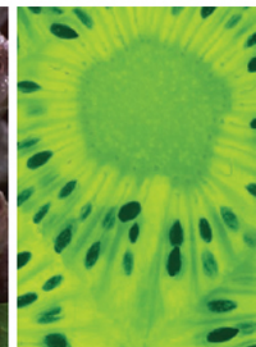


SOUTHERN CALIFORNIA NUTRITION INCENTIVE PROGRAM

PROGRESS REPORT

June 1, 2017 to May 31, 2018



Lead Author

University of California San Diego School of Medicine
Center for Community Health

Acknowledgements

This report, like the ¡Más Fresco! More Fresh Program itself is a collaborative effort. We are indebted to our many partners who have made this report and the ¡Más Fresco! More Fresh Program possible. Special thanks to the United States Department of Agriculture National Institute of Food and Agriculture; Northgate González Market; California Department of Social Services CalFresh Program and the local CalFresh Programs in Los Angeles, Orange and San Diego Counties; Ecology Center; Latino Health Access, Vision y Compromiso; The California Endowment; Univision; California Department of Public Health Nutrition Education Obesity Prevention (NEOP) Branch and the local health departments in Los Angeles, Orange and San Diego Counties; our NEOP community-based partners across Southern California; Center for Good Food Purchasing; and a very special thanks to the CalFresh recipients who are participating in this study and who are providing us with the key data that comprises this report, with which we will ultimately be able to inform the USDA and others about the impact of financial incentives on the purchase and consumption of fruits and vegetables.

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Program Overview

During our second year of operation from June 1, 2017 to May 31, 2018, the Southern California Nutrition Incentive Program, also known as the ¡Más Fresco! More Fresh Program, has continued to develop, implement, and evaluate a Food Insecurity Nutrition Incentive program for CalFresh recipients living in Los Angeles, Orange and San Diego Counties. In addition to providing participants greater access to more affordable fruits and vegetables, we are pushing the envelope with regards to evaluation and are using a randomized control design to examine the effect of different financial incentive levels on customer purchasing behaviors.

During this time frame, the ¡Más Fresco! More Fresh Program conducted 30 ¡Más Fresco! More Fresh Program enrollment events at six Northgate González Markets in Los Angeles, Orange and San Diego Counties (2 markets per county) and enrolled 1,230 participants in the program's second cohort. Since the inception of this program, we have enrolled



2,383 participants. Like our first cohort of 1,153 program participants, the participants in the second cohort have been randomized to receive either \$10, \$20, or \$40 a month for 12-months in financial incentives. This group of participants have completed their baseline surveys and have begun to earn and redeem their financial incentives. During this last federal fiscal year (FFY), we have also collected 359 six-month surveys and 188 12-month surveys from our Year 1 program participants (Cohort 1).

This report presents baseline survey characteristics and other data for Year 1 (Cohort 1) and Year 2 (Cohort 2) program participants through May 31, 2018.

Food Security

The United States Department of Agriculture (USDA) defines food security as access by all people at all times to nutritionally adequate foods to sustain an active, healthy life. This is one of several conditions necessary for a population to be healthy and well-nourished. In contrast to food security, the USDA defines food insecurity as a condition in which consistent access to nutritionally adequate foods for all household members is limited by a lack of resources. According to the USDA in their March 2018 report entitled *The Food Assistance Landscape: FY 2017 Annual Report*, an estimated 12.3 percent of U.S. households (or 15.6 million households containing 41.2 million people) were food insecure at least sometime during 2016. While those with *low* food security may have decreased access to nutritious foods and have to limit the variety and quantity of healthy foods they consume, this becomes even more concerning when families start to report increased frequency of disrupted eating patterns and reduced food intake that results in hunger. These families are then categorized as having very low food security. In 2016, 4.9 percent of all U.S. households experienced very low food security.

The ¡Más Fresco! More Fresh Program utilized USDA's U.S. Household Food Security Survey (Six-Item Short Form) as part of its baseline survey to assess the food security of the ¡Más Fresco! More Fresh program participants. The survey includes the following six statements and questions:

- The food that we bought just didn't last, and we didn't have money to get more.
- We couldn't afford to eat balanced meals.
- In the last 6 months, did you or other adults in your household ever cut the size of your meals or skip meals because there wasn't enough money for food?
- How often did this happen - almost every month, some months but not every month, or in only 1 or 2 months?
- In the last 6 months, did you ever eat less than you felt you should because there wasn't enough money for food?
- In the last 6 months, were you every hungry but didn't eat because there wasn't enough money for food?

Key Findings

Food Security

The self-reported level of food security among the ¡Más Fresco! More Fresh program participants, indicates that 80.80% of Cohort 1 participants and 78.50% of Cohort 2 participants suffer from low to very low levels of food security.

As noted in the Baseline Enrollment Characteristics section of this report, the mean household size of Cohort 1 and Cohort 2 are 5.5 and 4.2 household members respectively. Many of these households include children and senior citizens (up to age 95 years; 87% of Cohort 1 households, and 79% of Cohort 2 households include children). These results indicate that among the ¡Más Fresco! More Fresh program participants, children, youth, adults and seniors all suffer from low to very low levels of food security.

