support CNIP and increase program participation.



Implementing the CNIP program creates additional responsibilities for staff; some counties have limited resources and staff must choose where to invest time. Due to this additional burden, CNIP may not be the highest of priorities.

Areas for Improvement:

WIC agencies identified several areas that could be improved through additional support including utilizing **Food Navigators** and a **CNIP stipend** for administrative support.



Food Navigators

Food Navigators could serve to:

- promote outreach
- coordinate relationships between participants, growers, and WIC agencies
- on-site support at Farmer's markets to explain programs
- participant education around produce provided
- recipe suggestion
- market tours



CNIP Stipend

A CNIP stipend for administrative support could be used for:

- staffing
- volunteers
- increasing the number of farmers who work in each location
- unpaid administrative time used for participant recruitment and maintenance of participants
- organizing delivery internally
- coordinating services across large, rural geographic areas where both delivery and pick-up have nuanced management

KEY FINDINGS AND RECOMMENDATIONS



Building Participant Capacity

Identify types of information that would be most helpful and how participants would like to receive this information; Engage participants to co-develop materials and strategies.

Key Findings

- 8 in 10 participants were new to CNIP and desired more information about the types of produce and cooking instructions.
- Unfamiliarity with the produce contributed to leftovers, waste, and program fatigue

Strategy

Improve Produce Knowledge

Provide continued and ongoing education to improve knowledge of produce and capacity to cook with produce by sharing culturally relevant and easy recipes that align with contents of the weekly produce share.



Strengthen and Expand Community Partnerships and Networks

Gauge growers' interest in working together to create a local food economy to mitigate food insecurity and identify infrastructure supports to sustain network (e.g., single aggregator vs. hub/spoke model; cross county collaborations).

Key Findings

- Growers voiced an overwhelming desire to support local communities through their produce, and some underserved counties still lack access to produce from local sources.
- Participants found the amount of produce to be acceptable but desired more variety.

Strategy

Strengthen Grower Partnerships

Establish a network of grower partnerships to diversify produce availability and create support for local growers to improve CNIP delivery.

Diversify Growers

Strategically recruit growers to improve diversity and geographic scope in underserved areas lacking access to fresh healthy foods and provide education (e.g., apprenticeships for young farmers and farmers of color).

KEY FINDINGS AND RECOMMENDATIONS



Develop Sustainable Infrastructure to Administer CNIP

Seasonality: Identify and test promising strategies to support year-round distribution of and access to local produce (e.g., winter season, capital infrastructure fundings).

Key Findings

- Annual variability in CNIP funds makes it challenging to sustain and expand the program; growers identified earlier notification of CNIP funding as an opportunity to support continued involvement.
- Lack of available resources was the most cited factor limiting county WIC agencies' ability to support and expand CNIP implementation.
- Food safety regulations and infrastructure limit growers from distributing produce to partners such as schools.

Strategy

Dedicated Funding Stream

Advocate for policy change to increase amount of WIC-allocated fresh fruits and vegetables and systems change to reduce barriers for local and small growers to increase access to produce to feed their communities.

Staff Stipend & Food Navigators

Provide a stipend to county WIC agencies for administrative support. Expand CNIP staff to include food navigators that support local implementation and serve as a liaison.

Capital Investment & Food Safety Oversight

Explore options to secure capital funding for expensive equipment and resources to support sustained and expanded CNIP delivery and adherence to food safety requirements.



Enhance Systems for Implementation

Explore approaches to distributing produce to participants aiming to minimize participant burden and maximize produce distributed to WIC families (e.g., identifying central and convenient distribution sites, delivery service, wider pick up windows).

Key Findings

- Growers want feedback from participants about how to improve their experience. Participants want more information about produce. Communication barriers include lack of contact information and limited Spanish resources.
- How produce was distributed was a key factor influencing CNIP participation among WIC families.

Strategy

Communication and Feedback Loops

Develop infrastructure to support bidirectional communication between growers and participants with real-time feedback to enhance CNIP delivery.

REFERENCES

- Angelino, D., Godos, J., Ghelfi, F., Tieri, M., Titta, L., Lafranconi, A., ... & Grosso, G. (2019). Fruit and vegetable consumption and health outcomes: An umbrella review of observational studies. *International Journal of Food Sciences and Nutrition*, 70(6), 652-667.
- Gallo, A. (2019, November 13). [What is the True Cost of Food?](#) Sustainable Food Center.
- Gundersen, C., Ziliak, J.P. (2015, November). Food Insecurity and Health Outcomes. *Health Affairs* 34(11): 1830-1839.
- Hunger Free Colorado (2021, April). [A Survey of Hunger in Colorado](#). Hunger Free Colorado.
- Palakshappa, D., Garg, A., Peltz, A., Wong, C. A., Cholera, R., & Berkowitz, S. A. (2023). Food Insecurity Was Associated With Greater Family Health Care Expenditures In The US, 2016–17: Study examines the relationship between food insecurity and family health care expenditures. *Health Affairs*, 42(1), 44-52.
- Stuart, H. (2017, February 21). [How Much Do Fruits and Vegetables Cost?](#) U.S. Department of Agriculture.

