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# Clean up on Aisle 1: Food Environments in San Francisco's Mission District

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Clean up on aisle 1: Food Environments in San Francisco's Mission District

by

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### Abstract

**Introduction:** Underserved communities suffer from poor dietary habits and experience higher rates of chronic conditions mainly due to factors affecting their nutrition and grocery shopping behaviors. **Method:** A nutritional needs assessment was conducted with participants of the Community Wellness Program, a community resource center, at Zuckerberg San Francisco General Hospital, to assess the perspectives of the participant's nutrition and grocery shopping behaviors. Interviews were conducted with current members attending cooking demonstrations at the center ( $n=10$ ). **Results:** 50% of the participants have struggled to purchase fresh, healthy foods in the past year. Half of the participants stated shopping for groceries 2-4 times per week, and 70% mentioned spending more than \$80 per week on groceries. The top three types of stores participants reported shopping for groceries were supermarket chains (39%), boutique chains (22%), and farmer's markets (17%). When asked about what nutrition education material they wished to learn more about most answered cooking demos, affordable health market shopping tours, and a nutrition basics leaflet. The teaching method most suitable for this underserved community was determined to be hands-on (workshops, tours, one on one), class setting (lectures), and printed material. **Conclusion:** The perspectives of the Community Wellness Program members will be valuable in continuing to enhance current and future programs that will expand their self-empowerment and nutritional knowledge along with assisting them in reclaiming their health.

Keywords:

Community assessment; nutrition education; underserved communities; community resource center; grocery shopping behaviors

## **Executive Summary**

This paper discusses the needs assessment conducted with a free service community center, Community Wellness Program (CWP) at Zuckerberg San Francisco General Hospital located in the Mission District of San Francisco, California. CWP provides various free services and promotes innovative, culturally and linguistically accessible wellness programs to patients, staff, and community members throughout San Francisco. Services include daily exercise classes, cooking demonstrations, and the annual summer health resource fair. CWP achieves this by maintaining a sustainable, vibrant, healthy, engaged and compassionate community.

The needs assessment aimed to gain insight on nutritional information of interest along with what grocery shopping behaviors contribute to purchasing healthy fresh foods within the underserved communities of the Mission District. Additionally, insight was gained on what teaching methods were best suitable for underserved communities and how to apply these methods when enhancing the educational material.

The needs assessment was conducted in a one-on-one interview with ten current Community Wellness Program participants attending the bimonthly cooking demonstrations. Participants were selected randomly and based on willingness to participate. Interviews took place in a conference room across from the center, and each interview lasted approximately 30-45 minutes. A series of questions in five different parts were asked including (1) respondents details, (2) grocery shopping, (3) grocery stores, (4) nutrition, and (5) other comments. Limitations include that it was all women participants and most over the age of 45 years old. The fact that this assessment was conducted in San Francisco, a city with many local grocers, various modes of public transit, and high costs of living are all limitations to this study. This study is not

a full representation of all underserved populations in the Mission District since only participants attending CWP cooking demonstrations were interviewed.

This assessment determined that all participants ( $n=10$ ) were female aged 45 years old and older. All participants stated being primarily responsible for purchasing groceries in their household with an average of 3 individuals per household. 50% (5) of the participants have struggled to purchase fresh, healthy foods in the past year. Half (5) of the participants stated shopping for groceries 2-4 times per week. With 70% of the participants reporting spending more than \$80 per week on groceries. The top three types of stores participants reported shopping for groceries were supermarket chains (39%), Safeway and Grocery Outlet (22%), boutique chains, Trader Joe's, and (17%) farmer's markets.

Participants were asked what nutrition education material they wished to learn more about, and the top three educational materials were cooking demos (28%), affordable health market shopping tours (28%), and a nutrition basics leaflet (22%). The teaching methods that were determined to be most suitable for this underserved population were 30% hands-on (workshops, tours, one on one), 26% class setting (lectures), and 22% printed material.

The valuable information yielded from the nutrition needs assessment will enhance and strengthen cooking demonstrations, and potentially add a nutritional shopping component to the demonstration. For example, if the chef decides to do a leafy green salad, it opens a gateway for educating the participants on what vitamins these leafy greens contain and what quantity of it is a recommended serving. Adding a detailed explanation of why it is considered healthy and including this material to the print out leaflets provided during the demonstrations will provide a take-home educational leaflet. Also, as determined that hands-on teaching is one of the best methods, asking for more participant involvement will assist in retaining the learned material.

Asking participants to bring a cultural dish simple recipe and having the chef remake it in a healthier version will add a cultural component to cooking demonstrations along with verbal instructions on how to select fresh produce in a grocery store.

## Introduction

Nutrition is the core and basics of how the human body attains the nutrients to fully function at its full capacity to grant a life full of longevity. Nutrition is the intake of food to meet the body's dietary needs. To have "good nutrition," an adequate, well-balanced diet in combination with regular physical activity is fundamental for good health (WHO, 2018). Having proper nutrition involves gaining knowledge of what is healthy, at what quantity, and to what degree. Just like every diverse human, nutrition can be diverse, and its nonlinear meaning one portion does not fit all. This concept is especially important to remember when applying nutrition to diverse, underserved populations and communities.

The purpose of this study is to determine the nutritional health needs of the Community Wellness Program attendees through a needs assessment. CWP serves populations from various underserved communities in and surrounding San Francisco. Primarily, underserved communities experience an array of challenges and barriers. Barriers such as financial burdens, inaccessibility to transportation, lack of local grocers, and limited mobility play a role in the concept of attaining "good nutrition." Poor nutrition negatively holistically affects the human body affects the human body, often it is manifested through life-altering medical conditions. Chronic conditions such as hypertension, diabetes, cardiovascular diseases, and obesity is seen in higher numbers in underserved communities.

The objective of this needs assessment was to attain valuable and core information on nutrition behaviors, grocery shopping behaviors, and what teaching method best suited for learning along with what specific topics in nutrition is of benefit to their learning.

Educating underserved communities on how to attain desirable "good nutrition" under their circumstances will allow opportunities for positive lifestyle changes that will positively increase

individual's self-efficacy and serve as a self-empowerment tool to reclaim their health. Extensive research conducted with underserved communities address, food insecurity, chronic conditions, food deserts, and grocery shopping behaviors are ones that severely impact underserved communities. As a result, insight on barriers derived from these main factors has expressed why communities continue to choose the quantity of food versus quality of foods for themselves and their family.

## **Literature Review**

### **Food Insecurity**

Food insecurity continues to increase despite the available resources becoming a bigger problem as the effects of this affect underserved populations physically and physiologically. The United States Department of Agriculture (USDA) has two categories for food insecurity, low food security and very low food security. Low food security reports reduced quality, variety, or desirability of diet with little or no indication of reduced food intake (USDA, 2017). Very low food security reports of multiple indications of disrupted eating patterns and reduced food intake (USDA, 2017). Generally, food insecurity is a refers to a lack of access to enough quality food that is necessary to maintain a healthy life. In the United States alone the USDA reports 12.3% (about 16.6 million) households reported having food insecurity during 2016.

The prevalence of food insecurity is highest among low-income households, in households reliant on social assistance, those renting rather than owning their own dwelling, and lone-parent female-led households (Tarasuk, Mitchell, McLaren, McIntyre, 2013). The prevalence of food insecurity this creates a close association to health problems. Research determined that, food insecurity is associated with risks for cardiovascular disease, obesity, multiple chronic conditions, depression, cognitive function, and childhood emotional problems



(Kamimura et al., 2017). Researchers Katie S Martin et al., 2014, agree that the availability of nutritious and affordable food can greatly impact chronic disease rates and other critical individual health outcomes in a community. Due to the high association and ongoing health concern, it is important to identify the barriers that underserved communities face and how to increase their self-efficacy to make lifelong healthier choices.

### **Food Deserts**

According to the United States Department of Agriculture, “food deserts” are defined in theory as “urban neighborhoods and rural towns without ready access to fresh, healthy, and affordable food. Instead of supermarkets and grocery stores, these communities may have no food access or are served only by fast food restaurants and convenience stores that offer few healthy, affordable, food options” (USDA, 2017). Furthermore, researchers Ghosh-Dastidar et al., 2014, state that low-income and predominately African American neighborhoods (regardless of income) are less likely to have access to a supermarket relative to high-income and white neighborhoods, and it is hypothesized that distance to a supermarket may be an underlying cause of obesity, and other health disparities. Distance is a valid barrier affecting many underserved communities for example, a study conducted on 10,763 residents in four states found that the presence of supermarkets in the residential census tract was associated with a 24% lower prevalence of obesity and a 9% lower prevalence of being overweight (Ghosh-Dastidar et al., 2014).