COHORT 1



Food Security

- High food security: 19.2%
- Low food security: 40.1%
- Very low food security: 40.7%

COHORT 2



Food Security

- High food security: 21.5%
- Low food security: 43.7%
- Very low food security: 34.8%

Key Findings

Fruit and Vegetable Consumption

The *2015-2020 Dietary Guidelines for Americans* recommends that we consume 4.5 cup equivalent servings of fruits and vegetables a day at the referenced 2,000 calories per day level. The self-reported combined intake of fruits and vegetables among the ¡Más Fresco! More Fresh program participants fall far below the recommended levels, at approximately 58% to 60% of the recommended levels in Cohort 1 and 2 respectively.

Evidence shows that healthy eating patterns, as outlined in the *2015-2020 Dietary Guidelines* are associated with positive health outcomes. There is strong evidence indicating that healthy eating patterns are associated with a reduced risk of cardiovascular disease. Evidence also indicates that healthy eating patterns are associated with a reduced risk of type 2 diabetes, certain types of cancers (such as colorectal and postmenopausal breast cancers), overweight, and obesity. Emerging evidence also suggests that relationships may exist between eating patterns and some neurocognitive disorders and congenital anomalies. Within this body of evidence, higher intakes of vegetables and fruits have consistently been identified as characteristics of healthy eating patterns.

¡Más Fresco! More Fresh Program Participant Fruit and Vegetable Consumption

COHORT 1



Fruit and Vegetable Consumption

• Median: 2.6 servings of FV per day

COHORT 2



Fruit and Vegetable Consumption

• Median: 2.7 servings of FV per day

Key Findings

Food Access

As noted by the USDA, consumer choices about food spending and diet are likely to be influenced by the accessibility and affordability of food retailers — travel time to shopping, availability of healthy foods, and food prices. Some people, especially those with low income, may face greater barriers in accessing healthy and affordable food retailers, which may then negatively affect diet and food security.

According to a May 2016 report by The California Endowment entitled: *California FreshWorks Food Access Report An Examination of Three Northgate González Grocery Store Investments*, nearly one million Californians, 45 percent of whom are low-income, live without access to nearby supermarkets or large grocery stores in communities known as “food deserts.” Food deserts are defined as places with large proportions of households with low incomes, inadequate access to transportation, and a limited number of food retailers providing fresh produce and healthy groceries for affordable prices. These types of environments encourage poor eating habits, which can lead to poor health. Our understanding of the ways to increase access to healthy food for residents in these food desert communities is emerging. It is clear that providing access to healthy food through full-service supermarkets and other retail outlets is an important part of the solution—and an essential component of healthy communities.

Overall, the evaluation revealed that the Northgate González Markets where the evaluations took place are providing needed grocery services and that community members are benefiting from these investments. Compared to where they had previously shopped, a high proportion of shoppers reported that the Northgate store:

- Is closer in proximity to them, and that store parking and access to public transportation are better
- Offers a greater variety and higher quality of groceries, including fruits and vegetables
- Offers groceries, fruit, and vegetables at equal or lower prices
- Offers a greater variety of food that is culturally relevant to their family traditions
- Offers better customer service

Collectively, these findings indicate that shoppers are experiencing increased access to healthy, affordable, and high-quality food that is relevant to their cultural and family traditions in stores with better customer service.

Key Findings

Food Access

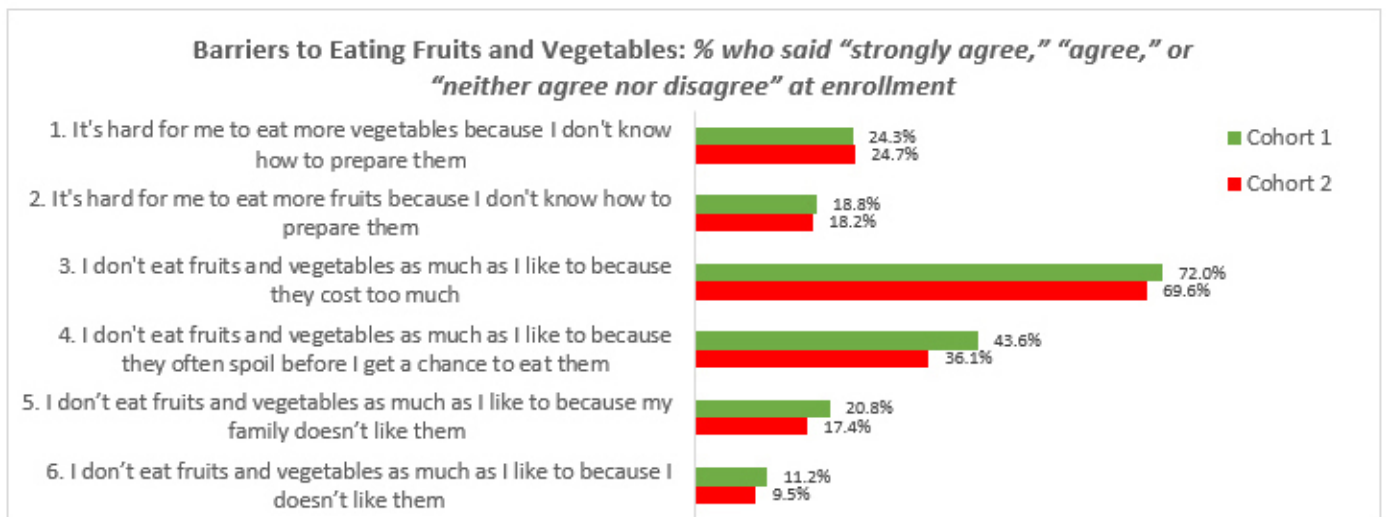
Barriers to Fruit and Vegetable Consumption

Based on the responses by the ¡Más Fresco! More Fresh program participants to a series of survey questions pertaining to barriers to fruit and vegetable consumption, the single greatest barrier to consuming more fruits and vegetables is the cost of fruits and vegetables. The cost of fruits and vegetables was indicated as the number one barrier by 72% of Cohort 1 and by 69.6% of Cohort 2.