Appendix A: County WIC Agency Survey (question and metrics)

Question	Choices, Calculations, OR Slider Labels
Which County WIC Agency do you represent?	1, Boulder 2, Broomfield 3, Denver 4, El Paso 5, Jefferson 6, Teller 7, Tri-County 8, Pueblo 9, Weld/Sunrise CH 10, Other
Enter County Name:	
Has your county participated in the WIC produce box program before this current year?	1, No 2, Yes, 1 year 3, Yes, more than 1 year 4, I do not know
How many households were enrolled in WIC in your county on June 1, 2022?	
How many CSA shares does the county have for the WIC produce box program?	
How many total households participated in the produce box program throughout the entire growing season? Please include households enrolled at the beginning of growing season plus any new households that were added during the summer.	
Now we are going to look at retention within WIC. Among the enrolled WIC households, how many remained actively enrolled in WIC from June through October?	
Among the households that participated in the produce box program, how many remained actively enrolled in WIC June through October?"	
What method(s) did you use to recruit participants for the WIC produce box program? Select all that apply.	1, Email 2, Individual discussions with households 3, Social media 999, Other (please explain)
Please explain:	
How did participants receive their weekly produce box? Select all that apply.	1, Delivered to participant's home 2, Participant picked up at farm or grower location 3, Participant picked up at farmer's market 4, Participant picked up at food hub 5, Participant picked up at WIC office 999, Other (please specify)
Please explain:	
On average, how many households picked up their produce box each week?	1, Almost all 2, More than half 3, About half 4, Less than half 5, Almost none
How many growers were contacted to participate?	
How many growers participated in the program?	
Their willingness to participate in the program	1, Very Satisfied 2, Somewhat Satisfied 3, Neither Satisfied nor Dissatisfied 4, Somewhat Dissatisfied 5, Very Dissatisfied 6, Not Applicable

Appendix A: County WIC Agency Survey (question and metrics)

Question	Choices, Calculations, OR Slider Labels
Timely delivery of weekly produce boxes	1, Very Satisfied 2, Somewhat Satisfied 3, Neither Satisfied nor Dissatisfied 4, Somewhat Dissatisfied 5, Very Dissatisfied 6, Not Applicable
Sufficient quantity of produce	1, Very Satisfied 2, Somewhat Satisfied 3, Neither Satisfied nor Dissatisfied 4, Somewhat Dissatisfied 5, Very Dissatisfied 6, Not Applicable
Their communication with you (County WIC Agency)	1, Very Satisfied 2, Somewhat Satisfied 3, Neither Satisfied nor Dissatisfied 4, Somewhat Dissatisfied 5, Very Dissatisfied 6, Not Applicable
Their communication with the participants	1, Very Satisfied 2, Somewhat Satisfied 3, Neither Satisfied nor Dissatisfied 4, Somewhat Dissatisfied 5, Very Dissatisfied 6, Not Applicable
Is there opportunity to expand enrollment in the WIC produce box program in your county (are there additional households that are interested)?	
How many additional WIC households are interested (i.e. households from a wait list, others who expressed interest)?	
What factors limit your county's ability to expand the WIC produce box program? Select all that apply.	1, Number of growers 2, Number of produce box shares available 3, Number of families interested 4, Administrative limitations 5, Produce boxes are not culturally relevant enough for households 999, Other (please specify)
Please explain:	
Would your agency be willing to participate in the WIC produce box program again?	
Is there anything else you would like to comment on regarding the WIC produce box program?	

Appendix B: Participant Survey questions and metrics (baseline & follow-up)

Participant Baseline Survey (May)	Choices, Calculations, OR Slider Labels
Would you like to take the survey in English or Spanish?	1, English/Inglés 2, Spanish/Español
¿Desea tomar esta encuesta en inglés o español?	
Have you participated in the WIC produce box program before?	0, No 1, Yes, 1 year 2, Yes, more than 1 year
How did you hear about the produce box program?	1, WIC program office 2, Social Media 3, Friend or family member 999, Other (please specify)
Please Specify	
What method did you use to register for the produce box program?	1, Email 2, In-person 3, Web-based form 4, Phone 999, Other (please specify)
Please Specify	
Total amount of fruits and vegetables allocated	1, More than enough 2, The right amount 3, Less than enough
Variety of WIC approved fruits and vegetables	1, More than enough 2, The right amount 3, Less than enough
Quality of WIC approved fruits and vegetables	1, More than enough 2, The right amount 3, Less than enough
Cultural relevance of WIC approved fruits and vegetables	1, More than enough 2, The right amount 3, Less than enough
Where do you obtain fruits and vegetables? (Select all that apply)	1, Grocery Store (e.g. King Soopers, City Market, Walmart) 2, Wholesale Store (e.g. Costco, Sam's Club); 3, Farmer's Market 4, CSA or produce box 5, Your own garden 6, I do not get fruits and vegetables in addition to the produce boxes 999, Other (please specify)
Please Specify	
On a typical day, how many servings of vegetables do you eat? (examples of a serving: one cup of raw, leafy greens; 1/2 cup of fresh/frozen/canned peas or other vegetable; 1/2 cup of vegetable juice)	1, None - 0 2, 1-2 3, 3-4 4, 5-6 5, 7+
On a typical day, how many servings of fruit do you eat? (examples of a serving: one medium apple or peach; 1/2 cup of fresh/frozen/canned fruit; 1/4 cup of dried fruit; 1/4 cup of 100% fruit juice)	1, None - 0 2, 1-2 3, 3-4 4, 5-6 5, 7+
On a typical day, how many servings of vegetables do children in the household eat? (examples of a serving: one cup of raw, leafy greens; 1/2 cup of fresh/frozen/canned peas or other vegetable; 1/2 cup of vegetable juice)	1, None - 0 2, 1-2 3, 3-4 4, 5-6 5, 7+

Appendix B: Participant Survey questions and metrics (baseline & follow-up)

Participant Baseline Survey (May)