Dietary intake and consumption is predominately the first thought that comes to mind when we speak of nutrition. However, there are key factors that directly affect dietary intake and an individual's overall nutrition behaviors. The ongoing research found that dietary intake is determined by a number of factors: availability, affordability, and accessibility. Availability is

determined by the type of food items are available to the consumer, affordability is at what prices are these foods available, and proximity to a grocery store is the accessibility factor (Katie S Martin et al., 2014). In addition, researchers Ghosh-Dastidar et al., 2014 has found similar ways to examine the influence of supermarkets on health outcomes, which is by focusing on characteristics of the store where people actually shop. Store choices reflect individual factors such as availability, quality pricing, and point of sale advertising of food. Overall, these factors are strong determinants of how an individual is affected by these factors that serve as barriers.

### **Supermarkets and Grocery Stores**

The availability of nutritious and affordable food has a direct link to chronic conditions, individuals residing in food deserts, and lacking food security are all contributors to what these underserved communities consider healthy, and purchase at grocery stores. A primary concern for urban areas is food accessibility, which involves the lack large-scale retail supermarkets with stocks of nutritious food at affordable price, compared to predominately white or more affluent suburban neighborhoods (Katie S Martin et al., 2014). Residents of rural areas experience more challenges as they need to travel longer distances if they desire to purchase fresh, healthier foods at large chain grocers. Researcher Katie S Martin et al., 2014, notes how it becomes a crucial situation for individuals with limited access to automobiles or well-connected public transportation. Similarly, Lopez-Class & Hosler, 2010, states that low-income residents with limited access to supermarkets are more likely to report decreased intake of nutritionally important foods such as fruits and vegetables than those with access to supermarkets. Typically, lower quality foods may impact consumers' willingness to shop in these stores or to purchase fruits and vegetables that contribute to a healthy diet, which can help prevent or mitigate chronic conditions (Martin et al., 2014).

Although prices for healthy foods are typically lower in supermarkets/wholesale clubs so is the affordability of junk foods, which may lead to bulk purchasing and greater consumption contributing to the ongoing increase of obesity (Ghosh-Dastidar et al., 2014). Unfortunately, in underserved community's quantity of food is chosen over the quality of the food due to financial distress. When threatened with acute food shortages, adults also juggle bill payment, delay rent, forfeit services in the home, sell or pawn possessions, and seek assistance from family, friends, and ultimately whatever charitable programs are accessible to them (Tarasuk, Mitchell, McLaren, McIntyre, 2013). For underserved communities, these are added everyday stressors which contribute to the vicious cycle of greater prevalence of food insecurity which increased the likelihood of chronic health conditions possibly due to the large amounts of ongoing stress. Tarasuk, Mitchell, McLaren, McIntyre, 2013, also state and correlate the barrier that food insecurity possesses on health-protective behaviors such as healthy eating and physical activity.

### **Self-efficacy and Nutrition Education**

Self-efficacy is defined as to the confidence in one's ability to change behaviors. Although poverty is positively associated with food insecurity, higher levels of self-efficacy may reduce levels of food insecurity (Kamimura et al., 2017). Self-efficacy is primarily achieved through education and increasing one's knowledge in the topic at hand. This same researcher notes that due to the close relation of self-efficacy and the intention to implement healthy eating behaviors it is important to increase knowledge about self-efficacy and food insecurity among low-income residents. Another useful tool that has potential to increase one's self-efficacy is effective guided grocery store tours. According to research, 53% to 62% of US consumers report at least sometimes using nutrition facts labels, but many perceive actual labels comprehension and use for product comparison to be confusing and difficult (Nikolaus, Muzaffar, Henna,

Nickols-Richardson, Sharon M., 2016). Structured tours take small groups throughout the grocery store to teach participants strategies and skills that enable healthful food purchasing choices. Another gateway for educating and assisting underserved communities suffering from not only food insecurity but more than likely a chronic health condition is through their primary healthcare provider. Food insecurity is associated with poor health conditions, yet it is not routinely addressed in health care. Educational interventions increase knowledge regarding the importance of food insecurity and the ability of healthcare providers and trainees to make appropriate referrals to resources currently addressing food insecurities (Nikolaus, Muzaffar, Henna, Nickols-Richardson, Sharon M., 2016).

### **Conclusion**

In conclusion, underserved communities are faced with many challenges and barriers that affect their overall well-being. Fortunately, education and ongoing resources can alleviate food insecurities and reverse the vicious cycle that continues to annually increase. Increasing education and knowledge on how to properly grocery shop and selecting quality products over quantity will help reverse chronic health conditions. Self-efficacy enables residents of underserved communities to regain their health through informed, wiser, food choices that will provide a lifelong lifestyle change.

### **Community Wellness Program Agency Profile**

The Community Wellness Program (CWP) is located inside the Wellness Center on the 2<sup>nd</sup> floor of the main building at Zuckerberg San Francisco General Hospital (ZSFGH). ZSFGH is a public safety-net hospital in Mission District, San Francisco, California. Predominately, serving underserved communities throughout San Francisco and the surrounding areas. CWP supports a broad, holistic view of health in which physical, emotional, mental, social, and

spiritual health are considered interconnected and essential in achieving improved health and wellness. CWP offers various wellness classes which are designed to accommodate patients and staff at all levels of physical abilities or limitations. These classes and services are offered in English/Spanish or English/Cantonese by wellness class instructors.

### **History**

In 2012, the hospital created a centrally located Community Wellness Program (CWP) within the main hospital space. Space was needed not only to hold wellness programming but to continue to carry a philosophy that promotes a compassionate and healing atmosphere. Located on the 2nd floor of what is called the main street of the hospital, the center provides wellness services that holistically promote health and wellness for staff, patients, and community members. Having a permanent central community space has provided a haven for people from all over the hospital and surrounding areas to promote wellness and be part of a community. Since the center has opened, they have received over 100 requests to host many existing wellness-related programs that were once held all over the hospital and in the community. Currently, the Community Wellness Program continues to provide wellness programs with an aim to promote and encourage the overall wellness of patients, staff, and all San Franciscans.

### **Mission**

The Community Wellness Program has a mission to PROVIDE and PROMOTE innovative, culturally and linguistically accessible wellness programs and services for the Zuckerberg San Francisco General Hospital (ZSFGH) community built of staff, patients, families, and all San Franciscans.

### **Vision**

A sustainable, vibrant, healthy, engaged, and compassionate community.

## **Goals**

- To promote health and wellness through healthy lifestyle choices
- Enhance patient care and patient safety through wellness
- To create a safe, healthy work environment for all employees, patients, and visitors.

## **Primary Services Provided**

The CWP has four main initiatives (programs) that aim to promote and empower the San Francisco community. The four initiatives are Healing Moves, Active Living, Healthy Food Environment, Community Engagement, and Tobacco Free Initiative.

### Healing Moves, Active Living Initiative

This initiative focuses on physical activity and movement by offering Working on Wellness (W.O.W) classes. W.O.W program offers movement and healing classes six days per week. The classes offered include strength training, chair stretch and boogie, Zumba, Yoga (offered in English, Spanish, and Cantonese), Hip-Hop, Salsa, and Bollywood.

### Healthy Food Environment Initiative

The Healthy Food Environment Initiative aims to promote a healthy food and nutrition education as it is fundamental to effective treatment and care of ZSFGH patients as well as the wellbeing of its staff and providers. The subprograms within this incentive include the Garden Giveaways, in which student interns along with community volunteers work with hospital gardeners to harvest and distribute hospital grown vegetables and herbs to participants in hospital-based chronic and acute disease management groups along with participants in the hospital's smoking cessation program. The most well-known and heavily looked forward to subprogram is the nutrition and cooking demonstration program. These cooking demonstrations are offered twice a month (2<sup>nd</sup> Tuesday and 4<sup>th</sup> Thursday) in the Wellness Demonstration

Kitchen located inside the Community Wellness Center. Attendants have the opportunity to learn about new foods and try new, fresh recipes. These classes are led by a natural chef, Catherine McConkie, and a Registered Dietitian. Other nutrition education topics discussed in the classes include hydration tips, nutrition label reading, cooking with spices, and preparing soups and stews.