Addressing this specific barrier is a key objective of the ¡Más Fresco! More Fresh Program. The primary goal of the USDA Food Insecurity Nutrition Incentive (FINI) Grant Program is to fund and evaluate projects intended to increase the purchase and consumption of fruits and vegetables by low-income consumers participating in Supplemental Nutrition Assistance Program (SNAP) by providing incentives at the point of purchase. Specifically, the ¡Más Fresco! More Fresh Program aims to test strategies that contribute to an understanding of how best to increase the purchase and consumption of fruits and vegetables by SNAP participants. The program aims to do this by incentivizing fruit and vegetable purchases, thereby increasing fruit and vegetable affordability and consumption and helping to ensure the availability of affordable, nutritious food, resulting in the improved nutrition and health status of participating households.

¡Más Fresco! More Fresh Program Participant Barriers to Eating Fruits and Vegetables

COHORT 1 and COHORT 2



¡Más Fresco! More Fresh Program Participant Baseline Enrollment Characteristics

COHORT 1



Gender

- Mostly (93%) female



Age

- Mean 39.7 years, range 18-95 years



Race/Ethnicity

- 90% Latino (of these, 90% Mexican origin), 5% White, 3% Black/African American, 1% Asian, 1% Other



Marital Status

- 56% Married/Living with Partner
- 22% Single
- 22% Widowed, Divorced/Separated



Household Size

- Mean of 5.5 household members
- 87% have children



Education

- High school incomplete: 67%
- High School Graduate/GED: 19%
- Any College: 15%



Monthly CalFresh/SNAP

- Mean: \$329/month



Distance to Participating Market

- 65% live within 2 miles
- 27% live 3-4 miles away
- 8% live further than 5 miles away

COHORT 2



Gender

- Mostly (88%) female



Age

- Mean 41.6 years, range 18-90 years



Race/Ethnicity

- 90% Latino (of these, 88% Mexican origin), 3% White, 3% Black/African American, 1% Asian, 3% Other



Marital Status

- 47% Married/Living with Partner
- 31% Single
- 22% Widowed, Divorced/Separated



Household Size

- Mean of 4.2 household members
- 79% have children



Education

- High school incomplete: 63%
- High School Graduate/GED: 17%
- Any College: 20%



Monthly CalFresh/SNAP

- Mean: \$302/month



Distance to Participating Market

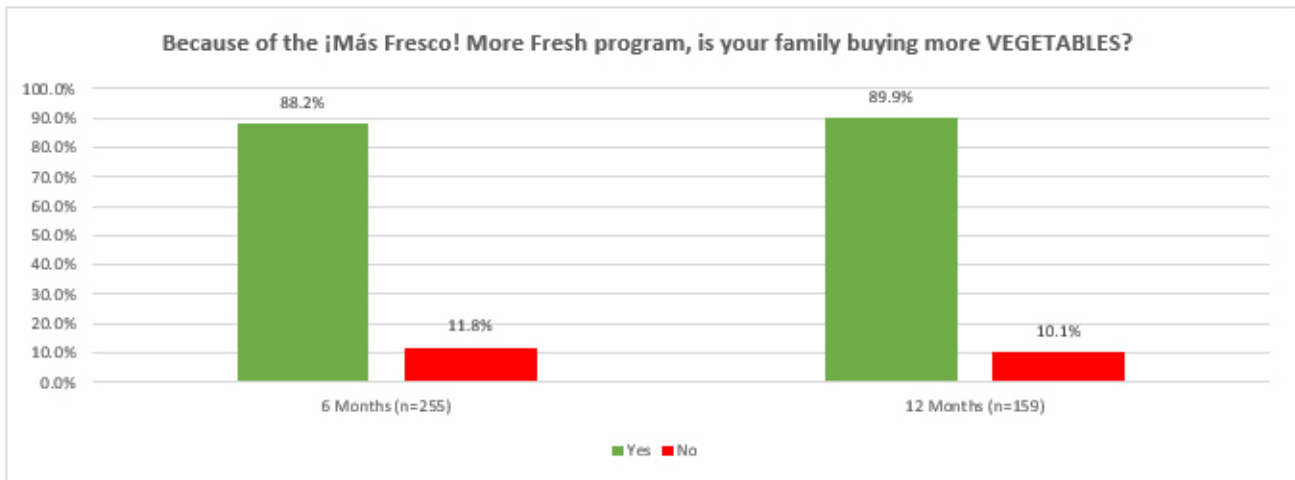
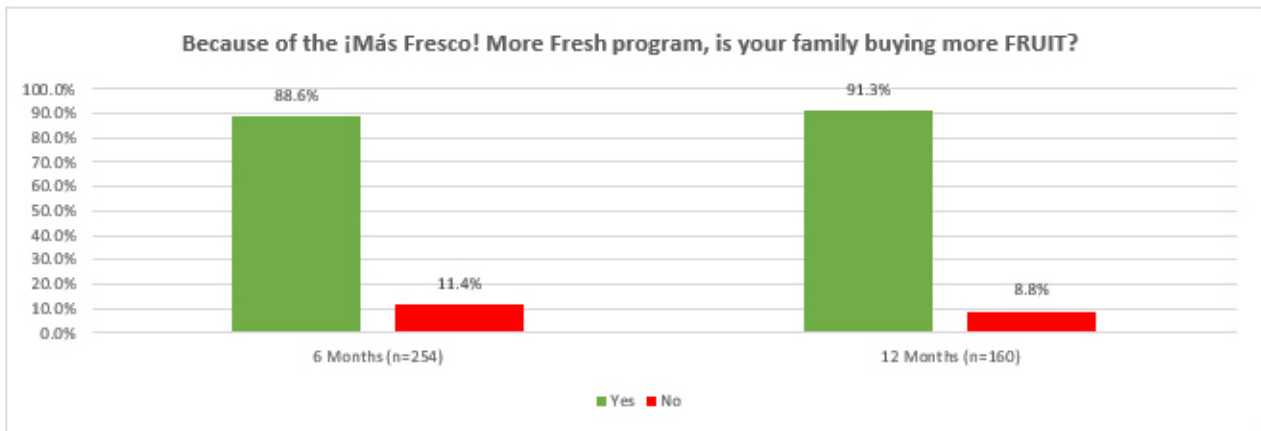
- 68% live within 2 miles
- 23% live 3-4 miles away
- 9% live further than 5 miles away