Choices, Calculations, OR Slider Labels

On a typical day, how many servings of fruit do children in the household eat? (examples of a serving: one medium apple or peach; 1/2 cup of fresh/frozen/canned fruit; 1/4 cup of dried fruit; 1/4 cup of 100% fruit juice)	1, None - 0 2, 1-2 3, 3-4 4, 5-6 5, 7+
In the past 30 days, my household had enough food to eat.	
Within the past 3 months, you were worried whether your food would run out before you got money to buy more.	1, Never true 2, Sometimes true 3, Often true
Within the past 3 months, the food you bought didn't last and you didn't have money to get more.	1, Never true 2, Sometimes true 3, Often true
Within the past 3 months, it was hard for you to get enough healthy food.	1, Never true 2, Sometimes true 3, Often true
What county do you live in?	1, Boulder 2, Broomfield 3, Denver 4, El Paso 5, Pueblo 6, Teller 7, Weld
What gender do you identify with?	1, Male 2, Female 3, Transgender 4, Gender non-conforming 999, Other 777, Prefer not to say
Please Clarify	
What is your current age?	1, 18-24 2, 25-34 3, 35-44 4, 45-54 5, 55-64 6, 65 years and older 777, Prefer not to say
Are you of Hispanic, Latino, or of Spanish origin?	1, Hispanic 2, Non-Hispanic 777, Prefer not to say
What race do you identify with? (Select all that apply)	1, White or Caucasian 2, Black or African American 3, Asian or Asian American 4, American Indian or Alaska Native 5, Native Hawaiian or other Pacific Islander 6, Multi racial 999, Other 777, Prefer not to say
Please Clarify	
How many people live in your household (for at least half of the year)?	

Appendix B: Participant Survey questions and metrics (baseline & follow-up)

Participant Baseline Survey (May)

Choices, Calculations, OR Slider Labels

How many people live in your household who are under 18? (Please enter the number of children in each age group)

- Under 1 year
- 1-5
- 6-10
- 11-14
- 15-17

- Under 1 year
- 1-5 years
- 6-10 years
- 11-14 years
- 15-17 years

Are you currently pregnant or breastfeeding?

1, Yes | 0, No | 777, Prefer not to say

What is your current employment status?

1, Employed | 2, Unemployed | 3, Retired | 777, Prefer not to say

What is your current household income (annual)?

1, Less than \$15,000 | 2, \$15,000 to \$24,999 | 3, \$25,000 to \$34,999 | 4, \$35,000 to \$49,999 | 5, \$50,000 to \$74,999 | 6, \$75,000 to \$99,999 | 7, Over \$100,000 | 777, Prefer not to say

Please select any food assistance programs you or someone in your household participates in (Select all that apply):

1, SNAP | 2, Free & Reduced School Meals | 3, Food bank | 4, Food pantry | 999, Other (please specify) | 6, None

Please Specify

Thank you for your participation. We collect your email address for two reasons: 1) to provide a gift card as an incentive; and 2) to connect your survey responses to each other over time. You can choose to provide your email for one, both, or neither of these options. They are completely separate and both are optional.

Would you like to receive a \$20 Target gift card for your participation? This is optional and your email address will not be used for any other communications except to send your electronic gift card.

1, Yes, please send me an incentive gift card | 0, No, I do not want an incentive gift card

Enter email address here:

****Please allow 1-2 business days to receive your gift card****

There are two surveys as part of this evaluation - one at the beginning of the summer and one in the fall. We would like to be able to see how this produce box program impacts families over time. If you take both surveys, your email address will be used to link your survey responses from the two surveys. Your email address will not be identified with your responses.

1, Yes, you may use my email to connect this survey with my other survey if I take both surveys | 0, No, I do not want you to use my email address to link my survey responses over time

Enter email address here:

Appendix B: Participant Survey questions and metrics (baseline & follow-up)

Participant Follow-up Survey (November)	Choices, Calculations, OR Slider Labels
Would you like to take the survey in English or Spanish?	1, English/Inglés 2, Spanish/Español
¿Desea tomar esta encuesta en inglés o español?	
On a typical day, how many servings of vegetables do you eat? (examples of a serving: one cup of raw, leafy greens; 1/2 cup of fresh/frozen/canned peas or other vegetable; 1/2 cup of vegetable juice)	1, None - 0; 2, 1-2; 3, 3-4; 4, 5-6; 5, 7+
On a typical day, how many servings of fruit do you eat? (examples of a serving: one medium apple or peach; 1/2 cup of fresh/frozen/canned fruit; 1/4 cup of dried fruit; 1/4 cup of 100% fruit juice)	1, None - 0; 2, 1-2; 3, 3-4; 4, 5-6; 5, 7+
On a typical day, how many servings of vegetables do children in the household eat? (examples of a serving: one cup of raw, leafy greens; 1/2 cup of fresh/frozen/canned peas or other vegetable; 1/2 cup of vegetable juice)	1, None - 0; 2, 1-2; 3, 3-4; 4, 5-6; 5, 7+
On a typical day, how many servings of fruit do children in the household eat? (examples of a serving: one medium apple or peach; 1/2 cup of fresh/frozen/canned fruit; 1/4 cup of dried fruit; 1/4 cup of 100% fruit juice)	1, None - 0; 2, 1-2; 3, 3-4; 4, 5-6; 5, 7+
How often did you pick up your box of fruits and vegetables this summer season?	1, Weekly 2, Every other week 3, Once a month 4, Less than once a month
How did you receive your produce box?	1, Delivered to home 2, Picked up directly from farmer 3, Picked up at farmer's market or food hub 999, Other (please specify)
Please Specify	
How far did you have to travel to get it?	1, Less than 2 miles 2, 2-5 miles 3, 5-10 miles 4, Over 10 miles 999, Prefer not to say
Total amount of fruits and vegetables in the food box	1, More than enough/Good 2, The right amount/Okay 3, Less than enough/Could be improved
Variety of fruits and vegetables in the food box	1, More than enough/Good 2, The right amount/Okay 3, Less than enough/Could be improved
Quality of each fruit and vegetable in the food box	1, More than enough/Good 2, The right amount/Okay 3, Less than enough/Could be improved
Information provided on how to use the provided foods	1, More than enough/Good 2, The right amount/Okay 3, Less than enough/Could be improved
Cultural relevance of food choices	1, More than enough/Good 2, The right amount/Okay 3, Less than enough/Could be improved