### Community Engagement Initiative

The Community Engagement Initiative focuses on working collaboratively with other community programs and organizations with aims to promote, cross-refer, and help ensure programs and services are fully available and accessible to those individuals who face challenges with language, literacy, and economic statuses. Community Wellness Program and staff have worked on putting together a free annual health resource fair during the summer, best known as Summer Fest. This year Summer Fest revolved around the theme of Redesigning Your Wellness. This health fair is a free event open to all ages and everyone that desires to attend. Many different activities, foods, and farmer market are provided along with extensive services to screen your health. This annual event brings together the community with aims to continue to empower people to make their own decisions on how they want to design their wellness.

### **Funding and expenses overview**

The Community Wellness Program is funded by an array of community partners that work collaboratively to provide and promote quality, culturally and linguistically accessible wellness programs and services for the ZSFGH community of staff, patients, their families. The Wellness Program partners with the following: Black Coalition on AIDS (BCA), Capay Valley Farm Shop, Good Samaritan Family Resource Center, Healthy Hearts SF, Leah's Pantry, Mission Community Market, Potrero Hill Health Center- Healing project, San Francisco General

Hospital Foundation, San Francisco Housing Development Corporation, San Francisco State University Health Education Department, SF Tobacco Free Project, Shape Up SF, Sports Basement, UCSF Community Partnerships, UCSF Living Well Program, and Mission & Bayview YMCA.

### **Agency Needs**

The Community Wellness Program needed a nutrition needs assessment to determine what enhancements and programs are needed. The first goal for this assessment was to determine what additional education is needed to continue to empower this population. The second goal was to determine what grocery shopping behaviors impact purchasing healthy, fresh foods.

### **Methods**

#### *Overview*

The current research project was conducted at the Community Wellness Program, a free program offering many health services. CWP is located inside the Wellness Center at Zuckerberg San Francisco General Hospital in San Francisco, California. A current Master of Science in Behavioral Health (MSBH) intern developed the survey and interpreted the results. The Summer Fest survey was developed by both the intern and staff at the center. The CWP provides and promotes free nutrition and exercise services to patients, staff, and community members. Community Wellness Program also conducts an annual health resource fair, Summer Fest, the Farmers Market booth is a big part of the resource fair as it offers nutrition information and offers a free bag of fresh produce. The primary aim for this nutrition needs assessment at CWP was to assess the program participants and determine what additional nutrition education is needed to expand and enhance their knowledge along with what grocery shopping behaviors impact purchasing healthy, fresh foods. Nutrition education is one of the main components the program aims to increase due to over 40% of the patients at Zuckerberg San Francisco General



Hospital having a chronic condition that can be addressed and reversed through self-empowerment and nutrition knowledge.

### *Study Design and Sampling*

The University of San Francisco approved the current study, and it was determined that no IRB approval was needed as this study is considered evidence-based and is staying within the Community Wellness Program and did not meet the definition of a research study. One-time in-depth interviews were determined to be the best method for underserved populations. Literature state fear and lack of knowledge on research are barriers to engagement therefore focus groups were determined to be less effective as lack of trust would exist in a large group setting (Valenzuela, J. M et al., (2013).

Participants meeting the following criteria were interviewed:

1. Adult participants (18 years old and older)
2. Primary grocery shoppers for their household,
3. Regular attendees of the Community Wellness Program
4. Attend cooking demonstrations at the CWP Community Center.

Participants were scheduled to be interviewed by randomly signing up in designated time slots provided by the researcher (Appendix A). Recruitment occurred before and after the biweekly cooking demonstrations at the Community Wellness Center. If a participant expressed interest in participating in the study, they were given the option to sign up using a sign-up sheet for desired time slots. Once scheduled, the researcher gave a courtesy reminder call a day before the scheduled interview. Bilingual participants speaking and dominating the Spanish language

had the option to be interviewed in Spanish by the bilingual researcher. All documents, such as an informed consent letter and surveys were translated and explained in Spanish before conducting the interview see Appendix D and Appendix E.

Before starting the interview, the researcher detailly read and made sure each participant understood the consent letter before signing it. Each participant was given the option of receiving a copy of the informed consent letter after concluding the interview. The interviews took place in a private conference room, each interview lasting between 30-45 minutes. The researcher was present at all times during the recruitment and interviews to answer any questions. Participants received a \$20 Eat SF food voucher upon completing the interview. The Eat SF food voucher was to be used exclusively on vegetables and fruits at various location throughout San Francisco. Data were collected at a single time after all ten interviews were conducted and concluded.

#### Summer Fest Survey

The Summer Fest survey was available to any adult interested in participating in the short one-time survey. The survey did not take more than 3-5 minutes to complete. Surveys were available in English and Spanish and were self-conducted. Participants filled out the surveys at the Farmer's Market booth, upon completion the participants returned the survey to the volunteer at the booth. The volunteer stamped each participant's hand and handed them a blue ticket to be redeemed at the produce tent for their free bag of produce.

#### *Measures*

Participants were asked a series of questions in five different parts. Each part was aimed to collect information on nutrition, grocery shopping behaviors, nutritional education interests, and preferred method to learn new educational information.

Part 1: Demographic characteristics. Seven demographic questions including age, gender, race/ethnicity, educational level, employment status, marital status, and zip code.

Part 2: Grocery shopping and purchase behaviors. Seven questions were asked to describe food sources and purchase behaviors: (1) Are you responsible for purchasing groceries in your household? (yes/no); (1a.) If no, who is responsible for doing the grocery shopping within your household? (partner/parents/ shared responsibility); (2) When purchasing groceries, how many people are you responsible for; (3) How often does the participant go grocery shopping per week (everyday, 2-4 times per week, once per week, once every two weeks, once every month); (4) How much does the participant spend on groceries per month (under \$20, \$21-\$30, \$31-\$50, \$50-\$70, more than \$80); (5) What transportation method does the participant use when he/she goes grocery shopping (drive personal car, walking, public transit, rideshare); (6) Does the participant have a specific day of the week they do their shopping (all days of the weeks listed) (7) What time of the day do they prefer to go shopping. These questions were developed from online research of previous surveys conducted.

Part 3: Grocery Stores. Three multiple answer questions were asked to determine top grocery store preference and qualities important for the participants decision making when buying food. (1) Where a participant generally purchase their groceries (multiple answers [e.g. list stores included on survey, what store?]), (2) Please circle the number that best represents the importance of each of the following to your grocery shopping expectations (3) Please circle the number that best represents how well your local grocery store meets your shopping expectations

(9 sub components for both questions include: quality of food, availability of food, prices, customer service, cleanliness of store, convenient hours, travel time to grocery store, supporting local business, buying locally grown foods)[rating was 1-5 with 5 exceeding expectations]).

Part 4: Nutrition and Food Insecurity. Five questions were asked to determine what the participants definition and concept of healthy is and how this is incorporated to their family's nutrition. (1) Within the month has the participant experience a time when he or she was unable to buy lean meats and fresh produce due to overly expensive (yes often, sometimes, no never). (2) What does it mean to be "healthy" (3) Does the participant consider themselves a healthy person (agree, somewhat agree, somewhat disagree, disagree) (4) How often does a member of your household (compliment your attempt to eat a healthy diet, encourage you to eat vegetables and fruits, talk about food and nutrition with you, bring healthy foods and fruits home for you to try, bring healthy vegetables for you to try [answers include often, sometimes, seldom, never]). (5) How willing are most members of your household to eat vegetables? Why?

Part 4: Educational material. Four questions about nutrition education and preferences were asked to gain insight on what the participants feels is most needed within the Nutrition Incentive at the Community Wellness Program. (1) What do you like most about the cooking demos at the Community Wellness Program (2) What do you like least about the cooking demos at the Community Wellness Program? (3) How do you prefer to learn new nutrition information (class setting or lectures, demo videos, hands on workshops, printed educational material) (4) Which of the following topics do you wish to learn more about? (cooking demos, affordable health market

shopping tours, nutrition basics leaflet/free food & soup kitchen flyers, food stamp application assistance, other).

Part 5: Any other comments. This part was intended to allow the participant to express any questions, comments, or concerns about anything this survey and interview brought up for the participant. All information and comments were confidential and used for current and future nutritional education purposes.

### **Summer Fest Survey:**

The Summer Fest farmers market survey consisted of five main questions and one sub question along with general demographic information.

