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Ladder for Growth: A National Network to Build Capacity and Test Innovative Strategies for Healthy Food Initiatives

Final Grant Report



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Submitted to Wholesome Wave Charitable Ventures, Inc.

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Executive Summary

The randomized control trial (RCT) described herein was managed and evaluated by the University of Delaware's Center for Research in Education and Social Policy (UD-CRESP), at 76 farmers markets (FMs) in 13 states and the District of Columbia, over a two-year time span. The RCT randomly awarded incentives to Supplemental Nutrition Assistance Program (SNAP) recipients to use to purchase fruits and vegetables (FVs) at FMs. Changes in three pre-designated outcome variables FV consumption, FV purchase, Body Mass Index (BMI)) were calculated using results of an online survey that addressed: standard dietary consumption over time; food insecurity; health status and perception; food purchasing; and, demographics. UD-CRESP also analyzed the effect of FV incentives randomly awarded to SNAP recipients on their FM spending.

The research resulted in the following findings. First, it was found that financial incentives awarded at FMs to SNAP participants have statistically significant, positive effects on FV consumption. No statistically significant changes were found in the other two pre-designated outcome variables, i.e. FV purchase and BMI for the national or overall sample. Secondly, the research showed statistically significant higher SNAP spending on FV at most incentive levels when compared to baseline, for all participants and for the subset of Hispanic participants.

Based on these results, our first recommendation is that a codified incentive program at the highest level be implemented. Additionally, based on a breakdown of participant characteristics, a relatively high percentage of Hispanic shoppers was revealed in two participating FM networks: Florida Certified Organic Growers and Consumers, and the New York City Department of Health and Mental Hygiene. This subset of participants also spent statistically significant higher amounts of their SNAP dollars on FVs at FMs when compared to baseline. Based on this related finding, our second recommendation is that culturally appropriate programming for Hispanic participants at FMs within these networks be developed.

Background

Between 2015 and 2017, University of Delaware's Center for Research in Education and Social Policy (UD-CRESP) partnered with Wholesome Wave, Inc. (WW), Florida Certified Organic Growers and Consumers (referred to as Florida Organic Growers, or FOG), and the New York City Department of Health and Mental Hygiene (NYCDOHMH) to measure the impact of expanded nutrition program incentives at the networks of farmers markets (FMs) supported by these three organizations, utilizing a Randomized Control Trial (RCT) research design. A three-year USDA Food Insecurity Nutrition Incentive (FINI) grant was implemented directly by WW for the RCT at FMs across the country. In addition, FOG and NYCDOHMH received individual FINI grants that funded the RCT within their respective FM networks. In total the national, FOG, and NYCDOHMH efforts represented the largest RCT ever conducted at FMs in the United States.

UD-CRESP conducted the multi-site RCT to assess the impact of awarding additional Supplemental Nutrition Assistance Program (SNAP) incentives at the 76 FMs operating under the auspices of WW, FOG, and NYCDOHMH on recipients' fruit and vegetable (FV) purchase and consumption practices, among other parameters. UD-CRESP also evaluated multiple health, food security, and FV consumption parameters of members of 18 Consumer Supported Agriculture (CSA) sites throughout the eastern United States.

Unless otherwise noted, this report provides results and outcomes of the RCT conducted at the 76 WW, FOG, and NYCDOHMH FMs between 2015 and 2017 – referred to herein as the "national sample." Similarly, this report also provides key data from participating CSA members. Additional details regarding these participating markets (i.e., tickets received, surveys sent, surveys completed, unique individuals, number and percent double completers, RCT monetary and nonmonetary incentives, and SNAP dollars spent) are provided on the separate Excel spreadsheet ("All FMs_all Rounds_3-30-18") that was provided directly to WW via email.

Design

Participant Recruitment and Retention

SNAP shoppers at the FMs described above were offered the opportunity to participate in the RCT study where they would be eligible for additional funds (referred to as monetary incentives) to spend at their FM. Participants were initially made aware of their potential eligibility for the study through a yellow enrollment ticket provided by the market manager, as well as a printed flier containing RCT information. The numbered enrollment ticket requested the shopper's first name, email address, and cell phone number. The shopper's enrollment ticket number and identifier (i.e., the initials of their first and last names plus the last four digits of the Electronic Benefits Transaction (EBT) card used to access SNAP benefits) were recorded using the specialized software, "FMTracks^{TM1}". Ultimately a link was able to be made, then between the FM Tracks sales data and the online survey.

UD-CRESP sent enrollment tickets and pre-stamped return envelopes to FM managers, prior to implementation of the RCT. Upon receipt of completed tickets, UD-CRESP staff entered data from each ticket into an Excel spreadsheet. Through linkage of Qualtrics™ survey software to the spreadsheet, SNAP shoppers were invited to participate in the study via email or text, or both.

Shoppers who responded to the invitation, and who both consented to participate and completed the corresponding online survey, were randomly awarded one of three monetary incentive amounts, or the nonmonetary incentive if available and as previously described. At the start of the following month, shoppers were sent an email and/or text with instructions on how to participate again, unless they opted out. Continued participation required completion of the survey again, after which, another randomized additional incentive was assigned.

Incentives were authorized for use at the participants' primary FM, or at another allowable FM within their network, for the remainder of the month, when the monetary incentive expired. At the start of the next month, participants were invited to complete another survey if they had chosen to remain in the study. Finally, at the end of each round (roughly a farmers' market season) we included a final 'follow-up' month during which prior participants were invited to complete the survey, with the same odds of winning randomly assigned

¹ FMTracks[™] is an IOS-based program developed by Case Western Reserve University. It organizes market sales data, individual purchase data, incentive redemptions/expenditures, and EBT transactions.

incentives as in prior months. No new RCT participants were recruited during this follow-up month.

All consent, survey, and other forms of formal communication with participants were reviewed and approved by UD's Institutional Review Board prior to its use in the RCT. Study materials were made available in English and Spanish.

Incentive Levels

After enrollment and baseline survey completion, participants were randomly assigned (computer generated) to one of three conditions (described below in more detail): 1) no additional monetary incentive beyond baseline; 2) moderate monetary incentive; or, 3) highest monetary incentive. During certain times in the RCT and at certain FMs, a nonmonetary incentive (i.e., a reusable grocery bag imprinted with a healthy eating message) was randomly assigned as a fourth option. When awarded, the nonmonetary incentive was given only once during the month; however, the recipient remained eligible to receive their FM's baseline monetary incentive throughout the entire month.