Appendix B: Participant Survey questions and metrics (baseline & follow-up)

Participant Follow-up Survey (November)

Choices, Calculations, OR Slider Labels

In a typical week, how much of the fruits and vegetables in the produce box did you eat?	1, All of it (100%) 2, Most of it (75%) 3, Some of it (50%) 4, A small amount of it (25%) 5, Hardly any of it (less than 10%)
What were the reason(s) for not eating all the fruits and vegetables in the box? (Select all that apply)	1, Too much produce (leftover from previous week, not enough people at home during these weeks) 2, Did not like the produce 3, Did not know what the produce was or how to cook it 4, Picked up the box later in the week 5, Poor quality of the produce when picked up 999, Other (please specify)
Please Specify	
What did you do with the leftovers? (Select all that apply)	1, Gave some to others 2, Threw it away 3, Returned it at the pick-up location 4, Made preserves/freezing at home 999, Other (please specify)
Please Specify	
In general, who ate most of the produce you received in the box?	1, Everyone 2, Children 3, Adults below 60 4, Adults over 60
I ate more fruits and vegetables	1, Strongly agree 2, Agree 3, Neither agree or disagree 4, Disagree 5, Strongly disagree
My family or children ate more fruits and vegetables	1, Strongly agree 2, Agree 3, Neither agree or disagree 4, Disagree 5, Strongly disagree
I buy more local produce from farmers (farmer's markets, CSA shares)	1, Strongly agree 2, Agree 3, Neither agree or disagree 4, Disagree 5, Strongly disagree
I am more likely to stay enrolled in WIC	1, Strongly agree 2, Agree 3, Neither agree or disagree 4, Disagree 5, Strongly disagree
I will participate in the produce box program next summer	1, Strongly agree 2, Agree 3, Neither agree or disagree 4, Disagree 5, Strongly disagree
Within the past 3 months, you were worried whether your food would run out before you got money to buy more.	1, Never true 2, Sometimes true 3, Often true
Within the past 3 months, the food you bought didn't last and you didn't have money to get more.	1, Never true 2, Sometimes true 3, Often true
Within the past 3 months, it was hard for you to get enough healthy food. In the past 30 days, my household had enough food to eat.	1, Never true 2, Sometimes true 3, Often true
How could the produce box program be improved? (Select all that apply)	1, More produce in each box 2, Less produce in each box 3, Different kinds of produce 4, More convenient pick-up times 5, Closer pick-up location 6, More information about the produce in the box 7, More cooking instructions 8, Better communication with farmers 888, Not applicable 999, Other (please specify)
Please Specify	

Appendix B: Participant Survey questions and metrics (baseline & follow-up)

Participant Follow-up Survey (November)

Choices, Calculations, OR Slider Labels

What challenges did you experience participating in the program? (Select all that apply)

1, I did not experience any challenges | 2, Inconvenient box pick-up times | 3, Inconvenient box pick-up location | 4, We did not like the produce | 5, Hard to remember to get the produce box every week | 6, There was no one to ask for help or support the program | 7, Insufficient information or communication regarding the program | 999, Other (please specify)

Please Specify

What changes or suggestions do you have to make the program better?

What county do you live in?

1, Boulder | 2, Broomfield | 3, Denver | 4, El Paso | 5, Pueblo | 6, Teller | 7, Weld

Are you currently pregnant or breastfeeding?

1, Yes | 0, No | 777, Prefer not to say

What is your current employment status?

1, Employed | 2, Unemployed | 3, Retired | 777, Prefer not to say

Please select any food assistance programs you or someone in your household participates in (Select all that apply):

1, SNAP | 2, Free & Reduced School Meals | 3, Food bank | 4, Food pantry | 999, Other (please specify) | 6, None

Please Specify

There are two surveys as part of this evaluation - one at the beginning of the summer and one in the fall. We would like to be able to see how this produce box program impacts families over time. If you take both surveys, your email address will be used to link your survey responses from the two surveys. Your email address will not be identified with your responses.

1, Yes, you may use my email to connect this survey with my survey from earlier this summer; | 0, No, I do not want you to use my email address to link my survey responses over time.

Enter email address here:

Would you like to receive a \$20 Target gift card for your participation? This is optional and your email address will not be used for any other communications except to send your electronic gift card.

1, Yes, please send me an incentive gift card | 0, No, I do not want an incentive gift card

Enter email address here:

Would you be willing to speak with Nourish Colorado to provide a testimonial about your experience with the WIC produce box program?

Please enter your phone number here:

Appendix B: Participant Survey questions and metrics (baseline & follow-up)

Non-Participant Baseline Survey (May)