Demographic characteristics. Three demographic characteristics including gender, age, and ethnicity.

Identity. Three options were available patient, staff, or community member.

Food insecurity. One main questions, with a sub question were asked. (1) In the past year they've struggled to purchase fresh healthy foods? (yes, often/Maybe, sometimes/No, never). (1a.) If yes, where do you get your produce? (Farmers markets, Supermarkets, Convenience stores, Food pantries, Soup kitchens, or other).

Current challenges. A single question was asked stating, what do you currently struggle with? (check all that apply). Options include recognizing what is healthy, knowing how to cook tasty healthy meals, finding time to cook, traveling to affordable fresh food markets, or other.

Interests. A single question asking, what of the following are you interested in? with a check all that apply option. Options include cooking demos, classes on getting loved ones to eat healthy,

free food pantry & soup kitchen flyers, nutrition classes, affordable health market shopping tours, and food stamp application assistance.

Education. A final question asked, where do you most often get your food and nutrition information from? (check all that apply) Options include doctors, friends/family, internet, other, or none.

## **Data Analysis**

The MSBH intern collected data for both the nutrition needs assessment and the Summer Fest farmers market survey. During the nutrition needs assessment interviews a hard copy of the questionnaire was used to take notes and record responses attained from participants. A copy of the nutrition needs assessment questionnaire can be found in Appendix C and a copy of the Summer Fest farmers market survey can be found in Appendix F. Both qualitative and quantitative data was attained from the interview. Themes based on participants responses summarized qualitative data. All participants were asked the same set of questions in the same order and were only interviewed once.

## **Results**

### **Interview Findings**

There were ten one-on-one interviews conducted with record number 1 to 10. In Table 1 demographic information can be seen, additional information such as if the participant is the primary grocery shopper for their household, and if they have ever struggled to purchase fresh, healthy foods within the year. All interviewees were female, and over 80% were 55 years of age or older. There was an even distribution between participants identifying themselves as either,

Asian/ Pacific Islander (30%), Hispanic/Chicano (30%), American Indian/ Alaska Native (20%), or other (20%). All interviewees stated they are entirely responsible for purchasing groceries for their household. On average, each participant reported being responsible for buying groceries for at least three people in their family.

**Table 1**  
**Interviewee Demographics and grocery shopping information**

Record number	Gender	Age category	Race/Ethnicity	Primary household grocery shopper?	In the past year, have you struggled to purchase fresh healthy food?	How many people are you responsible for?
1	Female	68	Asian/Pacific Islander	Yes	Yes, often	2
2	Female	55+	Other	Yes	No, never	2
3	Female	68	Asian/Pacific Islander	Yes	Yes, often	3
4	Female	55+	Native American/Alaska Native	Yes	No, never	1
5	Female	63	Asian/Pacific Islander	Yes	Yes, often	3
6	Female	70	Native American/Alaska Native	Yes	Yes, often	2
7	Female	61	Hispanic/Latino	Yes	No, never	3
8	Female	45-54	Hispanic/Latino	Yes	Sometimes	3
9	Female	51	Hispanic/Latino	Yes	Sometimes	4
10	Female	55+	Other	Yes	Yes, often	1

During the interview, interviewees were asked about their highest overall education completed. Half (50%) of the interviewees stated to have completed at least High School as their highest educational level. Of the ten interviewees, seven said they are currently retired, two interviewees are unable to work, and one is self-employed. Table 2 includes grocery shopping information that determines when and how the participant does their grocery shopping. Further evaluation of the data concluded that the majority of the interviewees from the Community Wellness Program grocery shopped two to three times per week. In a single week, seven (70%)

out of the ten interviewees indicated spending more than eighty dollars per week on groceries alone. Calculating this amount, on a monthly basis over \$300 is spent solely on groceries. The primary mode of transportation to and from the grocery stores was public transit (60%). One participant indicated having to ask her neighbor or son for a ride, and another had to wait to call a cab every time she had to go grocery shopping. The interviewee relying on cab transportation stated going over a month on not purchasing groceries due to current medical conditions and energy on calling a cab. This interviewee also indicated having limited mobility which also contributes to her grocery shopping challenges. When asked what day of the week they prefer to do their grocery shopping, Wednesdays followed by the weekends was a standard response. One participant mentioned Wednesdays was the day produce was the “freshest.” Another participant stated she preferred Friday’s since that’s when Safeway starts their weekly ad sales. There was no time of the day that was specified, and a common response was “when it’s most convenient, or when there is enough time before the bus gets here.”

**Table 2**  
**Grocery Shopping Information**

<b>Respondent</b>	<b>How often do you shop for groceries?</b>	<b>How much do you normally spend on groceries per week?</b>	<b>Which of the following modes of transportation do you usually use when you go to the grocery store?</b>	<b>Do you have a specific day which you do your shopping?</b>	<b>Time of day you go grocery shopping?</b>
<b>1</b>	2-4 times per week	\$50-70	Public Transit	Wednesday, Friday, Sunday	Anytime
<b>2</b>	2-4 times per week	More than \$80	Public Transit	No Specific Day	Anytime
<b>3</b>	Once a month	More than \$80	Walking, Public Transit	No Specific Day	Anytime
<b>4</b>	2-4 times per week	\$50-70	Public Transit	Weekends	Anytime
<b>5</b>	2-4 times per week	More than \$80	Carpool or ask for a ride	Wednesday, Weekends	A.M. or noon
<b>6</b>	Once a week	\$21-30	Drive my personal car	Monday	Afternoon



<b>7</b>	2-4 times per week	More than \$80	Drive my personal car	No Specific Day	Late Afternoon
<b>8</b>	Once every 2 weeks	More than \$80	Public Transit	Thursday	Afternoon
<b>9</b>	2-4 times per week	More than \$80	Public Transit	Monday, Thursday	Anytime
<b>10</b>	Once a month	More than \$80	Public Transit	Friday	A.M.

Several questions were asked to determine what was most important to the participant when they did their grocery shopping and also what their local grocers were and how they met their grocery shopping expectations. Table 3 in Appendix G demonstrates the importance of the nine characteristics of the interviewees shopping experience. These characteristics include quality of food, availability of food, prices of items offered, customer service, cleanliness of store, continent business hours, travel time to a grocery store, supporting local businesses, and buying locally grown foods. Data determined that the majority of the interviewees found it very important to have all these nine characteristics met for their grocery shopping expectations to be met. Conjunctively, Table 4 in Appendix H similarly shows the importance of these characteristics to the interviewee’s local grocery store (where they purchase the majority of their food) and how their local store meets their grocery shopping expectations. Large supermarket chains and boutique chains were determined to be the grocers of choice. Safeway and Grocery Outlet (39%) are the primary supermarket were participants purchase their groceries followed by Trader Joes and Whole Foods (21%).

Table 5 outlines the common interests of the ten interviewees stated regarding what method would better fit their needs when it came to learning further nutrition material. The second question was asked to determine what additional information is of interest. Majority of the participants indicated that a class lecture setting, hands-on workshops/tours, and demo videos would be the most beneficial. Currently, the Community Wellness Program offers two cooking

demos per month, in addition to these, participants indicated they would like affordable health market shopping tours and a nutrition leaflet.

**Table 5: Learning methods and topics for further knowledge**

<b>How do you prefer to learn new nutrition information?</b>	<b>(n)</b>	<b>(%)</b>
	<b>(27)</b>	<b>(100)</b>
Class setting (lectures)	7	25.93
Demo videos	5	18.52
Hands on (workshops, tours, one on one)	8	29.63
Printed educational material	6	22.22
Other: (stream videos)	1	3.70
<b>Which of the following do you plan to learn more about?</b>		
	<b>(18)</b>	<b>(100)</b>
Cooking demos	5	27.78
Affordable health market shopping tours	5	27.78
Nutrition leaflet/free food & soup kitchen flyers	4	22.22
Food stamp application assistance	2	11.11
Other:	2	11.11

*n* was based on multiple selections made by interviewees

## Discussion

The success factors most commonly cited for food environments in underserved communities in both current literature and responses attained from this needs assessment project is to fully understand the importance of availability, affordability, and accessibility of grocers. This project assessed the nutritional health needs and current grocery shopping behaviors of the Community Wellness Program attendees from the perspective of the underserved elderly community. Interviews were conducted with current participants that actively participate in cooking demonstrations. Yielded concerns and interest on what grocery shopping behaviors take

place after leaving the center with a healthy recipe in hand and an increased knowledge on cooking healthier.