Participant levels of incentive were determined based on the FM where they shopped. That is to say, each FM always had the same three possible levels of incentive and depending on the FM where the participant reported shopping, he or she would be eligible for one of that FM's three incentive amounts. For example, FM incentive amounts included:

- FM Type A: \$1 (spent) received \$0.40 additional (1:0.4 baseline); \$1 (spent) received \$0.80 (1:0.8 moderate); or, \$1 (spent) received \$1.00 (1:1.0 highest).
- FM Type B: \$1 (spent) received \$1 additional (1:1 baseline); \$1 (spent) received \$1.50 (1:1.5 moderate); or, \$1 (spent) received \$2.00 (1:2 highest).

Incentive levels are further explained as follows:

• Baseline Incentive: All FMs participating in the RCT offered either a 1:1.0 or 1:0.4 baseline monetary incentive match (or ratio). This means that for every \$1 in SNAP funds spent, SNAP shoppers randomly assigned to the baseline condition were provided an additional \$0.40 or \$1, depending on how the FM where they shopped had its baseline set. As noted, the amount of the baseline incentive was determined by the FM where the participant shopped, and as such, the baseline incentive level was consistent for the same FM throughout the study. That said, the participant was randomly assigned to an incentive level that could vary from month to month.

- Moderate Incentive: The next interval of additional funds participants could receive is referred to as the moderate incentive. Two possible levels of moderate incentives were available, 1:0.8 or 1:1.5. For example, if a participant spent \$6 in SNAP funds at the FM and was provided with a moderate 1:1.5 incentive ratio, that participant would receive an additional \$9 to spend on FVs for a total of \$15.
- <u>Highest Incentive</u>: Depending on the FM, participants could have received one of two possible maximum incentive ratios, 1:1 or 1:2. For example, if a participant spent \$8 in SNAP funds at the FM and was provided with the highest 1:1 incentive ratio, that participant would receive an additional \$8 to spend on FVs for a total of \$16.
- <u>Non-monetary incentive</u>: At certain times, and at certain FMs, a grocery bag was
 provided in addition to the baseline incentive and here is termed as a non-monetary
 incentive.

As previously noted, participants were given an equal chance of being assigned to one of the three or four possible incentive levels, depending on whether the non-monetary incentive was an option. In all cases, an additional monetary incentive allowed the RCT participant to utilize the additional incentive on FVs only (vs. any SNAP-eligible product available for purchase at the FM).

Survey Measures

The online survey was modified from the Dietary Screener Questionnaire (DSQ) in the National Health and Nutrition Examination Survey (NHANES), 2009 – 2010. Survey questions selected for the RCT include FV dietary recall questions for the previous month. This 16-item FV screener's intraclass correlations for test – retest reliability ranged from 0.62 to 0.67 for FVs for men and women combined. These reliabilities are considered adequate and approach accepted levels (0.7) for research. The survey also included questions regarding food expenditures at the FM; demographics information based on US Census parameters; and, health status and perception questions selected from the Behavioral Risk Factor Surveillance System Questionnaire.

As a monthly dietary recall, the modified DSQ asks about the frequency (e.g., three times per week) of consumption in the past month of selected foods and drinks. The modified DSQ considered fresh FVs as well as FVs bought in prepared forms or from mixed foods (e.g., 100% fruit juices, refried beans, salsa, tomato sauces, french fries, and pizza). Responses to these survey questions were converted to estimates of dietary FV intake, provided in cup equivalents and based on a set of scoring algorithms developed by NHANES (2009-2010), providing daily FV/legume intake, in cups, of RCT participants.

A two-item food insecurity (FI) screener was used to identify families at risk for food insecurity: (1) "Within the past 12 months we worried whether our food would run out before we got money to buy more," and (2) "Within the past 12 months the food we bought just didn't last and we didn't have money to get more." The two-item FI screener has high sensitivity (83%), specificity (97%), and convergent validity compared with the longer 18-item US Household Food Security Scale used by the Current Population Survey, making it an effective substitute tool to annually monitor food-security status.

Calculation of BMI used the participant's self-reported weight/height and was interpreted using standard weight status categories. These categories are the same for men and women of all body types and ages². Specifically, the BMI scores are defined as follows: below 18.5 is underweight; 18.5 – 24.9 is Normal or Healthy Weight; 25.0 – 29.9 is Overweight; and, 30.0 and above is Obese.

The individual purchase amount by different incentive levels was collected at the FM using FMTracksTM and Mobile Market+TM (in NYC only). These data sets were connected to the survey data in order to compare the variation in purchase amount by different incentive levels, using the participant's identifier (i.e., the initials of their first and last names plus the last four digits of their unique SNAP card, or in the case of Mobile Market+ TM data, only the last four digits of the SNAP card).

Research Approach

The data presented here reflect differences in participant purchasing, or changes to survey responses over the course of a single month, derived from both the online survey and from sales information provided by the FM. Each month of the RCT at participating FMs constituted its own distinct trial. As previously described, during each month, interested SNAP shoppers were given the opportunity to enroll in the study, take the dietary intake and shopping behavior survey, and receive one of the three or four possible incentive amounts.

Survey and participation data were downloaded from QualtricsTM and analyzed using SAS9.4TM. This report provides the results of and outcomes from RCT participants between September 2015 and October 2017.

Our analysis examined the following evaluation questions:

² https://www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/index.html.

- 1. What is the impact of selected (and incrementally different) incentive program innovations, both financial and non-financial, on SNAP customers' purchases of FV at the farmers market and overall grocery purchasing?
- 2. What is the impact of selected (and incrementally different) incentive program innovations, both financial and non-financial, on SNAP customers' consumption of fruits and vegetables?
- 3. What is the impact of selected (and incrementally different) incentive program innovations, both financial and non-financial, on SNAP customers' BMI?

In order to answer these questions we initially conducted descriptive analysis of the characteristics of SNAP FM customers and SNAP customers at CSAs; SNAP FM participant grocery spending, FV consumption, and health status; and examined differences in FV purchasing, grocery purchasing, consumption, and related indicators based on the level of the incentive amount received. Examination of SNAP expenditure data using a one-way ANOVA was used to detect any significant differences in SNAP dollars spent by participants at different incentive levels.

Further, we conducted a repeated measures mixed effects analysis to estimate potential changes in outcome variables after participants were assigned an incentive. Regarding FV expenditures, the repeated measures model uses a log transformation of the dollars spent on FVs over the course of the month to account for skewness in the data. In addition, the model controls for household size since the dollars spent is related to the number of people to feed in the household.