Choices, Calculations, OR Slider Labels

Would you like to take the survey in English or Spanish?	1, English/Inglés 2, Spanish/Español
¿Desea tomar esta encuesta en inglés o español?	
Have you participated in the WIC produce box program before?	0, No 1, Yes, 1 year 2, Yes, more than 1 year
Are you aware of the produce box program offered through your local WIC agency?	
If yes, how did you hear about the produce box program?	1, WIC program office 2, Social Media 3, Friend or family member 999, Other (please specify)
Please Specify	
Would you be interested in participating in a WIC produce box program in the future?	
Are you currently on a wait list for the WIC produce box program?	
Total amount of fruits and vegetables allocated	1, More than enough 2, The right amount 3, Less than enough
Variety of WIC approved fruits and vegetables	1, More than enough 2, The right amount 3, Less than enough
Quality of WIC approved fruits and vegetables	1, More than enough 2, The right amount 3, Less than enough
Cultural relevance of WIC approved fruits and vegetables	1, More than enough 2, The right amount 3, Less than enough
Where do you obtain fruits and vegetables? (Select all that apply)	1, Grocery Store (e.g. King Soopers, City Market, Walmart) 2, Wholesale Store (e.g. Costco, Sam's Club); 3, Farmer's Market 4, CSA or produce box 5, Your own garden 6, I do not get fruits and vegetables in addition to the produce boxes 999, Other (please specify)
Please Specify	
On a typical day, how many servings of vegetables do you eat? (examples of a serving: one cup of raw, leafy greens; 1/2 cup of fresh/frozen/canned peas or other vegetable; 1/2 cup of vegetable juice)	1, None - 0 2, 1-2 3, 3-4 4, 5-6 5, 7+
On a typical day, how many servings of fruit do you eat? (examples of a serving: one medium apple or peach; 1/2 cup of fresh/frozen/canned fruit; 1/4 cup of dried fruit; 1/4 cup of 100% fruit juice)	1, None - 0 2, 1-2 3, 3-4 4, 5-6 5, 7+
On a typical day, how many servings of vegetables do children in the household eat? (examples of a serving: one cup of raw, leafy greens; 1/2 cup of fresh/frozen/canned peas or other vegetable; 1/2 cup of vegetable juice)	1, None - 0 2, 1-2 3, 3-4 4, 5-6 5, 7+
On a typical day, how many servings of fruit do children in the household eat? (examples of a serving: one medium apple or peach; 1/2 cup of fresh/frozen/canned fruit; 1/4 cup of dried fruit; 1/4 cup of 100% fruit juice)	1, None - 0 2, 1-2 3, 3-4 4, 5-6 5, 7+

Appendix B: Participant Survey questions and metrics (baseline & follow-up)

Non-Participant Baseline Survey (May)

Choices, Calculations, OR Slider Labels

In the past 30 days, my household had enough food to eat.	
Within the past 3 months, you were worried whether your food would run out before you got money to buy more.	1, Never true 2, Sometimes true 3, Often true
Within the past 3 months, the food you bought didn't last and you didn't have money to get more.	1, Never true 2, Sometimes true 3, Often true
Within the past 3 months, it was hard for you to get enough healthy food.	1, Never true 2, Sometimes true 3, Often true
What county do you live in?	1, Boulder 2, Broomfield 3, Denver 4, El Paso 5, Pueblo 6, Teller 7, Weld
What gender do you identify with?	1, Male 2, Female 3, Transgender 4, Gender non-conforming 999, Other 777, Prefer not to say
Please Specify	
What is your current age?	1, 18-24 2, 25-34 3, 35-44 4, 45-54 5, 55-64 6, 65 years and older 777, Prefer not to say
Are you of Hispanic, Latino, or of Spanish origin?	1, Hispanic 2, Non-Hispanic 777, Prefer not to say
What race do you identify with? (Select all that apply)	1, White or Caucasian 2, Black or African American 3, Asian or Asian American 4, American Indian or Alaska Native 5, Native Hawaiian or other Pacific Islander 6, Multi racial 999, Other 777, Prefer not to say
Please Specify	
How many people live in your household (for at least half of the year)?	
How many people live in your household who are under 18? (Please enter the number of children in each age group)	
Under 1 year	Under 1 year
1-5	1-5
6-10	6-10
11-14	11-14
15-17	15-17
Are you currently pregnant or breastfeeding?	1, Yes 0, No 777, Prefer not to say
What is your current employment status?	1, Employed 2, Unemployed 3, Retired 777, Prefer not to say
What is your current household income (annual)?	1, Less than \$15,000 2, \$15,000 to \$24,999 3, \$25,000 to \$34,999 4, \$35,000 to \$49,999 5, \$50,000 to \$74,999 6, \$75,000 to \$99,999 7, Over \$100,000 777, Prefer not to say

Appendix B: Participant Survey questions and metrics (baseline & follow-up)

Non-Participant Baseline Survey (May)

Choices, Calculations, OR Slider Labels

Please select any food assistance programs you or someone in your household participates in (Select all that apply):

1, SNAP | 2, Free & Reduced School Meals | 3, Food bank | 4, Food pantry | 999, Other (please specify) | 6, None

Please Specify

Thank you for your participation. We collect your email address for two reasons: 1) to provide a gift card as an incentive; and 2) to connect your survey responses to each other over time. You can choose to provide your email for one, both, or neither of these options. They are completely separate and both are optional.

Would you like to receive a \$20 Target gift card for your participation? This is optional and your email address will not be used for any other communications except to send your electronic gift card.

1, Yes, please send me an incentive gift card | 0, No, I do not want an incentive gift card

Enter email address here

****Please allow 1-2 business days to receive your gift card****

There are two surveys as part of this evaluation - one at the beginning of the summer and one in the fall. We would like to be able to see how this produce box program impacts families over time. If you take both surveys, your email address will be used to link your survey responses from the two surveys. Your email address will not be identified with your responses.

1, Yes, you may use my email to connect this survey with my other survey if I take both surveys | 0, No, I do not want you to use my email address to link my survey responses over time.