Key Findings

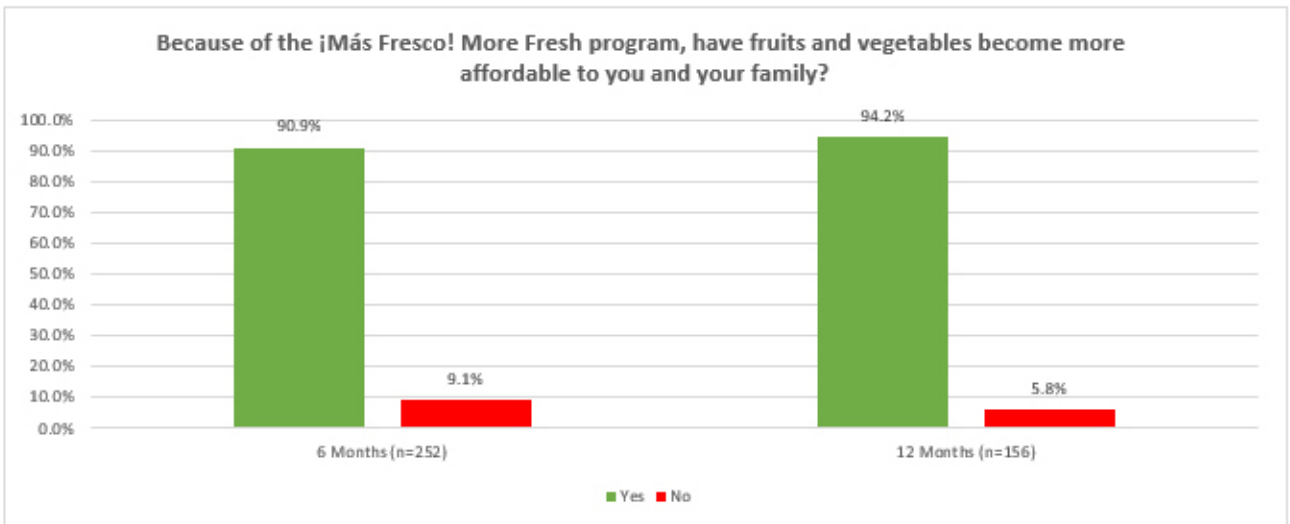
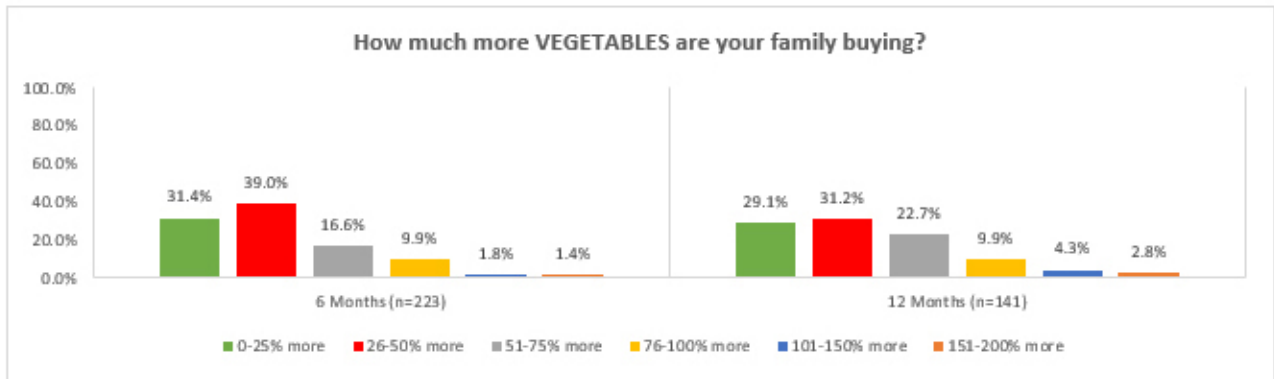
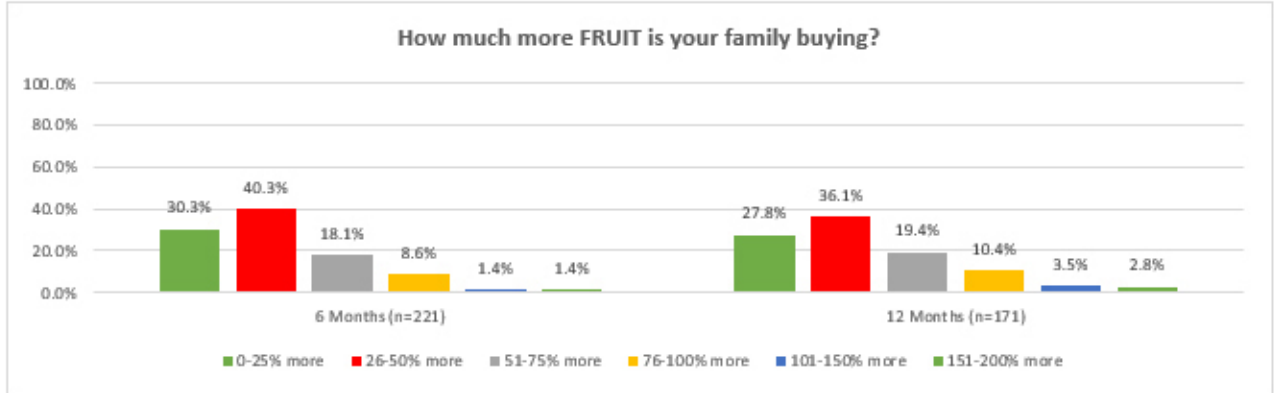
¡Más Fresco! More Fresh Program Participant 6-Month and 12-Month Retrospective Outcome Measures