A Complier Average Causal Effect (CACE) was also calculated for FV consumption, where a significant finding was identified, in order to adjust the repeated measures model results to calculate the effects for only those participants *who used* their randomly assigned incentive.

All outcomes were examined based on data from SNAP participants who completed a survey once at the beginning of the month and again at the start of the following month.

The field-based, coordinated, multi-site RCT was conducted at a total of 76 FMs. An additional 14 FMs signed up for the RCT but did not solicit RCT participants. A total of 7,097 independent responses were generated from the national sample of FMs.

RCT Results Sample

Between September 2015 and October 2017, 5,186 tickets were received from the national sample of FMs participating in the RCT (as reported on the "All FMs_all Rounds_3-30-18" spreadsheet): 2,728 tickets from WW FMs (Rounds 1 through 4); 818 tickets from FOG FMs (Rounds 2 and 4); and, 1,640 tickets from NYCDOHMH FMs (Rounds 3, 4, 5). A total of 23,291 survey invitations were sent via email or text to both first-time participants, and to those who agreed to complete the survey in subsequent months. Of the surveys sent, 30.5% (n=7,097) were completed. The number of first-time completers of the survey, between September 2015 and October 2017, was 3,073.

Further, the sample size is not consistent across all variables since participants had the option to skip over certain questions and still complete the survey. The following data report and analysis sections encompass the results from the national sample of FMs (i.e., the WW, FOG, NYCDOHMH network-based FMs), and subsets thereof, that recruited SNAP shoppers to participate in the RCT.

Characteristics of RCT Participants

Of the 2,968 first-time survey respondents who answered the gender questions, 82% (n= 2,446) were female. The majority of respondents 64% (n=1,851) were between the ages of 18 and 47.

Regarding race and ethnicity, 72% (n=1,959) of the respondents were white and 18% (n=515) were Hispanic. Given the demographic data, the Hispanic population's participation in SNAP and programs such as the RCT are of particular interest, presenting an opportunity to focus on culturally appropriate nutrition education and on outreach to this population. Three-quarters of the RCT's Hispanic participants represented FMs from the FOG (17%) and NYCDOHMH (58%) networks, reflecting the relatively high percentage of Hispanic residents in those communities. According to the Pew Research Center (2019), Florida's and New York's Hispanic populations represent 15% of all Hispanics in the US, third and fourth behind California and Texas, respectively³.

³ Krogstad, JM. Hispanics have accounted for more than half of total U.S. population growth since 2010. https://www.pewresearch.org/fact-tank/2020/07/10/hispanics-have-accounted-for-more-than-half-of-total-u-s-population-growth-since-2010/. Published July 10, 2020.

Table 1 summarizes much of these gender, race, and ethnicity data, for RCT participants from the: overall/national sample of FMs; three network-based FM programs (i.e., WW, FOG, NYCDOHMH-individually reported); and, subset of Hispanic participants from WW's network of FMs.

Table 1: Demographic Information, exclusive of CSA Data

Characteristics	Overall ¹	ww	FOG	NYCDOHMH	Hispanic Participants ²
Total Participants	3,073	1,659	600	814	515
Gender					
Male	18%	17%	17%	20%	10%
Female	82%	83%	83%	80%	90%
Race					
White	72%	80%	79%	50%	36%
Black or African American	12%	9%	9%	19%	10%
Asian/Other Pacific Islander	4%	3%	4%	7%	5%
American Indian/Alaskan Native	4%	4%	4%	3%	5%
Other Race	8%	4%	4%	20%	44%
Ethnicity					
Hispanic	18%	8%	16%	40%	100%
Non-Hispanic	82%	92%	84%	60%	0%
Age					
18 to 27 years	15%	17%	17%	9%	16%
28 to 37 years	28%	29%	25%	29%	39%
38 to 47 years	21%	20%	21%	23%	24%
48 to 57 years	16%	16%	17%	15%	13%
58 to 67 years	15%	14%	14%	16%	5%
68 to 77 years	5%	3%	6%	6%	2%
78 and above	1%	1%	1%	3%	2%

¹ Overall: the national sample of all FMs; i.e., the WW, FOG, NYCDOHMH network-based FMs that recruited SNAP shoppers to participate in the RCT.

At baseline, overall, 82% (n=2,424) of FM SNAP shoppers had experienced food insecurity in the prior year. More than half (61% n=1,803) reported that they were overweight or obese (BMI \geq 25). More than one in four (26%, n=758) stated that they were in fair or poor health. When asked about health conditions, 13% reported having diabetes and 23% reported having high blood pressure. Table 2 presents the prevalence of health conditions faced by

² Hispanic participants from the WW network of FMs.

SNAP shoppers from the: national sample of FMs; three network-based FM programs (i.e., WW, FOG, NYCDOHMH-individually reported); and, subset of Hispanic participants from WW's network of FMs.

Table 2: Participant Health Information, exclusive of CSA Data

	Overall ¹	ww	FOG	NYCDOHMH	Hispanic Participants ²
BMI					
Underweight (BMI below 18.5)	3%	2%	3%	3%	2%
Normal Weight ((BMI 18.5 – 24.9)	37%	33%	43%	40%	34%
Overweight (BMI 25.0 - 29.9)	27%	25%	28%	30%	30%
Obese (BMI 30.0 - 34.9)	16%	17%	14%	15%	17%
Severely Obese (BMI 35.0-39.9)	9%	10%	7%	7%	10%
Morbidly Obese (BMI 40.0 and over)	9%	12%	5%	5%	6%
Food Insecurity					
Food Insecure	82%	81%	82%	86%	89%
Food Secure	18%	19%	18%	14%	11%
Health Status					
Excellent	9%	7%	11%	13%	12%
Very Good	28%	26%	31%	29%	28%
Good	37%	36%	36%	38%	38%
Fair	19%	21%	17%	15%	12%
Poor	7%	9%	5%	5%	9%
Health Conditions					
Heart Disease	5%	5%	4%	6%	3%
Diabetes	13%	14%	12%	12%	11%
High Blood Pressure	23%	24%	23%	21%	16%

Overall: the national sample of all FMs; i.e., the WW, FOG, NYCDOHMH network-based FMs that recruited SNAP shoppers to participate in the RCT.

Hispanic participants from the WW network of FMs.