Participants expressed how financial burdens impact the affordability of healthy, fresh foods along with the added barrier of accessibility to grocery stores all while relying on public transportation. Conversely, participants believed that there was a variety of grocery stores located near bus stops and on their way to the Community Wellness Program. Large supermarkets such as Safeway and Grocery Outlet were determined to be where the majority of participants purchase their groceries. Additionally, participants also stated purchasing groceries and organic produce at boutique chains such as Trader Joes and Whole Foods.

Community Wellness Program participants, purchasing groceries 2-3 times per week ranked the highest followed by once per week and once per month. In a given week, the majority of the participants stated spending more than \$80. However, two participants stated spending anywhere from \$30 to \$70 in a week. Respectively, if we calculate this for the month, this accumulates to over \$300. On average each participant interviewed stated being responsible for buying groceries in their household. Each participant is responsible for 2-3 people in their home. Other factors such as time of day and days of the week did not seem to be considerable barriers to participants. All ten participants interviewed are active members of the CWP, they concurrently attending exercise classes at the center. Therefore, participants stated shopping after these classes since it is on their way to the bus stop. Accessibility is the proximity to a food environment; eight participants reported relying on public transit and or rideshare to get to and from grocery stores. One participant stated, "I haven't been to the grocery store in about a month, I haven't had anyone to give me a ride. I usually call a cab, but this month my health and mobility have kept me from getting out there." It should be noted that the importance of factors

such as the availability, affordability, and accessibility of food environments and foods plays a considerable role in underserved communities.

During the interviews every participant was asked what it meant to be healthy, everyone mentioned consuming fruits and vegetables. Collectively, exercising to maintain weight, reducing stress, having mobility, maintaining mental wellness, and living a life of longevity were common themes. Majority of participants mentioned how most members of their household was open to talking about food and nutrition, bring and try new foods, fruits, and vegetables.

In the contrary, when asked about someone in their household complimenting their attempt to eat a healthy diet support from family was minimal. Nonetheless, the needs assessment results showed new gaps in what is defined as healthy. Every participant mentioned fruits and vegetables along with staying physically active, but none of them said serving sizes. One participant did mention knowing how to read nutritional labels along with one other participant stating, "I only know how to see if it has sugar because my doctor showed me how." Equally important to note that some participants mentioned mental and social factors that contribute to being healthy in a holistic manner.

Community Wellness Program interviewees were asked to select which educational material they would like more of and or see in the future. First, the cooking demonstrations were selected, secondly, affordable health market shopping tours, thirdly, a nutrition basics leaflet or free food and soup kitchen flyers. One participant added how essential and beneficial it would be if CWP would provide cooking methods or techniques for people with mobility problems. Now that we know what topics are of interest its crucial to understand how to implement new educational material with the target population, underserved communities. After asking all ten participants which method they preferred to learn further information it was determined that

most prefer both hands-on (workshops, tours, one-on-one) and in a class setting (lectures). Additionally, printed educational material was the next best teaching method selected. In conjunction to the nutrition needs assessment the Summer Fest farmers market survey determined that cooking demonstration along with affordable health market tours and a nutrition basics course would benefit patients, staff, and community members (see Table 6 in Appendix J).

### **Limitations**

There are several limitations in conducting a needs assessment of the Community Wellness Program. A significant limitation had to do with the recruitment of participants since recruitment was from cooking demonstrations these are only offered twice per month, the 2<sup>nd</sup> Tuesday and 4<sup>th</sup> Thursday of every month. This timing limited the days of recruitment along with delaying the interview time slots. However, recruitment of the 4<sup>th</sup> Thursday limited the participant to use their food voucher that expired at the end of the month.

Limitations with my sample size include a small sample of ten participants recruited for an interview. Although on average roughly 14 participants attend the cooking demonstrations at the Community Wellness Program. Participants interviewed stated attending sporadically, while others are attending on a more consistent basis. Since the Community Wellness Center is open and serves staff, community members, and patients solely community members were recruited on a voluntarily. Although the Summer Fest Farmers Market Survey provided a larger sample size in all three populations, it was mainly taken by staff members.

The design of the survey was also a limitation. It had mainly quantitative components and very minimal open-ended questions. Since interviews were conducted before, in between, or after W.O.W exercise classes, time constraint existed. Participants might have felt rushed and or felt tired after the exercise class. My survey questions could have been more clear and simplistic.

### **Implications for practice**

The project goal was to conduct a needs assessment with the Community Wellness Program population, specifically those that attend cooking demos within the center. This project was necessary to implement new programs and or enhance current programs within the Healthy Food Environment Initiative to better meet the needs of the population. To find out what current needs and interest the population might have an in-depth interview was conducted. From the interviews and information attained through surveys, it has been determined that the best way to introduce new educational material and what topics of interest the community was interested in the most. This is crucial for CWP as funding can be limited, and to keep empowering the community in a holistically manner, it becomes a main priority to find ways to achieve this outcome.

The top three learning methods that are of interest are hands on this includes workshops, tours, and one on one activities. Class settings followed with interest of having lectures and notetaking as a method of learning. Lastly, printed educational material was also an excellent method to present new information, primarily due to the fact members enjoy listening to the instructor and following with a leaflet in hand. Some participants expressed they enjoy taking the information home and having material to read while on the bus or when recreating a recipe. Based on personal observation, one of the current chefs at cooking demos provides a leaflet of the recipe followed with nutritional information and also tips. Participants have been seen taking notes on the margins or crossing out ingredients and replacing them with another similar ingredient that is more attainable for them.

With the project goal in mind, after speaking with the participants, it has been determined that the top three services of interest are cooking demos, affordable health market shopping

tours, and a nutrition basics leaflet. These interests provide information to CWP and its current staff, interns, and community. Both in-depth surveys and the survey used to collect the data, support the need for more nutrition information with a component of hands-on participation this will also help close the gap that in existence on nutrition basics. Learning new ways to cook healthy fresh dishes is the main reasons participant attend the cooking demonstration, finding ways to slowly have participants demonstrate this knowledge in a safe, supportive environment will continue to self-empower these individuals to recreate and increase their self-efficacy to take charge of their nutrition under their circumstances.

### **Community Wellness Program Recommendations**

I recommend that the Community Wellness Program continues to offer as many cooking demonstrations as possible, as it serves as an empowerment educational tool. However, I do recommend adding additional components to the cooking demonstrations. Components such as, verbal and written nutritional information on produce and components in the Chefs recipes. Additionally, if any ingredient in the recipe comes in a packaged format adding the nutritional label and highlighting main macronutrient components to the leaflet provided would be beneficial. To continue to implement the centers mission and vision, contributing a cultural component to the cooking demonstrations would be a fun interactive method to have attendees participate. Asking attendees to bring a simple cultural recipe that they are willing to share with the group will fulfill this. The Chef then will randomly select a recipe and remake it in a healthier way. By adding these simple changes, it will enhance the current cooking demonstrations by adding more educational material to the program already in place.

Since the affordable health market tours were of interest for majority of the participants in both the needs assessment interviews and the summer fest farmers market survey, the CWP

staff should really consider implementing a virtual grocery store tour or creating a grocery store marketing educational tool. This marketing tool can be as simple as outlining the layout of a grocery store such as Safeway and emphasizing smarter ways to shop. For example, fresh produce is always on the outside aisle, pricey items are always at the consumers eye level, how to read sales ads, etc. This is recommended versus a onsite tour primarily due to the lack of transportation for the targeted population since its determined that public transit is the primary mode of transit.

Lastly, I would recommend adding an additional course on cooking basics. Cooking basics such as how to properly wash vegetables, knife skills, cooking with mobility limitations, cooking for combating chronic conditions such as diabetes or hypertension. Since these basics are often overlooked and assumed as logic, these basics can further empower anyone in cooking and feeling capable of being their own chef. Cooking with limited mobility is something I would really feel can make a difference to empower individuals who have limited standing time or have limited usage of their hands. Creating a versatile course where everyone can benefit from it will empower individuals when making lifestyle choices for a healthier life.

### **Suggestions for Research**

Currently, the literature does not provide enough data on mixed cultural communities and nutrition education; I suggest further research to be conducted with a mixture of underserved communities as this would be beneficial when implementing nutrition education in these communities. Culture is an integral part of one's identity, knowing how to collaborate we need to be sensitive and empower the community with these components in mind.