Cohort 1 was asked the following questions as part of the 6-month and 12-month follow up survey to gauge perceived outcomes of the program.

¡Más Fresco! More Fresh Program Impact on Fruit and Vegetable Purchases



¡Más Fresco! More Fresh Program Impact on Fruit and Vegetable Purchases



Key Observations

While the results are still preliminary, with much more data to be collected and further Cohorts to be evaluated over the next 2 years, an analysis of Cohort 1 6-month and 12-month survey data indicates that the ¡Más Fresco! More Fresh Program is achieving its primary objective of increasing the purchase and consumption of fruits and vegetables by low-income consumers participating in the Supplemental Nutrition Assistance Program (SNAP) by providing incentives at the point of purchase.

Affordability

As noted earlier in this report, 72% of Cohort 1 program participants noted in their baseline surveys that they do not eat fruits and vegetables as much as they would like because they cost too much. Based on the 6-month and 12-month follow up surveys, the ¡Más Fresco! More Fresh Program appears to have increased the affordability of fruits and vegetables. At 6-months, 90.9% of Cohort 1 survey respondents indicated that fruits and vegetables were more affordable due to the ¡Más Fresco! More Fresh Program. At 12-months, 94.2% of Cohort 1 survey respondents indicated that fruits and vegetables were more affordable due to the ¡Más Fresco! More Fresh Program.

Increased Purchase of Fruits and Vegetables

Based on further analysis of the 6-month and 12-month survey data, the increased affordability of fruits and vegetables made possible by the ¡Más Fresco! More Fresh Program has translated into increased purchase of fruits and vegetables. At 6-months, 88.6% of Cohort 1 program participants indicated that they were purchasing more fruits and 88.2% indicated that they were purchasing more vegetables as a result of their participation in the ¡Más Fresco! More Fresh Program. At 12-months, 91.3% of Cohort 1 program participants indicated that they were purchasing more fruits and 89.9% indicated that they were purchasing more vegetables as a result of their participation in the ¡Más Fresco! More Fresh Program.

Based on the self-reported information provided by the 6-month and 12-month surveys, Cohort 1 appears to have been able to increase their purchase of fruits and vegetables in the near-term (6-months) and to have been able to sustain this increased purchase of fruits and vegetables over the longer term (12-months). These are favorable results suggesting that financial incentives provided at the point-of-purchase do result in increased purchase of fruits and vegetables.

The ¡Más Fresco! More Fresh Program is now in the process of assessing additional data to determine the program's impact on the consumption of the fruits and vegetables purchased, as well as any changes in nutrition knowledge, self-efficacy, and overall eating behaviors as a result of participation in the ¡Más Fresco! More Fresh Program. Ultimately, analysis of the purchasing data will allow us to have a clearer understanding of how this financial incentive program impacts fruit and vegetable purchases among SNAP recipients in Southern California.