The survey also asked SNAP FM shoppers about the amount spent on all groceries and the amount spent on FVs as part of their overall grocery budget - not just items purchased at the FM. Per month, each household spent on average \$153.76 on FVs. When compared to the total amount spent on groceries, FV purchasing comprised 45% of the total. Refer to Table 3 for expenditure data; data in these same categories are also reported for SNAP shoppers from each of the three network-based FM programs (i.e., WW, FOG,

NYCDOHMH-individually reported) and for the subset of Hispanic participants from WW's network of FMs.

The data on dietary intake or consumption revealed that SNAP shoppers consumed on average 3.00 daily cups of FVs (an amount that includes french fries), at baseline. Males typically consumed 3.27 daily cups of FVs, while females consumed 2.95 cups per day. Overall, the average amount of FVs adults age 18-47 consumed was about 3.03 cups per day. Adults age 48-67 consumed 2.95 cups of FVs per day and older adults (68+) consumed about 2.96 cups of FVs per day. Table 3 summarizes these data from the national sample, as well as the FV consumption data from the three network-based FM programs (i.e., WW, FOG, NYCDOHMH-individually reported) and for the subset of Hispanic participants from the WW network of FMs.

Table 3: Mean Baseline FV Intake and Expenditures, exclusive of CSA Data

	Overall ¹	ww	FOG	NYCDOHMH	Hispanic Participants ²
Daily Cups, FV Intake by Gender					
Male	3.27	3.24	3.33	3.29	3.15
Female	2.95	3.16	3.10	2.99	3.03
Daily Cups, FV Intake by Age					
18 to 27 years	2.93	2.87	3.08	2.97	2.92
28 to 37 years	3.03	2.92	3.26	3.10	3.03
38 to 47 years	3.12	3.13	3.20	3.06	3.14
48 to 57 years	2.98	2.94	2.98	3.08	2.86
58 to 67 years	2.91	2.80	3.10	3.00	3.42
68 to 77 years	3.03	2.99	3.03	3.08	3.22
78 years and above	2.75	2.11	3.46	2.80	2.90
Daily Cups, FV Intake Overall Average (in cups)	3.00	2.93	3.13	3.05	3.04
Monthly FV Grocery Expenditures, all sources, in dollars	153.76	143.99	162.66	167.53	182.52
BMI	28.5	29.7	27.1	27.2	28.2

Overall: the national sample of all FMs; i.e., the WW, FOG, NYCDOHMH network-based FMs that recruited SNAP shoppers to participate in the RCT. ² Hispanic participants from the WW network of FMs.

RCT Incentive Coupon Usage

In total, the study issued 6,979 monetary incentives that could be used multiple times over one month at the national sample of FMs. Of these, 3,144 incentives were redeemed at

least once, and in total, incentives were redeemed during 5,253 visits. In other words, participants who used incentives redeemed them an average of 1.67 times across the month. Those with an incentive spent an average of \$34.39 in SNAP funds alone (before any additional incentive was applied) per visit to the FM, as shown in Table 7.

Table 4 provides a summary of the incentives issued for use at FMs by incentive level, including whether the incentive level was considered to be baseline, moderate, or highest for that FM.

Table 4: Sample Analysis for the National Sample of FMs

	Ir			
Incentive Ratio	Baseline	Level1 (Moderate)	Level2 (Highest)	Total
0.4	1199			1199
0.8		1060		1060
1	1627		1108	2735
1.5		1002		1002
2			982	982
Non-monetary	858			858
Total monetary	2826	2062	2090	6978

Table 5 establishes incentive assignment according to the: national sample of FMs; three network-based FM programs (i.e., WW, FOG, NYCDOHMH-individually reported); and, subset of Hispanic participants from WW's network of FMs.

Table 5: Incentive Assignment

Incentive Ratio	Overall ¹	ww	FOG	NYCDOHMH	Hispanic Participants ²
0.4	17%	14%		32%	22%
0.8	15%	10%		34%	21%
1	39%	41%	43%	34%	33%
1.5	14%	18%	28%		8%
2	14%	17%	30%		9%
Non-monetary	24%	24%	25%		7%

Overall: the national sample of all FMs; i.e., the WW, FOG, NYCDOHMH network-based FMs that recruited SNAP shoppers to participate in the RCT.

Hispanic participants from the WW network of FMs.

Change in Outcome Variables

Repeated measures mixed effects analysis was conducted to estimate potential changes in outcome variables after participants were assigned an incentive. Table 6 summarizes outcomes data based on the repeated measures mixed effects analysis and reports the data according to incentive level for: all participants from the national sample and those reported individually by the three network-based FM programs (i.e., WW, FOG, NYCDOHMH). The data are further analyzed according to the Hispanic subsets of these cohorts.

Statistically significant differences were found for participants assigned the highest incentive; i.e., \$2.00 for \$1.00 baseline FMs. receiving the highest incentive level resulted in an increased FV consumption of 0.16 daily cups. Hispanic participants did not experience any additional increases in in FV consumption beyond the increases seen in the full sample.

The repeated measures model estimates include all participants, whether or not they used the incentive they were randomly assigned. As noted, the Complier Average Causal Effect (CACE) methodology adjusts the repeated measures model results to calculate the effects for only those participants who used their randomly assigned incentive. Based on the CACE calculation, the FV consumption of participants who used their 2.0 incentive increased by 0.31 cups per day, almost twice the average for all participants who were randomly assigned the 2.0 incentive level.

Regarding FV expenditures, the repeated measures model uses a log transformation of the dollars spent on FVs over the course of the month to account for skewness in the data. In addition, the model controls for household size since the dollars spent is related to the number of people to feed in the household. With one exception, no significant differences were found for monthly FV expenditures between incentive levels. One estimate was statistically significant in the subset of Hispanic participants from the WW network of FMs (n=91): at the 0.8 level (n=7). Hispanic participants spent significantly more on FV when compared to Hispanic participants at the 0.4 level (n=9). However, with such small sample sizes, generalizability to a larger Hispanic population is limited due to the likelihood of outliers. Finally, no significant differences were found between incentive levels for participants from the three network-based programs.

Not unexpectedly, no significant change in BMI was found for participants regardless of incentive level. This finding is likely due to the short periods of time under study;it is unlikely that large changes in BMI are detectable over a month's time. Additional research of longer-

term effects is recommended in order to better estimate the impacts of FV incentives on BMI. Further, no significant differences in FV consumption, purchasing or BMI were found for those that received a non-monetary incentive (a grocery bag).