Enter email address here

Appendix B: Participant Survey questions and metrics (baseline & follow-up)

Non-Participant Follow-up Survey (November)

Choices, Calculations, OR Slider Labels

Would you like to take the survey in English or Spanish?	1, English/Inglés 2, Spanish/Español
¿Desea tomar esta encuesta en inglés o español?	
On a typical day, how many servings of vegetables do you eat? (examples of a serving: one cup of raw, leafy greens; 1/2 cup of fresh/frozen/canned peas or other vegetable; 1/2 cup of vegetable juice)	1, None - 0 2, 1-2 3, 3-4 4, 5-6 5, 7+
On a typical day, how many servings of fruit do you eat? (examples of a serving: one medium apple or peach; 1/2 cup of fresh/frozen/canned fruit; 1/4 cup of dried fruit; 1/4 cup of 100% fruit juice)	1, None - 0 2, 1-2 3, 3-4 4, 5-6 5, 7+
On a typical day, how many servings of vegetables do children in the household eat? (examples of a serving: one cup of raw, leafy greens; 1/2 cup of fresh/frozen/canned peas or other vegetable; 1/2 cup of vegetable juice)	1, None - 0 2, 1-2 3, 3-4 4, 5-6 5, 7+
On a typical day, how many servings of fruit do children in the household eat? (examples of a serving: one medium apple or peach; 1/2 cup of fresh/frozen/canned fruit; 1/4 cup of dried fruit; 1/4 cup of 100% fruit juice)	1, None - 0 2, 1-2 3, 3-4 4, 5-6 5, 7+
Total amount of fruits and vegetables allocated	1, More than enough/Good 2, The right amount/Okay 3, Less than enough/Could be improved
Variety of WIC approved fruits and vegetables	1, More than enough/Good 2, The right amount/Okay 3, Less than enough/Could be improved
Quality of WIC approved fruits and vegetables	1, More than enough/Good 2, The right amount/Okay 3, Less than enough/Could be improved
Cultural relevance of WIC approved fruits and vegetables	1, More than enough/Good 2, The right amount/Okay 3, Less than enough/Could be improved
Within the past 3 months, you were worried whether your food would run out before you got money to buy more.	1, Never true 2, Sometimes true 3, Often true
Within the past 3 months, the food you bought didn't last and you didn't have money to get more.	1, Never true 2, Sometimes true 3, Often true
Within the past 3 months, it was hard for you to get enough healthy food.	1, Never true 2, Sometimes true 3, Often true
In the past 30 days, my household had enough food to eat.	
Did you participate in the WIC produce box program this summer? For example, were you added from a wait list?	

Appendix B: Participant Survey questions and metrics (baseline & follow-up)

Non-Participant Follow-up Survey (November)

Choices, Calculations, OR Slider Labels

What county do you live in?

1, Boulder | 2, Broomfield | 3, Denver | 4, El Paso | 5, Pueblo | 6, Teller | 7, Weld

Are you currently pregnant or breastfeeding?

1, Yes | 2, No | 777, Prefer not to say

What is your current employment status?

1, Employed | 2, Unemployed | 3, Retired | 777, Prefer not to say

Please select any food assistance programs you or someone in your household participates in (Select all that apply):

1, SNAP | 2, Free & Reduced School Meals | 3, Food bank | 4, Food pantry | 999, Other (please specify) | 6, None

Please Specify

There are two surveys as part of this evaluation - one at the beginning of the summer and one in the fall. We would like to be able to see how this produce box program impacts families over time. If you take both surveys, your email address will be used to link your survey responses from the two surveys. Your email address will not be identified with your responses.

1, Yes, you may use my email to connect this survey with my other survey from earlier this summer | 0, No, I do not want you to use my email address to link my survey responses over time.

Enter email address here:

Please let us know if you would like to receive a \$20 Target gift card as our way of saying THANK YOU for your participation. This is optional and your email address will not be used for any other communications except to send your electronic gift card.

1, Yes, please send me an incentive gift card | 0, No, I do not want an incentive gift card

Enter email address here:

Appendix C: Grower Interview Questions and Metrics

Question	Probe
Introduction - Grower Characteristics	
Quick overview of evaluation (noting difference between CSA produce boxes for community and CSA produce boxes purchased by Nourish for WIC families, the latter being the focus of the evaluation) goals, interview, confidentiality...	
In what city and county is your farm located?	
Is farming your primary source of income?	
	In an average year, what are your top crops?
	To whom do you sell your produce...who are your buyers or customers for items produced on your farm? (e.g. selling to commercial grocers, farmer's market, government subsidies, CSA's for community, CSA's through Nourish CO, etc.)
	Can you estimate the proportion of your farming income that comes from your participation in the community supported agriculture (CSA) programs?
	How many paid employees (or volunteers) do you have at your farm?
Grower experience with CSAs - other and Nourish	
We are particularly interested in your experience working with Nourish CO to provide produce boxes to WIC families but I'd like to know about your experience in general with CSAs. Were you familiar with community supported agriculture, or CSAs, like the produce box program before your participation in the program this year?	
	Is this your first time participating as a grower in any CSA or have you participated in the past?
	(if participated in a CSA before) Have you worked with Nourish CO supported produce boxes for WIC families in the past or is this your first experience working with them?
	(if participated before but not with Nourish) How does your experience working with Nourish purchased CSA's this year compare with your past experience?
	(If participated before with Nourish) Have you noticed any differences working with Nourish this year than in the past?
	(if not participated in any CSA before) Tell me about your experience this year working with Nourish CO purchased produce boxes?