Additionally, minimal research exists with empowering individuals with limited mobility. Enabling these individuals in their kitchen, can create a sense of self-efficacy and create positive



change in their health status. Individuals with limited mobility are often asked to rely on other family members or caregivers to prepare their meals, having a standard course on cooking basics with limited mobility will be great for future studies.

### **Acknowledgments**

I would like to thank the participants of the cooking demonstrations at CWP for granting me an opportunity to interview them and providing valuable information for future enhancements to services offered by the CWP. I would also like to thank my preceptor and all the staff at the Community Wellness Program for welcoming me with open arms and making allowing me to execute this project. I would also like to thank my professors, director, and fieldwork advisors for advising and mentoring me throughout my master's program.

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### Appendix A- Interview Sign-up Sheet

Date: Tuesday, June 5, 2018 Location: Cafeteria Conference Room			
Time	Name (print)	Phone:	Email:
<b>9 am-10 am</b>			
<b>10:30 am-11:30pm</b>			
<b>12 pm-1:00 pm</b>			

Date: Thursday, June 7, 2018 Location: Cafeteria Conference Room			
Time	Name (print)	Phone:	Email:
<b>3:30 pm-4:30 pm</b>			

Date: Tuesday, June 19, 2018 Location: Cafeteria Conference Room			
Time	Name (print)	Phone:	Email:
<b>9 am-10 am</b>			
<b>10:30 am-11:30pm</b>			
<b>12:00 pm- 1:00pm</b>			

Date: Wednesday, June 20, 2018 Location: Cafeteria Conference Room			
Time	Name (print)	Phone:	Email:
<b>9 am-10 am</b>			
<b>10:30 am 11:30pm</b>			
<b>1:00 pm- 2:00pm</b>			
<b>2:30 pm-3:30 pm</b>			
<b>4:00pm-5:00pm</b>			

## Appendix B- Informed Consent Letter

### INFORMED CONSENT

#### Assessing the quality of nutrition: Community Wellness Program

June 20, 2018

Dear Community Wellness Program Participant:

I am a current graduate student in the Behavioral Health Program at the University of San Francisco. I am conducting a research study to learn more about the nutritional needs of San Franciscans attending Zuckerberg San Francisco General Hospital.

I am requesting your participation, which will involve a survey questionnaire and interview which will last no more than one hour. Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, there will be no further questions asked. If at any time you discontinue the survey, your results will be discarded. The attached questionnaire is anonymous. The results of the study may be published but your name will not be known.

The risks of the study are minimal. The topics in this survey may upset some respondents. You may decline to answer any or all questions and you may terminate your participation at any time if you choose. There will be no direct benefit to you for your participation in this study. However, we hope that the information obtained from this study may improve and or create new programs for the community at Zuckerberg San Francisco General Hospital Community Wellness Program.

If you have any questions concerning the research study, please call me at xxx-xxx-xxxx or e-mail me at djzamora2@dons.usfca.edu.

By signing this consent form, I confirm that I am 18 years or older and I have read and understood the information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason. I understand that I will be given a copy of this consent form if asked to. I voluntarily agree to take part in this study.

Signature \_\_\_\_\_

Date \_\_\_\_\_

## Appendix C- Interview Questionnaire

### Part 1- Respondent's Details

1. Gender:
  - a. Male
  - b. Female
  - c. Decline to state
2. Age (years)
  - a. Under 24
  - b. 25-34
  - c. 35-44
  - d. 45-54
  - e. 55 and above
3. What is your marital status?
  - a. Single, never married
  - b. Married or domestic partnership
  - c. Widowed
  - d. Divorced
  - e. Separated
4. Do you identify yourself as?
  - a. White
  - b. Hispanic or Latino
  - c. African American
  - d. Asian or Pacific Islander
  - e. Native American or American Indian
  - f. Other:
5. What is the highest degree or level of school you have completed? If currently enrolled, highest degree received.
  - a. No schooling completed
  - b. Nursery school to 8th grade
  - c. High school graduate
  - d. Trade/technical/vocational training
  - e. Associate degree
  - f. Bachelor's degree
  - g. Master's degree
  - h. Professional degree
  - i. Doctorate degree
6. Are you currently...?
  - a. Employed
  - b. Self-employed
  - c. A homemaker
  - d. A student

- e. Military
  - f. Retired
  - g. Unable to work
7. 5-Digit Zip code: \_\_\_\_\_

### Part 2-Grocery Shopping

8. Are you responsible for purchasing groceries in your household?
- a. Yes, Skip to question 10
  - b. No, Skip to Part 4
9. Who is responsible for doing the grocery shopping within your household?
- a. Partner
  - b. Parents
  - c. Shared responsibility
10. When purchasing groceries, how many people are you responsible for? \_\_\_\_\_
11. How often do you shop for groceries?
- a. Everyday
  - b. 2-4 times per week
  - c. Once a week
  - d. Once every two weeks
  - e. Once a month
12. How much do you normally spend on groceries per week?
- a. Under \$20
  - b. \$21-\$30
  - c. \$31-\$50
  - d. \$50-\$70
  - e. More than \$80
13. Which of the following modes of transportation do you usually use when you go to the grocery store?
- a. Drive my personal car
  - b. Walking
  - c. Public transit (bus/BART/shuttle)
  - d. Public Rideshare (Uber/Lyft)
14. Do you have a specific day which you do your shopping?
- a. Monday
  - b. Tuesday
  - c. Wednesday
  - d. Thursday
  - e. Friday
  - f. Weekends
15. Time of day you go grocery shopping? \_\_\_\_\_



**Part 3- Grocery Stores**

16. In the past year have you struggled to purchase healthy fresh foods?
- a. Yes, often
  - b. Sometimes
  - c. No, never

17. Where do you generally buy your groceries? (Circle all that apply.)
- a. Local grocers
  - b. Farmers' markets
  - c. Boutique chains (Whole Foods Market, Trader Joes)
  - d. Larger supermarket chains (Lucky's, Safeway, Grocery Outlet, etc.)
  - e. Very large "hypermarket" (Walmart, Target, Costco, etc.)

**hypermarket** is a superstore combining a supermarket and a department store

18. Please circle the number that best represents the **importance of each of the following** to your grocery shopping expectations.

	<u>Not Very</u> <u>Important</u>				<u>Very</u> <u>Important</u>
1. Quality of food .....	1	2	3	4	5
2. Availability of food (variety, brand choices) . .	1	2	3	4	5
3. Prices of items offered .....	1	2	3	4	5
4. Customer service .....	1	2	3	4	5
5. Cleanliness of store .....	1	2	3	4	5
6. Convenient business hours .....	1	2	3	4	5
7. Travel time to the grocery store .....	1	2	3	4	5
8. Supporting local business .....	1	2	3	4	5
9. Buying locally grown foods .....	1	2	3	4	5

19. Please circle the number that best represents how well your **local grocery store** meets your shopping expectations.

	<u>Doesn't meet</u> <u>Expectations</u>				<u>Exceeds</u> <u>Expectations</u>
1. Quality of food .....	1	2	3	4	5
2. Availability of food (variety, brand choices) . . .	1	2	3	4	5
	1	2	3	4	5

3. Prices of items offered .....					
4. Customer service .....	1	2	3	4	5
5. Cleanliness of store .....	1	2	3	4	5
6. Convenient business hours .....	1	2	3	4	5
7. Travel time to the grocery store .....	1	2	3	4	5
8. Supporting local business .....	1	2	3	4	5
9. Buying locally grown foods .....	1	2	3	4	5

**Part 4- Nutrition**

20. What does it mean to be “healthy”?

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21. Do you consider yourself a healthy person?

- a. Agree
- b. Somewhat agree
- c. Somewhat disagree
- d. Disagree

22. How often does a member of your household:

**(Often Sometimes Seldom Never)**

- a. Compliment your attempt to eat a healthy diet?
- b. Encourage you to eat vegetables?
- c. Encourage you to eat fruits?
- d. Talk about food and nutrition with you?
- e. Bring healthy foods home for you to try?
- f. Bring healthy fruits for you to try?
- g. Bring healthy vegetables for you to try?

23. How willing are most members of your household to eat vegetables?

Why? \_\_\_\_\_

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24. What do you like most about the cooking demos?