Table 6: Repeated-Measures Fixed-Effects on Outcomes

Table 6: Repeated-Measure	Overall ¹	WW	FOG	NYCDOHMH
FV Consumption (in cups)				
Intercept	2.77*	2.76*	2.88*	2.98*
0.4				
0.8	-0.04	0.02		-0.07
1.0	0.00	-0.03		0.00
1.5	0.08	0.03	0.11	
2.0	0.16*	0.15	0.11	
Non-monetary	-0.03	-0.03	-0.17	
Hispanic intercept	-0.02	0.19	0.01	-0.02
Hispanic 0.4				
Hispanic 0.8	-0.01	-0.24		0.05
Hispanic 1.0	0.00	-0.35		0.04
Hispanic 1.5	0.11	-0.17	80.0	
Hispanic 2.0	-0.10	-0.40	-0.04	
Hispanic Non-monetary	-0.07	-0.45	0.32	
Monthly Grocery Expendit	ures on FV (Log	transformatio	n; percent ch	nange in FV
expenditures)				
Intercept	4.44*	4.45*	4.51*	4.66*
0.4				
0.8	0.04	0.06		0.02
1.0	-0.02	-0.04		-0.01
1.5	0.05	0.00	0.20	
2.0	0.03	0.00	0.13	
Non-monetary	-0.01	-0.03	0.11	
Hispanic intercept	0.04	-0.31	0.12	-0.01
Hispanic 0.4				
Hispanic 0.8	-0.09	-0.62*		-0.04
Hispanic 1.0	0.06	-0.06		0.05
Hispanic 1.5	0.00	-0.19	-0.12	
Hispanic 2.0	0.05	0.01	-0.16	
Hispanic Non-monetary	-0.04	-0.25	-0.04	
Household size	0.02*	0.01*	0.15*	0.05

	Overall ¹	WW	FOG	NYCDOHMH
BMI				
Intercept	25.33*	25.70*	24.45*	26.77*
0.4				
0.8	0.22	0.45		0.06
1.0	-0.09	0.00		-0.12
1.5	-0.01	0.03	0.20	
2.0	-0.09	0.03	0.04	
Non-monetary	0.11	0.13	0.76	
Hispanic intercept	1.21	-1.08	1.28	1.46*
Hispanic 0.4				
Hispanic 0.8	0.37	0.66		0.38
Hispanic 1.0	-0.19	0.89		-0.15
Hispanic 1.5	-0.92	-0.32	-0.06	
Hispanic 2.0	-0.82	-0.35	0.27	
Hispanic Non-monetary	-0.73	-0.40	0.18	

^{*} p < .05 Indicates a value different from 0.

Analyses of SNAP Expenditures

As noted earlier, participants who used incentives at the FM spent an average of \$34.39 SNAP dollars per transaction, before any additional incentive was applied. Examination of these data using a one-way ANOVA shows significant increases of SNAP dollars spent by participants in the national sample of FMs, as shown in Table 7. Specifically, Table 7 presents these expenditure data for SNAP shoppers from the: national sample of FMs; three network-based FM programs (i.e., WW, FOG, NYCDOHMH-individually reported); and, subset of Hispanic participants from WW's network of FMs.

For the FMs with a baseline of 0.4, participants spent a statistically significant higher amount of their SNAP dollars at both the moderate (0.8) and highest (1.0) incentive levels when compared to baseline. For the FMs with a baseline of 1.0, the highest incentive level (2.0) showed a statistically significant increase from baseline. Between incentive levels, SNAP expenditures at the highest (2.0) level were showed to statistically significant increase when compared to the moderate (1.5) level, as shown in Table 7. SNAP recipients who shopped at FMs that were awarded a baseline incentive of \$0.40 for every \$1.00 in SNAP spent an average of \$19.03 per transaction. Since not all incentive levels were available at all markets which limited the true comparability across all incentive levels, the data show a steady increase in the amount of SNAP spent at each incremental incentive level to the highest incentive level of 2.0, where \$36.28 was spent on average per transaction.

¹ Overall: the national sample of all FMs; i.e., the WW, FOG, NYCDOHMH network-based FMs that recruited SNAP shoppers to participate in the RCT.

Table 7: SNAP Expenditures at Farmers Markets, per Transaction and by Incentive Level, in Dollars

Incentive Ratio	Overall ¹	ww	FOG	NYCDOHMH	Hispanic Participants ²
0.4	19.03	28.02		18.33	20.25
0.8	25.30*+	34.20		24.56*+	28.61
1	26.87+	29.84	20.40	26.62+	26.45
1.5	29.73	27.19	33.81*+		28.16
2	36.28*+	30.76	44.07*+		43.48+

^{*} p < .05. Statistical significance indicated for the difference with the preceding incentive level; † p < .05 with baseline level 1 Overall: the national sample of all FMs; i.e., the WW, FOG, NYCDOHMH network-based FMs that recruited SNAP shoppers to

Community Supported Agriculture: Participant Feedback and Characteristics

Design

UD-CRESP researchers, in coordination with WW, gathered information regarding the CSA sites including, but not limited to: mailing address; CSA pickup logistics; and, the number of customers. Prior to the start of each of the two sampling rounds, the managers of all participating CSAs were provided with paper surveys and a postage-paid return envelope, or an electronic link to the survey, depending on their preference.

The CSA survey was conducted at 18 sites between 2015 and 2016; i.e., 10 sites in 2015 and 8 sites in 2016. Specifically, 2,242 SNAP and non-SNAP CSA members were provided a paper survey, or a link to an online version of the same (2015 only), and asked to complete the survey during the month of October (2015) or July (2016). No USDA funding was used to provide any financial incentives for completing the survey. The CSA survey administration was not randomized nor limited to only SNAP participants. Finally, CSA members could select a reusable grocery bag imprinted with a healthy eating message on one side of the bag, whether or not they completed the CSA survey.

Sample

Upon receipt of completed paper surveys, data were manually entered into an Excel spreadsheet using a codebook developed by UD-CRESP. Data from surveys completed electronically were mined from QualtricsTM and stored with the paper survey codebook data;

participate in the RCT.

Hispanic participants from the WW network of FMs.

in combination; the data were analyzed using SAS9.4TM. During the two rounds of sampling, a total of 330 independent responses were generated.

Survey Measures

The survey presented to CSA members mirrored most aspects of the RCT survey, including questions related to: the modified DSQ; FI; demographics; and, BMI and health status. The survey also asked several additional questions unique to the CSA setting (e.g., CSA location).