Appendix C: Grower Interview Questions and Metrics

Question	Probe
How did you hear about the Nourish CO CSA program for WIC families?	Can you comment on your recruitment and enrollment process with Nourish CO?
	Why did you decide to sign up for the Nourish CO program this year?
Can you give your best estimate as to how many CSA shares you produced per week during this season?	
	Was this less, more, or about right in terms of your capacity to provide CSAs?
	What portion of the produce boxes you provided were purchased through Nourish for WIC families vs. produce boxes produced for your community?
During your participation in the Nourish CO supported program this year did you interact at all with the county WIC agency?	
	(if yes) What were those interactions like? (in-person? Mostly logistics? etc.)
During your participation in the Nourish CO supported program this year did you interact at all with the WIC families receiving the boxes?	
	(if yes) What were those interactions like? (in-person? Mostly logistics? etc.)
Can you talk about any differences and similarities in your experience providing CSA boxes to the community and providing CSA boxes to WIC families through the Nourish CO supported program?	
Impact on growers - financial/economic, new markets, working with Nourish, working with WIC, interacting with participants, alignment with their values/goals	
What were some of the benefits you experienced being part of the Nourish CO supported produce box program for WIC families?	
	What were the problems or issues you encountered being part of the program?
How did your participation in the Nourish produce box program affect the market that you serve?	
	Did you gain (or lose) any customers by working with Nourish?
Thinking specifically about economic or financial outcomes: How did your participation in the Nourish CO supported produce box program affect your farm?	
	What specifically were the financial effects? (if needed) How else was it helpful to your farm to be involved in the Nourish CO CSA?

Appendix C: Grower Interview Questions and Metrics

Question	Probe
<p>Thinking about your business goals and personal values: How did your participation in the Nourish CO supported produce box program fit with the goals and values you have for your farm or business?</p>	<p>(if goals aren't stated) What specifically are the strategic goals that fit with working with Nourish CO to provide produce boxes to families?</p>
	<p>(if needed) In what other ways was it helpful for your business to be involved in the Nourish CSA?</p>
<p>Can you comment on your experience providing fresh produce to WIC families, who may have limited access to healthy fruits and vegetables? Did you enjoy your experience this year working with Nourish and WIC families? Why or why not?</p>	
	<p>Do you plan to participate in a CSA in the future? Why or why not?</p>
	<p>Do you plan to work with Nourish in the future? Why or why not?</p>
<p>Impact on food system - sustainable, scalable</p>	
<p>What would Nourish organizers need to consider, from your perspective, if they wanted to expand the number of WIC families receiving produce boxes/CSA shares?</p>	<p>priority question</p>
	<p>Would you be able to increase the number of CSA shares you provide? Why or why not?</p>
	<p>What is the biggest barrier for you to increase the number of CSA shares provided to your community? To WIC families?</p>
	<p>What would you need to increase the number of CSA shares provided to your community? To WIC families?</p>
<p>Is there anything else we haven't asked you about your experience with the CSA and/or working with Nourish CO to provide CSA shares to WIC families you think is important to share?</p>	
<p>Do you have any photos you would be willing to share documenting your experience and work this year?</p>	

Appendix D: Participant Demographics

Baseline Survey	Respondents with Completed Baseline Survey	Respondents with Matched Baseline and Follow-Up Surveys	Respondents who were NOT enrolled in CNIP
	Participants (cases) N = 105	Participants (cases) N = 54	Non-Participants (controls) N = 48
Survey Language Options			
English	87.62%	85.19%	83.33%
Spanish	12.38%	14.81%	16.67%
Gender			
Female	98.10%	100.00%	93.75
Male	1.90%	0.00%	6.25%
Age			
18-24	14.29%	11.11%	18.75%
25-34	54.29%	57.41%	62.50%
35-44	28.57%	29.63%	16.67%
45-54	2.86%	1.85%	0.00%
Prefer not to say	0.00%	0.00%	2.08%
Race and Ethnicity Collapsed			
Hispanic	50.48%	44.44%	66.67%
Non-Hispanic White	37.14%	46.30%	25%
Non-Hispanic Black	3.81%	3.70%	2.1%
Non-Hispanic Asian	3.81%	0.00%	0.00%
Non-Hispanic American Indian/Alaska Native	0.95%	0.00%	0.00%
Non-Hispanic Native Hawaiian/Pacific Islander	0.00%	0.00%	0.00%
Multi-racial (including those that checked more than 1 response)	2.86%	5.56%	4.2%
Prefer Not to Say	0.95%	0.00%	2.1%
Other	0.00%	0.00%	0.00%
People Living in Household			
Mean # of people living in household	4.42	4.30	3.87
Mean # of children living in household	2.5	2.48	2.47
Currently pregnant or breastfeeding			
No	43.81%	37.04%	77.08%
Yes	56.19%	62.96%	22.92%

Appendix D: Participant Demographics

Baseline Survey	Respondents with Completed Baseline Survey	Respondents with Matched Baseline and Follow-Up Surveys	Respondents who were NOT enrolled in CNIP
	Participants (cases) N = 105	Participants (cases) N = 54	Non-Participants (controls) N = 48
Current employment status			
Employed	35.24%	31.48%	41.67%
Unemployed	56.19%	61.11%	50.00%
Prefer not to say	8.57%	7.41%	8.33%
Current household annual income			
Less than \$15,000	20.00%	20.37%	39.58%
\$15,000 to \$24,999	10.48%	11.11%	16.67%
\$25,000 to \$34,999*	20.00%	18.52%	8.33%
\$35,000 to \$49,999	17.14%	18.52%	16.67%
\$50,000 to \$74,999	13.33%	16.67%	6.25%
\$75,000 to \$99,999	0.00%	0.00%	2.08%
Over \$100,000	0.95%	0.00%	0.00%
Prefer not to say	18.10%	14.81%	10.42%
Have you participated in the WIC produce box program before?			
No	80.00%	81.48%	70.83%
Yes, 1 year	15.24%	12.96%	14.58%
Yes, more than 1 year	4.76%	5.56%	14.58%

Note: * Under \$35k is the federal poverty level for family of 4 (average family size of this population is 4.4)

Appendix E: Testimonials

Quotes from County Agencies:

"Our program truly loves this program and has loved being a part of it for the last few years"

"We love this program, thank you so much! We look forward to next season."