Key Observations

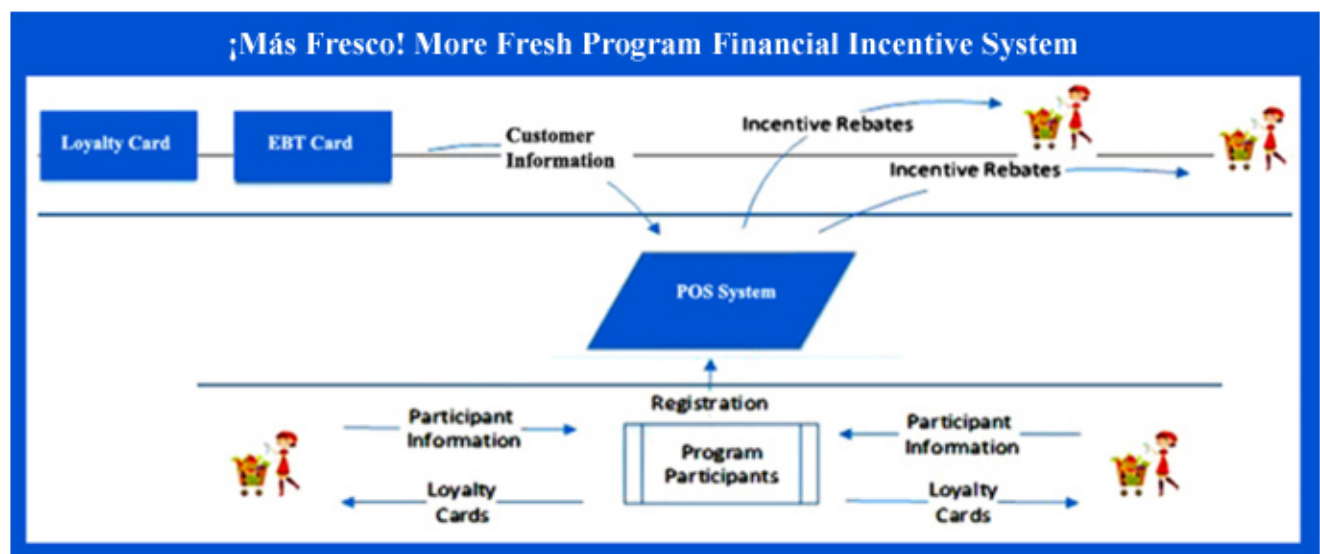
We will be able to determine what proportion of the monthly purchases are made up of fruits and vegetables and whether the level of incentive impacts this outcome. Finally, the program will be conducting an 18-month follow up survey with each Cohort, to determine the longer-term impacts of the program after the financial incentives have stopped.

Key Accomplishments

Innovative Technologies

In order to implement the financial incentive redemption program in a large-scale retail setting, UC San Diego School of Medicine Center for Community Health partnered with Northgate González Market to develop, implement and evaluate a cloud-based, customer loyalty financial incentive program that instantaneously tracks the dollars spent, earned, and redeemed within the ¡Más Fresco! More Fresh program.

As originally envisioned and proposed to USDA, this is a seamless, paperless, instantaneous process where program participants earn and redeem financial incentives simply by buying fresh fruits and vegetables with the CalFresh benefits on their Electronic Benefit Transfer (EBT) card at participating Northgate González Markets located in Los Angeles, Orange and San Diego Counties in Southern California.



As envisioned by UC San Diego School of Medicine Center for Community Health and as noted in our USDA Food Insecurity Nutrition Incentive grant proposal, the Southern California Nutrition Incentive Program aims to develop effective and efficient technologies for benefit redemption systems that may be replicated in other States and communities. Based on the success of this innovative financial incentive system developed in partnership and collaboration with Northgate González Market, and the great interest we have received in this technology from other programs around the country, we believe that this financial incentive system and associated technologies represent a model benefit redemption system that can be disseminated and replicated nationwide.

Key Accomplishments

Partnership Development & Resource Leveraging

A key goal of the Southern California Nutrition Incentive Program is to support partnership development and resource leveraging to support the health and well-being of SNAP recipients. Toward this effort, the Southern California Nutrition Incentive Program is working with FINI programs and partners as well as SNAP-Ed Implementing Agencies at the local, state and national levels. These partners span the state of California and include: California Department of Public Health, Los Angeles County Public Health Department, UC Cooperative Extension, Catholic Charities, SNAP-Ed Implementing Agencies, and Nutrition Education and Obesity Prevention (NEOP) partners. Together, we developed and submitted a report to the Supplemental Nutrition Assistance Program (SNAP) Task Force in September of 2017. A key component of this report was a detailed description of the enhanced program integration and coordination, as well as leveraging of resources, that exists between FINI Programs and SNAP-Ed Implementing Agencies to enhance the health and well-being of SNAP recipients.

A key outcome of this work was the development of an integrated FINI/SNAP-Ed panel presentation and abstracts for the national American Public Health Association (APHA) conference in San Diego in November of 2018. The Southern California Nutrition Incentive Program working in conjunction with USDA, the Washington State Department of Health, The Food Trust, Ecology Center, University of Florida, Wholesome Wave and others, developed and submitted a full panel presentation proposal to APHA for their 2018 annual conference. The focus of the panel presentation is on innovative Food Insecurity Nutrition Incentive Programs and the many public-private sector collaboration opportunities that FINI programs provide. This includes broad-based collaboration, program integration and resource leveraging between and among FINI programs, SNAP-Ed Implementing Agencies, Nutrition Education and Obesity Prevention (NEOP) programs, retailers, health care providers, researchers, food systems alliance partners, and health equity, social justice and food justice advocates. The following combined FINI/SNAP-Ed panel presentations and abstracts have been accepted by APHA for their 2018 national conference:

- Advancing Healthy Food Access and Affordability Through Innovative Food Insecurity Nutrition Incentive (FINI) Programs
- SNAP Incentives at California's Farmers' Markets: Enhanced Health, Food Security, and Economic Development
- Public Health Implications of a Large-Scale, Multi-Sector Produce Prescription Program
- Utilizing the SNAP-Ed Evaluation Framework to Integrate and Maximize Results of SNAP-Ed and FINI Programming

Key Accomplishments

Media and Other Program Outreach

In FFY 2018 the Southern California Nutrition Incentive Program continued its media outreach to a wide array of media partners. This outreach resulted in media placements across the United States. Key story placements included the Los Angeles Times, National Public Radio (NPR), KPBS News, Kaiser Health News, KQED News, PEW Charitable Trust News, USA News, NIFA USDA Impacts and HealthLine.