Results

A total of 2,242 surveys were provided to the 18 participating CSA sites; 15% (n=330) were completed in either paper or electronic format, although not all 330 respondents answered every survey question. Of the 330 respondents, 85% were female (n=280), and 15% (n=50) were male. Regarding race and ethnicity, a significant majority of respondents, 88% (n=291), were white, and 8% (n=25) were Hispanic. The average age of respondents was 45.3 years.

Regarding sample members' participation in food assistance programs in the prior year, 8% (n=25) had received Women, Infants, and Children (WIC) benefits, and 19% (n=63) had received SNAP benefits. Almost half (47%, n=18) of those receiving SNAP benefits had done so for longer than five years.

Of the 236 surveys that provided food security information, 33% (n=78) were considered food insecure based on the same validated FI screener used with RCT participants. A number of the participants (8%, n=26) stated that they had fair or poor health, and 13% (n=43) (averaged) reported that they had high blood pressure or hypertension. The sample population was obese (BMI \geq 25), given its average BMI of 27.3.

The average amount that a participant spent per month on FVs as part of their total grocery shopping purchases was \$207.42, which comprised 48% of their total expenditure on food and drinks. Overall, about 3.16 cups of FVs per day were consumed by the sample as a whole.

No comparison between 2015 and 2016 results was made due to the limited size of each year's sample.

Anecdotal Feedback

Communication received from FM managers and RCT participants during the RCT is included verbatim in Appendix AAppendix A. Overall, there was little to no criticism of the RCT process. Rather, FM managers recognized the benefit of additional RCT spending to their market's farmer vendors, and on the overall reputations and desirability of their FMs. Further, numerous participants expressed appreciation for the increased incentives and the value of the additional FVs to their health. All questions and concerns were promptly addressed. Further, acknowledgement of communications that did not necessitate a response was provided in most cases.

Conclusions and Recommendations

The study showed three notable effects. First, financial FV incentives randomly awarded to SNAP shoppers at FMs had statistically significant, positive effects on FV consumption, increasing consumption for those at the highest (2.0) incentive level by 0.16 cups/day. Even stronger positive effects were found when FV consumption was calculated for only those SNAP shoppers who used their incentive: at the 2.0 level, consumption increase almost doubled to 0.31 cups/day. Second, the data show a steady increase in the amount of SNAP spent on FV at each incremental incentive level – and most of these increases were statistically significant when compared to the baseline incentive level. Specifically, and finally, Hispanic participants spent a statistically significant higher amount of their SNAP dollars on FV at the highest incentive level when compared to the baseline incentive level.

Based on these effects, we make two recommendations. Our first recommendation is that an incentive be codified at the highest incentive level. At baseline, participants reported consuming 2.77 cups of FVs per day which increased to 2.93 cups at the highest incentive level, a statistically significant increase. Accordingly, a dedicated FV incentive for SNAP shoppers would help to close the gap between current FV consumption and that recommended by the Dietary Guidelines for Americans (4.5 cups of FVs per day)⁴. Improving dietary quality among participants results in numerous health benefits for the individual, including a reduced risk of stroke and other cardiovascular diseases, a reduced

⁴ U.S. Department of Health and Human Services and U.S. Department of Agriculture. *2015–2020 Dietary Guidelines for Americans*. 8th Edition. December 2015. Available at http://health.gov/dietaryguidelines/2015/guidelines/.

risk of developing cancer, and a reduced risk of Type 2 Diabetes^{5,6,7}. Beyond the individual level, improved dietary quality also results in a reduced strain on the health system as a decreased incidence of health problems for the individual reduces the need for care and interventions.

Further, a codified FV incentive for SNAP shoppers at FMs conveys economic benefits since the highest incentive level is associated with a statistically significant increase in SNAP FV expenditures at FMs. Also, incentive programs have the potential to bring new customers to FMs and bolster FM use among participants. The increases in FM sales relieves local farmers of the need to ship their products over long distances and is mutually beneficial for the consumers and sellers.

An alternative to our recommendation for an incentive at the highest level is codification of an FV incentive at the moderate level. This would still confer the benefits of increases in both FV consumption and SNAP spending on FVs, creating a cost-saving alternative to an FV incentive at the highest level. For example, it was found that for FMs with \$1 incentives or less, there was little difference between providing a "spend \$1 and get \$0.80" versus a "spend \$1 and get \$1" offer. In both cases, SNAP shoppers spent between \$25 and \$27/transaction at FMs.

Our second recommendation is that culturally appropriate programming for Hispanic participants at FMs be created or expanded given that SNAP spending on FV for this subset of the population also increased at higher incentive levels. The relatively high percentage of Hispanic residents in the FOG and NYCDOHMH networks presents a unique opportunity to offer this specialized programming

In conclusion, investing in FM incentive programs, which is supported by this study's findings and widely across the literature, should be prioritized. Specifically, this RCT supports the effectiveness of incentive programs in improving nutrition behaviors of SNAP shoppers and increasing spending at FMs. Such programs address the need to increase

⁵ Jardim TV, Mozaffarian D, Abrahams- Gessel S, Sy S, Lee Y, Liu J, et al. (2019) Cardiometabolic disease costs associated with suboptimal diet in the United States: A cost analysis based on a microsimulation model. PLoS Med 16(12): e1002981. https://doi.org/10.1371/journal.pmed.1002981

⁶ Mozaffarian D, Benjamin EJ, Go AS, et. al. (2016) Heart Disease and Stroke Statistics—2016 Update. American Heart Association Statistics Committee and Stroke Statistics Subcommittee. Circulation. 133:e38–e360. https://doi.org/10.1161/CIR.0000000000000350

Mozaffariam D, (2016) Dietary and Policy Priorities for Cardiovascular Disease, Diabetes, and Obesity A Comprehensive Review. American Heart Association. Circulation. 133:187–225. https://doi.org/10.1161/CIRCULATIONAHA.115.018585

purchasing power for low-income consumers, such as SNAP participants, enabling the purchase of healthy foods. This is particularly timely as, in recent years, the price of healthy items such as FVs has increased relative to unhealthy items. Accordingly, incentive programs such as the one analyzed in this RCT, improve the affordability of FVs for program participants. Therefore, incentive programs that increase SNAP shoppers' ability to purchase additional FVs should be part of future policies to support this population which will create more equitable access for those whose food budgets are otherwise limited. Further, efforts to maximize incentive usage should be undertaken in order to maximize program benefits.

Appendix A: Anecdotal Feedback from all FMs

(Note, in many cases participants and FM managers refer to "vouchers," which means the incentive randomly awarded by the RCT process.)