"We're so grateful for the support this year. Nourish was our only funder who was able to support home deliveries to WIC families who live outside the county. This allowed us to serve many more families, and reduce the administrative burden of manually checking addresses against the county line. Thank you!"

Quotes from CNIP Participants:

"Thank you for the help you have given us with fruits and vegetables, it has been a great blessing to my children."

"I just wanted to say I absolutely loved being able to be a part of this program. It helped out my family in so many ways. We got to try new things we've never had before, it got us to think of healthier meals, and it also helped with saving money with groceries. I feel so blessed and thankful for all we received. I hope my family and I are lucky enough to be a part of it again! We thank you all so so much! Much love." – Jefferson County

"The farm to WIC program has impacted my family in so many positive ways. Not only has it provided my family with local, nutritious food, it has also sustained my family during financially difficult times. During this program, my two and three-year-old children are so excited to pick out fresh produce each week, and it has helped me tremendously to expand their palettes. They love trying new fruits and vegetables that they help to pick out themselves. My three-year-old has fallen in love with lions mane mushrooms! This program has been a catalyst for me to be more creative in the kitchen, and with my recipes. I am so very grateful for this program, and give many thanks to all the hands that make this happen!" – Jefferson County

"I am extremely grateful for the Farmer's Market Vouchers. I take my 3 yo daughter and she helps me pick out food at various stands each week during the season. It is a wonderful experience for us both and something I hope she always remembers us doing together. I am confident I would not shop at the Market without these vouchers or it would be only on occasion and we wouldn't buy nearly as much due to prices and our current financial situation." – Telluride/San Miguel County WIC Program

"Thank you for the wonderful organic local food provided this summer!"

"We really enjoyed our weekly produce pickup this summer. My kids, 2 and 4, were always excited on pick up day and were very involved in unpacking the bag. There were a few new items through out the summer that we had not eaten before and it was fun to experiment. This program also guaranteed that we always has fresh produce at home and the excitement helped in enhancing my kids willingness to try everything that came in the produce box. Thank you for this program!" - Pueblo

"We received the \$25 Farmer's Market Vouchers this past two summers, and we couldn't be more appreciative of the program. Besides loving the experience of attending the farmer's market with my little one, the vouchers allowed us to afford obtaining fresh seasonal fruits and vegetables and support our local farmers. During the summer months we primarily eat the seasonal foods provided by these vouchers." - Ouray County

Appendix E: Testimonials

Quotes from CNIP Participants:

"We received the \$25 Farmer's Market Vouchers this past two summers, and we couldn't be more appreciative of the program. Besides loving the experience of attending the farmer's market with my little one, the vouchers allowed us to afford obtaining fresh seasonal fruits and vegetables and support our local farmers. During the summer months we primarily eat the seasonal foods provided by these vouchers." - Ouray County

"Our family is very educated in agriculture and local produce. However, as you can imagine being on hard times and lower income it is harder to keep these family values. With Farm to WIC, it helped bridge this gap. We used the produce as a conversation starter. Showing my boys what each plant looks like that grew the produce we received via google images. My boys looked forward to the delivery every week and seeing what meals we could make. I hope it continues to be a lasting program as it helped us significantly."

"Being part of the Farm to WIC program was such a blessing for our family. We loved getting garden fresh produce weekly and enjoyed exposing our kids to new veggies they'd never tried before. I love cooking, and we primarily eat a vegetarian diet so it was also just a total blessing to have the added produce in the summer. I also reached out the farm we received produce from and got to take my kids by for a visit. The Farm to WIC program was such fun and such a financial gift as well."

"The Farm to WIC program was a huge blessing to our family last year. We had never participated before and it was really cool to have fresh produce delivered directly to us from the farm. We were able to use this as a learning opportunity for our kids and in teaching how food is grown and what farmers do. It was exciting to see the different types of vegetables that would arrive each week, and even the varieties of the same vegetable we'd received that we might not find in the grocery store. Our family was able to experiment with the different produce each week and find new meals to cook and different ways to incorporate what we got into those meals.

We are really hoping the program can continue this upcoming season and are looking forward to what is in store this growing season!"

Appendix E: Testimonials

Quotes from CNIP Participants:

"The WIC CSA shares are a great program. I feel like it is crucial that WIC continue this with the upcoming reductions in EBT (the supplement from covid will not be there after February 2023). For our family of 4, we are losing \$549/ month of EBT. I see other families posting on social media that they're scared about the reduction because the cost of groceries are higher than ever right now. People are worried how they are going to feed their kids, and I truly feel like low-income families deserve better than to be worried about choosing to feed their family or taking care of other human needs like diapers, electricity, medication, etc. I also think it's important to support local farmers. The ability for children to see where the food is grown and exposure to vegetables they may not typically have is an important aspect of the program too. A lot of folks on WIC are unlikely to have access to CSA shares due to the high upfront costs and the WIC program ensuring that it's participants have access to fresh, nutritious, locally grown (and more often than not organic!) food just like families who can afford those costs is admirable.

Schools are closed in the summer and many prek/k students will not have access to free/reduced breakfast and lunch so this is also another added food expense on top of the impending reduction in EBT. The extra veggies, eggs, and fruit will help ensure that children are not hungry this summer. My two year old loved the fresh fruits that were in our share this summer. He especially loved the peaches and pears. When I picture him in my head it is him sitting at our table with peach juice running down his face. My four year old loved the eggs and helping make his egg sandwiches. They both loved the fresh lettuce and salads that we made this summer. I made sauce with our tomatoes and garlic and they both love pasta with tomato sauce. Most of our meals this summer had food that came from the WIC CSA shares." – Jefferson County