A key outcome of this media attention and coverage included a call from CNN to develop a story on the ¡Más Fresco! More Fresh Program. CNN flew out from Washington, DC in May of 2018 to conduct interviews with the ¡Más Fresco! More Fresh Program Director, as well as to interview a ¡Más Fresco! More Fresh Program participant and their family members. This included in-store footage while they shopped at a Northgate González Market, and

footage in their home to discuss the impact of the program on the family's health and well-being.

In addition to our media outreach, thanks to our partnership with our local Social Service Agency CalFresh Programs we were able to conduct a direct mail campaign to SNAP recipients living within a 5-mile radius of each of our retail intervention sites located in Orange County and in Los Angeles County. This outreach resulted in numerous SNAP recipients arriving at the in-store enrollment events already informed about the program and ready to enroll.

Media and Other Program Outreach



County of San Diego

NICK MACCHIONE, FACHE
AGENCY DIRECTOR

HEALTH AND HUMAN SERVICES AGENCY
ELIGIBILITY OPERATIONS
1255 IMPERIAL AVENUE, MAIL STOP W-414
SAN DIEGO, CA 92101-7404
(619) 338-2932 • FAX (619) 338-2972

RICK WANNE, MA, MFT
DIRECTOR, ELIGIBILITY OPERATIONS

Dear Customer,

The County of San Diego Health and Human Services Agency CalFresh Program is pleased to inform you of an opportunity to participate in the *¡Mas Fresco! More Fresh* Program. This program is part of a research study by the University of California San Diego (UC San Diego) in partnership with Northgate González Markets. It is designed to make it easier for CalFresh recipients to purchase and consume more fresh fruits and vegetables for better health.

In this program, for every dollar of fresh fruits and vegetables you purchase with CalFresh benefits on your electronic benefit transfer (EBT) card at a participating Northgate González Market, you will earn a dollar credit that you can use to purchase more fresh fruits and vegetables for yourself and your family. You can earn up to \$10, \$20, or \$40 a month, depending on the study group to which you are randomly assigned, for 12 months with a possibility for extension.

To enroll in this program, you must be a CalFresh recipient 18 years of age or older. In order to earn the financial incentives, you need to shop at participating Northgate González Markets. Participation is limited to one participant per household.

We invite you to attend a special in-store event to learn more about the program at the following locations:

¡Mas Fresco! More Fresh Program Enrollment Locations, Dates and Times:

Northgate González Market

5403 University Avenue, San Diego, CA 92105
March 5, 9 (2018) - 10:00 a.m. to 3:00 p.m. (Each Day)
March 12, 16, 17 (2018) - 10:00 a.m. to 6:00 p.m. (Each Day)

Northgate González Market

1410 S 43rd Street, San Diego, CA 92113
March 19, 23 (2018) - 10:00 a.m. to 3:00 p.m. (Each Day)
March 26, April 6, 7 (2018) - 10:00 a.m. to 6:00 p.m. (Each Day)

Additional information on the *¡Mas Fresco! More Fresh* Program is available at:
888-282-2711 -- www.ucsdcommunityhealth.org/work/morefresh -- morefresh@ucsd.edu

This program is made possible through funding provided by the USDA.

Key Accomplishments

Media and Other Program Outreach

During FFY 2018 we also finalized our ¡Más Fresco! More Fresh Program videos for both program participants and for the Northgate González Market Cashiers. These videos include a general program overview video, as well as a video explaining the specifics of how program participants earn and redeem their financial incentives.



The cashier video outlines the specific steps needed by the Northgate González Market cashiers to facilitate the earn and redeem process at the point-of-sale register for the ¡Más Fresco! More Fresh Program participants. The videos are available in both English and Spanish language. The cashier videos are part of an ongoing series of trainings that Northgate González Market is conducting for all staff members at each of the participating Northgate González Markets to ensure that all staff members, not only cashiers, are familiar with and understand the ¡Más Fresco! More Fresh Program and can help and support ¡Más Fresco! More Fresh Program members as needed.

Key Accomplishments

Promotora Model

Key to the ¡Más Fresco! More Fresh Program's successful program participant enrollment, support and retention is the Promotora model that we developed. Like FFY 2017, during FFY 2018, the Southern California Nutrition Incentive Program conducted a series of trainings with both Latino Health Access and Vision y Compromiso and their network of Promotoras to support the program's enrollment events in Orange County, Los Angeles County and in San Diego County.

Since the program is a randomized control trial (RCT) study, the entire study, including the recruitment of program participants, needs to adhere to UC San Diego Institutional Review Board (IRB) standards that comply with the ethical conduct of trials involving human subjects. As such, the Promotoras needed to be trained and certified to conduct human subjects research before they could interact with and enroll the program participants.

To support this work, the Southern California Nutrition Incentive Program developed a UC San Diego IRB approved training program and process to enable the Promotoras to understand the unique challenges involved in human subject research and to ensure that all UC San Diego IRB guidelines and protocols were adhered to during the engagement, recruitment and follow up interactions with program participants, including:

- Program Participant Eligibility Screening
- Informed Consent Process
- Program Registration
- Administration of Baseline Survey
- Study Group Randomization
- Overview of Program Goals and Objectives and the Usage of the Mi Familia Card
- Data Capture and Entry

Food Security

USDA's September 2017 report entitled *Household Food Security in the United States in 2016*, notes the following:

- Food insecurity tends to be more prevalent in households with children and in single-parent households, in particular. In 2016, 31.6 percent of single-mother households and 21.7 percent of single-father households were food insecure.
- The prevalence of food insecurity is lower among households headed by White, non-Hispanics (9.3 percent) than households headed by Black, non-Hispanics (22.5 percent) or Hispanics (18.5 percent). Despite the lower prevalence of food insecurity among White, non-Hispanic-headed households, these households make up 50 percent of food-insecure households.
- In 2016, the prevalence of food insecurity was higher in nonmetropolitan counties (15.0 percent) and principal cities (14.2 percent) than in suburbs (9.5 percent). The distribution of food insecurity across residence areas shows that the majority of food-insecure households are in metropolitan areas. About 18 percent of food-insecure households in 2016 lived in nonmetropolitan or rural counties.
- Income is one of the primary characteristics associated with food insecurity. Low-income households have a much higher prevalence of food insecurity than their nonpoor counterparts. In 2016, 31.6 percent of households with incomes below 185 percent of the Federal poverty line were food insecure. The Federal poverty line for a family of four (two adults and two children) in 2016 was \$24,339. These low-income households constituted the majority of food-insecure households, 58.9 percent.
- In 2016, 4.9 percent of U.S. households (6.1 million households) had very low food security. In this more severe range of food insecurity, the food intake of some household members was reduced and normal eating patterns were disrupted at times during the year due to limited resources.
- In 2016 children were food insecure at times during the year in 8.0 percent of U.S. households with children (3.1 million households). These households were unable at times during the year to provide adequate, nutritious food for their children.

Food Security

- While children are usually shielded from the disrupted eating patterns and reduced food intake that characterize very low food security, in 2016 both children and adults experienced instances of very low food security in 0.8 percent of households with children (298,000 households).
- Rates of food insecurity were substantially higher than the national average for households with incomes near or below the Federal poverty line, households with children headed by single women or single men, women and men living alone, Black- and Hispanic-headed households, and households in principal cities and nonmetropolitan areas.
- The prevalence of food insecurity varied considerably from State to State, ranging from 8.7 percent in Hawaii to 18.7 percent in Mississippi in 2014-16. (Data for 3 years were combined to provide more reliable State-level statistics.)
- The typical (median) food-secure household spent 29 percent more for food than the typical food-insecure household of the same size and composition. These estimates include food purchases made with Supplemental Nutrition Assistance Program (SNAP, formerly food stamps) benefits.
- About 59 percent of food-insecure households in the survey reported that, in the previous month, they had participated in one or more of the three largest Federal nutrition assistance programs (SNAP; Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); and National School Lunch Program).

Fruit and Vegetable Consumption

Dietary Guidelines, the 2015-2020 Dietary Guidelines for Americans

One of our Government's most important responsibilities is to protect the health of the American public. Today, about half of all American adults - 117 million people- have one or more preventable, chronic diseases, many of which are related to poor quality eating patterns and physical inactivity. Rates of these chronic, diet-related diseases continue to rise, and they come not only with increased health risks, but also at high cost. In 2008, the medical costs linked to obesity were estimated to be \$147 billion. In 2012, the total estimated cost of diagnosed diabetes was \$245 billion, including \$176 billion in direct medical costs and \$69 billion in decreased productivity.

The *Dietary Guidelines for Americans* is an essential resource for health professionals and policymakers as they design and implement food and nutrition programs that feed the American people, such as USDA's National School Lunch Program and School Breakfast Program which feed more than 30 million children each school day. The *Dietary Guidelines* also provides information that helps Americans make healthy choices for themselves and their families. The *2015-2020 Dietary Guidelines* provides guidance for choosing a healthy diet and focuses on preventing the diet-related chronic diseases that continue to affect our population. Its recommendations are ultimately intended to help individuals improve and maintain overall health and reduce the risk of chronic disease. Its focus is disease prevention, not treatment. Eating an appropriate mix of foods from the food groups and subgroups - within an appropriate calorie level - is important to promote health. Each of the food groups and their subgroups provides an array of nutrients, and the amounts recommended reflect eating patterns that have been associated with positive health outcomes.

In terms of fruit and vegetable consumption, the *2015-2020 Dietary Guidelines for Americans* recommends the following intake of fruits and vegetables.

Vegetables

Healthy Intake: Healthy eating patterns include a variety of vegetables from all of the five vegetable subgroups - dark green, red and orange, legumes (beans and peas), starchy, and other. These include all fresh, frozen, canned, and dried options in cooked or raw forms, including vegetable juices. The recommended amount of vegetables in the Healthy U.S. Style Eating Pattern at the 2,000-calorie level is 2½ cup-equivalents of vegetables per day. In addition, weekly amounts from each vegetable subgroup are recommended to ensure variety and meet nutrient needs.

Fruit and Vegetable Consumption

Fruits

Healthy Intake: Healthy eating patterns include fruits, especially whole fruits. The fruits food group includes whole fruits and 100% fruit juice. Whole fruits include fresh, canned, frozen, and dried forms. The recommended amount of fruits in the Healthy U.S. Style Eating Pattern at the 2,000-calorie level is 2 cup-equivalents per day. One cup of 100% fruit juice counts as 1 cup of fruit. Although fruit juice can be part of healthy eating patterns, it is lower than whole fruit in dietary fiber and when consumed in excess can contribute extra calories. Therefore, at least half of the recommended amount of fruits should come from whole fruits. When juices are consumed, they should be 100% juice, without added sugars. Also, when selecting canned fruit, choose options that are lowest in added sugars. One-half cup of dried fruit counts as one cup-equivalent of fruit. Similar to juice, when consumed in excess, dried fruits can contribute extra calories.