(participant, undated)

Good morning!

I was so happy to take part in your survey. I only spend my SNAP benefits at the Farmer's Market. As excited and thankful as I was to receive the awesome redemption voucher, I was discouraged as it expires barely a week after I received it. The facts are I only receive \$22.00 a month in SNAP benefits....that is as a Mom of 2! Also, it is given at the beginning of the month. So when I took your survey, I had already used up September's benefits at the previous week's market. Is there any way you can send a new voucher I can use at this Saturday's market or send me a link and I will happily take the survey again please? Thanks so much in advance for your help,

(participant, undated)

Since I have no way to copy anything I brought my phone and showed them the email of winning... I used it all up already was down to nothing for food I want to thank you so much this helped me so much I made a nice veg roast and a large apple and blueberry pie.. can I get some more help for October?

(Comment by phone from a voucher winner, undated)

I am very grateful for the opportunity to purchase more fruits & vegetables. My son has had health issues, which I feel are the result of decreased fruit and vegetable intake since I went on SNAP benefits.

(participant, undated)

The few extra bucks was very helpful last time.

(Comment by phone from a market manager, undated)

The extra dollars are so helpful to our customers. I would gladly take a whole lot of hassle trying to figure out any glitches in the lottery system if it means extra benefits for our customers.

(participant, undated)

May I say this is helping me so much.. its very hard to stretch the little bit I do have and I try to eat healthy but can't always afford to.. many thank you. :-)

(Karen McGlammery, Webb City FM Manager, 10/4/15)

We had a great market yesterday with THREE very excited lottery winners redeeming!! This is such an awesome program. And our local paper ran a story on the lottery program yesterday.

(participant, undated)

The social culture in my particular area (Seacoast of NH) might give some skewed results. The Eat Local/Buy Local movement has been a hard driving factor throughout the entire recession. Residents are predominantly physically active and conscientious about their health and environment. Compared to the rest of the country, obesity is quite low, but smoking is very popular. Believe it or not, some SNAP recipients had perfectly good eating habits prior to enrolling in the program. SNAP acceptance at the farmer's market simply makes it possible to continue (to some degree) while enduring financial hardships.

(participant, undated)

(Karen McGlammery, 10/15/15)

You helped one of our market clients, Sam, be able to access the survey and she was a winner and was so happy. I've copied a couple of statements from her emails (with her permission) to share with you. [In the first paragraph she is referring to the fact that as of October our Friday market is over for the season so we are down to two markets per week instead of three, thus only two times to match EBT funds instead of three]. Also, in conversation at the market I teased Sam that she'd have to hold a dinner party now that she can buy so many veggies with the lottery. She said that seriously, she now would be able to have someone over for a meal when she never could before as she just didn't have enough food. I hadn't thought about that social aspect of not having enough food...

Sam:

"I am so excited!!!!! I was thinking over how the dropping of Friday markets would cut \$60-\$75 match dollars per month out of my budget and how I would have to shift things around for that... AND then I got a double match! That'll be like \$90 extra match if I make it to every market this month! Every month seems to work out for food now because of the matches, providence of "random" food showing up, and good farmers who are very generous in general and even more so when they suspect that you don't have very much on a given day. I have always been pleased with the Webb City market and how well it works and is put together, but now it is staple in my life even more. Thank you, Karen and Eileen for all the wonderful things you do, countless hours, and hard work you put into making the market great! This is one of the hardest working programs I have seen in terms of personal, small famers agricultural, local economy, and many other intangible, impacts."

(participant, 10/15/15)

I am so very grateful for this program and the ability to be able to use the SNAP benefits at the

farmers market to obtain fresh food for my family and to support local farmers.

(from a farmers market manager, undated)

I thought you might also be interested in a quote from one of our other SNAP customers on Saturday. When I told her that the in-market survey was part of a research project that would hopefully justify future funding, she was very enthusiastic about the match program and happy to participate in the survey. As she left she said "I haven't eaten this healthy in years!"

(Englewood FM, undated)

So glad to be able to buy fresh, organic veggies at the farmers market instead of at WalMart.

(undated)

The market and this program is jessy a blessing all together, with it and exercise, I have been able to lose and keep off 135 pounds now of over a year. This program made it a much easier to be able to purchase real food. Thanks again for what you guys are doing,

(Tucson, AZ FM customer, 4/18/16)

Thank you for doing this. Anything to help with making fresh food available is making a huge difference in people's lives & making a difference for farmers. Incentives help to offset higher costs at farmers markets"

(From a participant at Southwest Community FM, 5/11/16)

"this survey has really made it possible for me to have not only enough food each month with the little help i get from the state but also able to eat much healthier. I love the fresh fruit and veg that my refrigerator is filled with as oppose to frozen dinners."

(From a participant from the Grandin Road FM, 6/16/16)

I'm glad to hear what you guys do with the data from the Farmers Market surveys! Sounds like it could potentially lead to some positive results! Thanks for your work on this project that, at least for me, is a worthwhile program!

(Tracy Herner, Williamsburg VA FM Manager, undated)

Don't know how frequently you hear stories, but this past weekend was a huge success for us! We did over \$400 in SNAP, which is a record. 2 customers got over \$100 in tokens, and one of those was an RCT winner. She got \$120 in SNAP tokens, and \$240 in F&V.....for a whopping \$360 to spend at the market. She was nearly crying as that is more than she gets all year. Because of how happy she was about winning, she encourage 3 other SNAP recipients to come to the market with her.

(Sara Rhoades, City of Alexandria, VA, 9/9/2016)

We've increased our sales at the market by >200% this summer because of this RCT

(Alyssa Lerman, 11/3/15)

The Concord Farmers' Market concluded for the season this past Saturday (with positive feedback from customers participating in the RCT surveys!)

(Forwarded from Eileen Nichols, Webb City FM, 10/13/16)

"Hey, I just back from the doctor and my AIC dropped, meaning I am no longer considered to have prediabetes. That's something you can to take to your market match funders."