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## Appendix D- Spanish Informed Consent Letter

### CONSENTIMIENTO INFORMADO

El tema es evaluar la calidad de la nutrición: Community Wellness Program

20 de junio de 2018

Estimado participante del programa de bienestar comunitario:

Soy un estudiante de la maestría del Programa de Salud del Comportamiento de la Universidad de San Francisco. Estoy llevando a cabo un estudio de investigación para aprender más sobre las necesidades nutricionales de los residentes de San Francisco que asisten al Hospital General de Zuckerberg San Francisco.

Estoy solicitando su participación, que incluirá un cuestionario de encuesta y una entrevista que no durará más de una hora. Tu participación en este estudio es voluntario. Si elige no participar o retirarse del estudio en cualquier momento, no se harán más preguntas. Si en algún momento suspendes la encuesta, tus resultados serán descartados. El cuestionario adjunto es anónimo. Los resultados del estudio pueden publicarse, pero no se conocerá su nombre.

Los riesgos del estudio son mínimos. Los temas en esta encuesta pueden molestar a algunos encuestados. Puede rechazar contestar algunas o todas las preguntas y puede cancelar su participación en cualquier momento si lo desea. No habrá beneficio directo para usted por su participación en este estudio. Sin embargo, esperamos que la información obtenida de este estudio pueda mejorar y / o crear nuevos programas para la comunidad en el Programa de Bienestar Comunitario del Hospital General de Zuckerberg San Francisco.

Si tiene alguna pregunta sobre el estudio de investigación, llámeme al xxx-xxx-xxxx o envíeme un correo electrónico a [dizamora2@dons.usfca.edu](mailto:dizamora2@dons.usfca.edu).

Al firmar este formulario de consentimiento, confirmo que tengo 18 años o más y que he leído y entendido la información y he tenido la oportunidad de hacer preguntas. Entiendo que mi participación es voluntaria y que soy libre de retirarme en cualquier momento, sin dar una razón. Entiendo que se me dará una copia de este formulario de consentimiento si lo solicito. Yo voluntariamente acepto tomar parte en este estudio.

Firma \_\_\_\_\_

Fecha \_\_\_\_\_

**Appendix E-Spanish Interview Questionnaire****Parte 1- Detalles del participante**

1. Género:
  - a. Hombre
  - b. Mujer
  - c. Prefiero no decir
2. Edad (años)
  - a. Menos de 24
  - b. 25-34
  - c. 35-44
  - d. 45-54
  - e. 55 y más
3. ¿Cuál es su estado civil?
  - a. Soltero/a, nunca casado/a
  - b. Casado/a
  - c. Viudo/a
  - d. Divorciado/a
  - e. Separado/a
4. ¿Cómo se identifica?
  - a. Blanco/a
  - b. Hispano/a or Latino/a
  - c. Afroamericano
  - d. Asiático o de islas asiáticas
  - e. Indio Americano
  - f. Otro:
5. ¿Cuál es el grado o nivel más alto de la escuela que ha completado? Si actualmente está inscrito, recibió el grado más alto.
  - a. No completó la escuela
  - b. Guardería hasta 8 ° grado
  - c. Graduado de preparatoria
  - d. Capacitación comercial / técnica / vocacional
  - e. Grado asociado
  - f. Licenciatura
  - g. Maestría
  - h. Título profesional
  - i. Doctorado
6. ¿Estás...
  - a. Empleado
  - b. Trabajadores por cuenta propia
  - c. Un ama de casa
  - d. Estudiante
  - e. Militar
  - f. Retirado
  - g. Incapaz de trabajar

7. Código postal de 5 dígitos: \_\_\_\_\_

### Parte 2-Compras de comestibles

1. ¿Es usted responsable de comprar comestibles en su hogar?
  - a. Si, pase a la pregunta 10
  - b. No, pase a la parte 4
2. ¿Quién es responsable de hacer las compras en su hogar?
  - a. Compañero
  - b. Padres
  - c. Responsabilidad compartida
3. Al comprar comestibles, ¿de cuántas personas es responsable? \_\_\_\_\_
8. ¿Con qué frecuencia compra comestibles?
  - f. Cada día
  - g. 2-4 veces por semana
  - h. Una vez por semana
  - i. Una vez cada dos semanas
  - j. Cada mes
9. ¿Cuánto gastas normalmente en comestibles por semana?
  - f. Menos de \$20
  - g. \$21-\$30
  - h. \$31-\$50
  - i. \$50-\$70
  - j. Mas de \$80
10. ¿Cuál de los siguientes modos de transporte usas habitualmente cuando vas a la tienda de comestibles?
  - a. Conduce mi coche personal
  - b. Caminando
  - c. Transporte público (Muni/BART/shuttle)
  - d. Public Rideshare (Uber/Lyft)
11. ¿Tienes un día específico en el que compras?
  - a. Lunes
  - b. Martes
  - c. Miércoles
  - d. Jueves
  - e. Viernes
  - f. Fines de semana
12. ¿La hora del día en que vas de compras? \_\_\_\_\_

### Parte 3- Tiendas de comestibles

13. En el último año, ¿ha tenido problemas para comprar alimentos frescos y saludables?
  - d. Sí, Siempre
  - e. A veces
  - f. No, nunca

14. ¿Dónde compras generalmente tus compras? (Encierre en un círculo todos los que correspondan).

- f. Tiendas locales
- g. Mercados de agricultores
- h. Cadenas de tiendas (Whole Foods Market, Trader Joes)
- i. Cadenas de supermercados más grandes (Lucky's, Safeway, Grocery Outlet, etc.)
- j. "Hipermercado" muy grande (Walmart, Target, Costco, etc.)

**hipermercado** es una supertienda que combina un supermercado y una tienda por departamentos

15. Círcule el número que mejor represente la importancia de cada uno de los siguientes elementos en sus **expectativas de compra de alimentos**.

	<u>No Muy Importante</u>				<u>Muy Important</u>
1. Calidad de los alimentos. . . . .	1	2	3	4	5
2. Disponibilidad de comida (variedad y opciones de marca) . .	1	2	3	4	5
3. Precios de los artículos ofrecidos. . . . .	1	2	3	4	5
4. Servicio al cliente. . . . .	1	2	3	4	5
5. Limpieza de la tienda. . . . .	1	2	3	4	5
6. El horario de la tienda es conveniente. . . . .	1	2	3	4	5
7. Tiempo de viaje a la tienda . . . . .	1	2	3	4	5
8. Apoyo a negocios locales. . . . .	1	2	3	4	5
9. Comprar alimentos cultivados localmente. . . . .	1	2	3	4	5

16. Círcule el número que mejor represente **qué tan bien su supermercado** local cumple con sus expectativas de compra.

	<u>No cumple con las Expectativas</u>				<u>Supera las Expectativas</u>
1. Calidad de los alimentos . . . . .	1	2	3	4	5
2. Disponibilidad de comida (variedad y opciones de marca). . .	1	2	3	4	5

3. Precios de los artículos ofrecidos. ....	1	2	3	4	5
4. Servicio al cliente. ....	1	2	3	4	5
5. Limpieza de la tienda. ....	1	2	3	4	5
6. El horario de la tienda es conveniente. ....	1	2	3	4	5
7. Tiempo de viaje a la tienda. ....	1	2	3	4	5
8. Apoyo a negocios locales. ....	1	2	3	4	5
9. Comprar alimentos cultivados localmente. ....	1	2	3	4	5

#### Part 4- Nutrición

17. ¿Qué significa ser "saludable" para usted?

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18. ¿Se considera una persona saludable?

- e. De acuerdo
- f. Parcialmente de acuerdo
- g. Algo en desacuerdo
- h. Desacuerdo

19. ¿Con qué frecuencia un miembro de su hogar:

**(Siempre A menudo Rara Vez Nunca)**

- a. ¿Complemente su intento de comer una dieta saludable?
- b. ¿La/Lo animan a comer vegetales?
- c. ¿La/Lo animan a comer frutas?
- d. Habla sobre la comida y la nutrición con usted?
- e. Trae alimentos saludables a casa para que pruebes?
- f. Trae frutas saludables para que pruebes?
- g. Trae vegetales saludables para que pruebes?

20. ¿Qué tan dispuesto está la mayoría de los miembros de su hogar a comer verduras?

¿Porqué?