(Lee Perron, Englewood FM, 1/22/16)

We, as in the collective "all of us", had a BIG day at the market yesterday. Please note the photos. We had our first RCT winner! She showed with her voucher on her smart phone. That's Amy and the winner with the voucher displayed on the phone. She was so excited that she swiped for \$60 in SNAP funds and she received \$90 in black tokens. Wow! Katie, I checked the transaction log for data and sure enough the \$90 showed up as 1.5 RCT! The tracking is working well... and Carmen you now have your data available residing in the portal. The winner is one of our participants that come every week. Amy spent time reinforcing with each sign up and with those who have already signed up the importance of filling out the survey. Some said they thought it was a little long.... But when Amy shared the story of the winner receiving a \$90 dollar match... we think the list got a little easier to fill out. We had 22 participants, with 11 new, and we sent in 14 RCT cards this week. They purchased \$462 in SNAP, we matched \$442, and the vendors redeemed \$754... including our first 20 black tokens for redemption. So, there's the numbers and the platform is humming along.

(participant, 10/8/15)

Tara.

Thanks for taking the time to get back to me. Yes I did win for October I plan to spend about \$200 of my food assistance in Portsmouth Saturday. This program is an amazing way to get healthy foods and choices into lower income families. It's great for us and the farmers get a whole new group of people to share their goodies with. I also plan to use the winter markets too so I'll be looking for the surveys then too. Hope this research is successful because we will be taking advantage as long as it exists. If you need an advocate I would be happy to share my experiences. Thanks again.

(newspaper article)

Webb City market fuels healthier eating, research program for low-income customers BY MIKE POUND mpound@joplinglobe.com | Posted: Friday, October 2, 2015 6:50 pm

WEBB CITY, Mo. — The Webb City Farmers Market has been selected to take part in a research program that hopefully will allow low-income residents to continue to receive increased access to local fresh fruits and vegetables.

In March, the market received a three-year \$33,000 grant that provided matching dollars for customers enrolled in the government's food stamp program. The grant was part of a larger United States Department of Agriculture \$3.77 million grant award to Wholesome Wave, a national nonprofit organization. Wholesome Wave in turn issued the \$33,000 annual grant to the Webb City market. A group of St. Louis farmers markets and the Webb City market were the only markets in the state selected to take part in the program.

Karen McGlamery, volunteer market manager, said the fact that the Webb City market was even considered for the grant from Wholesome Wave is a testament to the determination of Eileen Nichols, the founder and director of the Webb City Farmers Market.

"Eileen called them (Wholesome Wave) repeatedly," McGlamery said. "The fact that we got the grant says a lot about the Webb City Farmers Market and Eileen Nichols."

Under the program, food stamp customers may swipe their Supplemental Nutrition Assistance Program (SNAP) cards at the Webb City market's information desk and receive tokens for the amount of money they wish to spend. The market then, thanks to the grant from Wholesome Wave, will issue matching tokens — up to \$15 — to the customer to be used at the market. While the customers may spend their SNAP tokens on any market product, the matching token may only be used for produce, McGlamery said.

In addition to the matching token program, the market has been selected by Wholesome Wave to take part in a research program, McGlamery said.

When SNAP customers purchase their tokens at the market, they are asked to take part in a short, anonymous survey. The purpose of the survey, McGlamery said, is to gauge how the SNAP money is being spent at the market. The information will be used by Wholesome Wave to help justify continued support for farmers markets from the USDA.

As part of the research project, during three months of each year, customers who take part in the survey are entered in a drawing for a much larger token match for the month in which their name is drawn.

This year, the drawings began in September and will continue through October and November. McGlamery said that in September several Webb City customers won additional token matches.

"We had one woman who spent \$40 and walked away with 123 (\$1) market tokens," McGlamery said.

McGlamery said the whole idea surrounding the Wholesome Wave grant is to encourage people to eat healthier and to be able to stretch their food budgets.

"But it also helps our growers by giving them another market and increasing their business," she said.

For more information about the SNAP program and to be entered into the drawing, you may visit the market's information desk located on the east side of the market pavilion in King Jack Park.

Fall hours

The Webb City Farmers Market fall hours are from 4 p.m. to 7 p.m. on Tuesdays and from 9 a.m. to noon on Saturdays.

(Rob Shepard, Healthy Exchange Project Coordinator, Greenmarket GrowNYC, 2/13/17) 2/10/17 at 97th St – "A few of the EBT lottery winners used all of their available money at the market (in two cases they purchased \$150 in tokens). It seems that winning the lottery is becoming an important incentive for people to shop at the market."

2/12/17 at Cortelyou – "Year round Health Bucks and RCT have had a clear positive impact on this market! Even with freezing rain all day, I still did good EBT sales due to several regulars who previously came seasonally showing up to get their Health Bucks."

(Eileen Nichols, Manager, Webb City FM, 2/17/17)

"We're getting the word out! The lottery is in the "continue reading" section."



Webb City Farmers Market

Posted by Eileen Nichols

11 hrs . 🚱

For our food stamp customers - did you know that you can use your card to buy food at the market? Just come to the information table. And, did you know that we can match your food sta... Continue Reading



(participant, 3/2/17)

(participant, 3/7/17)

"The program has been a godsend getting fresh vegetables and fruits."

(Roxanne Garcia, Co-Director, Heirloom Farmers Markets, 3/31/17)

"We have really enjoyed distributing the lottery. Our farmers and customers have really benefited!"

(participant, 7/26/17)

Please send me a survey. I must say I miss the extra health bucks. Last year I was able to go vegetarian because of the extra help. This year I wanted to see if I can eat vegan for a little while. This I was also able to buy white peaches. This year the prices on vegetables and fruit went up. I try to make all of my food purchases at the farmers markets. I also juice a lot. I have been able to keep my UC under control because of the changes made. Thank you for this program. It makes a difference.

. ************* **********

(participant, undated)

Thank you. Please keep encouraging others to eat healthy. "An ounce of prevention is better than a life time of cures".

(participant, 8/7/17)

You guys are so nice to me and your vegetables are so fresh and healthy.

(participant, 9/30/17)

I want to let you know what a life-saver your program was to me and my family last month. My 9 year old has Lyme disease and will have it the rest of his life, so learning how to thrive with Lyme has been my #1 priority this past year. Before approaching what Lyme is all about, when, where and how it was identified and how it functions unlike any other disease, I have been well-advised to focus on and master 4 areas: 1. Nutrient 2. toxins 3. stress 4. sleep. It sounds a lot simpler than it is! Your program was just the thing we need that helped me with 3 of 4 of those areas last month and being able to get him the quantity of vegetables made a noticeable impact on him in just the one month I was able to participate. At the same time, I am also climbing out of a messy domestic violence situation which has made becoming financially independent a real challenge, and affects every part of our lives. I cannot express enough how just this little bit of help goes a very long way.

(participant, 10/11/17)

Si gracias hay mucho producto buenísimo (Yes thank you there is a lot of great produce).