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## Appendix F- Summer Fest 2018: Farmers Market Survey

### Farmers Market Survey

**Gender:** Female Male Transgender

**Age:** Under 18 18-40 41-65 65+

**Demographics:**

African American/African White/Caucasian Latino/Chicano

Native American Asian/Pacific Islander Other/Unknown

**Questions:**

1. **Are you:** Patient Staff Community Member
2. **In the last year have you struggled to purchase healthy fresh foods?**  
Yes, often Maybe, sometimes No, Never  
**2a. If Yes Where to do you get your produce?**  
Farmers markets Supermarkets Convenience stores Food pantries Soup kitchens Other: \_\_\_\_\_
3. **What do you struggle with? (check all that apply)**  
Recognizing what is healthy Knowing how to cook tasty healthy meals Finding time to cook  
Traveling to affordable fresh food markets Other: \_\_\_\_\_
4. **What of the following are you interested in? (check all that apply)**  
Cooking Demos Classes on getting loved ones to eat healthy Free food pantry & soup kitchen flyers  
Nutrition Classes Affordable health market shopping tours Food stamp application assistance
5. **Where do you most often to get your food and nutrition information from? (check all that apply)**  
Doctors Friends/Family Internet Other: \_\_\_\_\_ None

**Appendix G:**

**Table 3:** How well your local grocery store meets your shopping expectations.

Table 3: **How well your local grocery store** meets your shopping expectations. (scale 1-5)

	<b>(1) Not Very Important</b> % (n=10)			<b>(5) Very Important</b> % (n=10)	
<b>Quality of food</b>	0.00% (0)	0.00% (0)	0.00% (0)	50.00% (5)	50.00% (5)
<b>Availability of food (variety, brand choices)</b>	0.00% (0)	0.00% (0)	0.00% (0)	40.00% (4)	60.00% (6)
<b>Prices of items offered</b>	0.00% (0)	0.00% (0)	10.00% (1)	10.00% (1)	80.00% (8)
<b>Customer service</b>	10.00% (1)	0.00% (0)	0.00% (0)	30.00 (3)	60.00% (6)
<b>Cleanliness of store</b>	0.00% (0)	0.00% (0)	0.00% (0)	10.00% (1)	90.00% (9)
<b>Convenient business hours</b>	0.00% (0)	0.00% (0)	0.00% (0)	10.00% (1)	90.00% (9)
<b>Travel time to the grocery store</b>	0.00% (0)	0.00% (0)	20.00% (2)	20.00% (2)	60.00% (6)
<b>Supporting local business</b>	0.00% (0)	0.00% (0)	10.00% (1)	30.00 (3)	60.00% (6)
<b>Buying locally grown foods</b>	10.00% (1)	0.00% (0)	10.00% (1)	20.00% (2)	60.00% (6)

**Appendix H:**Table 4: Importance of each of the following to your **grocery shopping expectations****Table 4:** Importance of each of the following to **your grocery shopping expectations**.

(scale 1-5)

	<b>(1) Not Very Important % (n=10)</b>			<b>(5) Very Important % (n=10)</b>	
<b>Quality of food</b>	0.00% (0)	0.00% (0)	0.00% (0)	20.00% (2)	80.00% (8)
<b>Availability of food (variety, brand choices)</b>	0.00% (0)	0.00% (0)	0.00% (0)	30.00% (3)	70.00% (7)
<b>Prices of items offered</b>	10.00% (1)	0.00% (0)	0.00% (0)	0.00% (0)	90.00% (9)
<b>Customer service</b>	10.00% (1)	0.00% (0)	0.00% (0)	20.00% (2)	70.00% (7)
<b>Cleanliness of store</b>	0.00% (0)	0.00% (0)	0.00% (0)	0.00% (0)	100.00% (10)
<b>Convenient business hours</b>	10.00% (1)	0.00% (0)	10.00% (1)	0.00% (0)	80.00% (8)
<b>Travel time to the grocery store</b>	10.00% (1)	0.00% (0)	0.00% (0)	20.00% (2)	70.00% (7)
<b>Supporting local business</b>	20.00% (2)	0.00% (0)	10.00% (1)	40.00% (4)	30.00% (3)
<b>Buying locally grown foods</b>	0.00% (0)	0.00% (0)	20.00% (2)	20.00% (2)	60.00% (6)

**Appendix I-** Table 5: Summer Fest 2018---Farmer's Market Survey**Table 5: Summer Fest 2018---Farmer's Market Survey**

	<b>Patient n (%)</b> <b>n=29</b>	<b>Community Member n (%)</b> <b>n=32</b>	<b>Staff n (%)</b> <b>n=135</b>
<b>Gender</b>			
Female	19 (65.52)	22 (68.75)	104 (77.04)
Male	7 (24.14)	3 (9.38)	16 (11.85)
Transgender	0 (0.00)	0 (0.00)	0 (0.00)
No Response	3 (10.34)	7 (21.88)	15 (11.11)
<b>Age (years)</b>			
Under 18	0 (0.00)	0 (0.00)	0 (0.00)
18-40	10 (34.48)	9 (28.13)	59 (43.70)
41-65	17 (58.62)	12 (37.50)	63 (46.67)
65+	0 (0.00)	11 (34.38)	6 (4.44)
No Response	2 (6.90)	0 (0.00)	7 (5.19)
<b>Ethnicity/Race</b>			
African American/African	4 (13.79)	1 (3.13)	11 (8.15)
White/Caucasian	3 (10.34)	7 (21.88)	16 (11.85)
Latino/Chicano	14 (48.28)	5 (15.63)	26 (19.26)
Native American	0 (0.00)	0 (0.00)	0 (0.00)
Asian/Pacific Islander	5 (17.24)	17 (53.13)	67 (49.63)
Other/Unknown	1 (3.45)	1 (3.13)	5 (3.70)
No Response	2 (6.90)	1 (3.13)	10 (7.41)
<b>In the last year have you struggled to purchase healthy fresh foods?</b>			
Yes, often	13 (44.83)	5 (15.63)	20 (14.81)
Maybe, sometimes	11 (37.93)	14 (43.75)	46 (34.07)
No, never	3 (10.34)	13 (40.63)	64 (47.41)
No Response	2 (6.90)	0 (0.00)	5 (3.70)
<b>If Yes, where to do you get your produce?</b>			
Farmers markets	8 (28.57)	9 (31.03)	32 (35.16)
Supermarkets	12 (42.86)	12 (41.38)	43 (47.25)
Convenience stores	2 (7.14)	4 (13.79)	4 (4.40)
Food pantries	3 (10.71)	1 (3.45)	0 (0.00)
Soup kitchens	1 (3.57)	0 (0.00)	0 (0.00)
Other:	0 (0.00)	1 (3.45)	1 (1.10)
No Response	2 (7.14)	2 (6.90)	11 (12.09)

**Appendix J-** Table 6: Participant struggles/interests, along with where nutrition information is attained from**Table 6: Participant struggles and interests along with where nutrition information is attained from**

	Patient n (%) n=29	Community Member n (%) n=32	Staff n (%) n=135
<b>What do you struggle with? (check all that apply)</b>			
Recognizing what is healthy	10 (27.78)	7 (16.28)	26 (14.61)
Knowing how to cook tasty healthy meals	15 (41.67)	16 (37.21)	50 (28.09)
Finding time to cook	4 (11.11)	10 (23.26)	66 (37.08)
Traveling to affordable fresh food markets	4 (11.11)	6 (13.95)	20 (11.24)
Other:	1 (2.78)	2 (4.65)	4 (2.25)
No Response	2 (5.56)	2 (4.65)	12 (6.74)
<b>What of the following are you interested in? (check all that apply)</b>			
Cooking Demos	11 (17.74)	20 (30.30)	76 (33.19)
Classes on getting loved ones to eat	14 (22.58)	12 (18.18)	49 (21.40)
Free food pantry & soup kitchen flyers	10 (16.13)	7 (10.61)	21 (9.17)
Nutrition Classes	17 (27.42)	17 (25.76)	50 (21.83)
Affordable health market shopping tours	5 (8.06)	9 (13.64)	26 (11.35)
Food stamp application assistance	4 (6.45)	1 (1.52)	0 (0.00)
No Response	1 (1.61)	0 (0.00)	7 (3.06)
<b>Where do you most often to get your food and nutrition information from? (check all that apply)</b>			
Doctors	11 (27.50)	5 (12.50)	27 (13.99)
Friends/Family	17 (42.50)	17 (42.50)	77 (39.90)
Internet	6 (15.00)	11 (27.50)	76 (39.38)
Other:	2 (5.00)	5 (12.50)	9 (4.66)
None	2 (5.00)	2 (5.00)	1 (0.52)
No Response	2 (5.00)	0 (0.00)	3 (1.55)