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2019 Empowering Aging Adults to Improve Health: An Evaluation of Olivewood Gardens Cooking for Salud Program

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Empowering Aging Adults to Improve Health: An Evaluation of Olivewood Gardens' *Cooking for Salud* Program

April 2019



Presented by:
Caster Family Center for Nonprofit
and Philanthropic Research



This evaluation was made possible thanks to grant support from The San Diego Foundation Age-Friendly Communities.



About Olivewood Gardens and Learning Center

The mission of Olivewood Gardens and Learning Center is to empower students and families from diverse backgrounds to be healthy and active citizens through organic gardening, environmental stewardship, and nutrition education.



About The Nonprofit Institute's Caster Family Center for Nonprofit and Philanthropic Research

The Caster Center is housed within The Nonprofit Institute in the School of Leadership and Education Sciences at the University of San Diego. The mission of the Caster Center is to provide research, evaluation and consulting services that build the leadership and strategic and evaluative-thinking capacity of local nonprofits, as well as to be the leading source of information, data and research on the local nonprofit sector.

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Cite As:

Tinkler, T. & Schneider, M. (2019). *Empowering Aging Adults to Improve Health: An Evaluation of Olivewood Gardens Cooking for Salud Program*. San Diego, CA: The Nonprofit Institute, University of San Diego.

Acknowledgements:

The Nonprofit Institute's Caster Center would like to acknowledge *Cooking for Salud's* Cohort 14 staff and participants for their time and participation in the data collection process.

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EXECUTIVE SUMMARY

In response to the community's need for adult nutrition education, Olivewood Gardens and Learning Center (Olivewood Gardens) hosted its first *Cooking for Salud* nutrition education program in 2013. The *Cooking for Salud* program is designed to support the health and well-being of adults in National City and San Diego's Southern region by teaching participants how to create healthy kitchens at home. These regions are of particular importance as they have been identified as having limited food access for residents and a significant number of residents who are low income.¹

In July 2018, Olivewood Gardens commissioned The Nonprofit Institute's Caster Family Center for Nonprofit and Philanthropic Research at the University of San Diego to conduct a program evaluation of its 14th cohort of the *Cooking for Salud* program, a cohort specifically comprised of older adults 55 years and older. This evaluation was designed to assess the program's impact on participants' 1) health and well-being; 2) healthy cooking knowledge, confidence, and practices; and 3) ability to share knowledge of healthy cooking with their communities.

Quantitative and qualitative analysis of the 15 participants' pre/post clinical health measures, dietary patterns, confidence in healthy cooking practices, and overall ratings of well-being provided evidence that the *Cooking for Salud* program can positively impact older adults' health and well-being in meaningful ways. The data show that *Cooking for Salud* is meeting its primary goals for the program and helping to improve participants' quality of life.

"For years I only was taking care of my family and I worked a lot and I felt that my health was poor... when I found [Olivewood Gardens] it was a miracle from God. I am very happy, very relaxed. I love to come here with my new friends, I take care of myself, and I learn new things. I'm very grateful with the staff of the program that always helped us and they treated us with a lot of attention and love and I felt very special."

"Por muchas años solo atendía a mi familia y trabajaba mucho, y me sentía muy mal de salud... cuando encontré [Olivewood Gardens] sentí que fue un milagro de Dios. Estoy feliz, muy tranquila, relajada. Me encanta venir con mis nuevas amistades, me cuido, y aprendo cosas nuevas. Estoy muy agradecida con el equipo del programa que siempre nos ayudaron y nos trataron con mucha atención y cariño, me sentí muy especial."

- Cooking for Salud Cohort 14 Participant

¹ Economic Research Service (ERS), U.S. Department of Agriculture. *Food Access Research Atlas*. Retrieved September 5, 2018 from: <https://www.ers.usda.gov/data-products/food-access-research-atlas/>



15 senior participants

completed the 7-week
Cooking for Salud Program in 2018



**Participants mindfully
prepared and consumed
food**

17%

increase in mindful eating
practices from pre to post



**Participants were engaged
in healthy eating decisions
and practices**

82%

of participants increased their confidence
in applying healthy cooking practices by
the end of *Cooking for Salud*

100%

reported they eat meals that are now
more nutritious for them



**Participants improved their
health and well-being**

100%

of participants positively changed
one or more clinical health
measures by the end of *Cooking
for Salud*

48%

increase in overall health

38%

increase in mental health

28%

increase in life satisfaction

91%

"Happier with my life after the
program."

100%

"I have had more opportunities to
socialize with other people."



**Participants were
ambassadors of healthy
eating in their family and
community**

**12
out of
15**

continued to attend Olivewood
Gardens events after they graduated

Participants reported sharing what they learned with
family and friends

*"I want to apply what I learned with
my friends at the Seniors Club.
I have already told them I will teach them
new recipes and healthier ways to cook
in our next meeting.
I like to share and help others and
this has helped me and
I want this to help other people too."*

OVERVIEW AND BACKGROUND

In response to the community's need for adult nutrition education, Olivewood Gardens and Learning Center (Olivewood Gardens) hosted its first *Cooking for Salud* nutrition education program in 2013. The *Cooking for Salud* program is designed to support the health and well-being of adults in National City and San Diego's Southern region by teaching participants how to create healthy kitchens at home. These regions are of particular importance as they have been identified as having limited food access for residents and a significant number of residents that are low income.²

In July 2018, Olivewood Gardens commissioned The Nonprofit Institute's (NPI's) Caster Family Center for Nonprofit and Philanthropic Research (Caster Center) at the University of San Diego to conduct a program evaluation of its 14th cohort of the *Cooking for Salud* program, a cohort specifically comprised of older adults 55 years and older. This evaluation was designed to assess the program's impact on participants' health and well-being; healthy cooking knowledge, confidence, and practices; and ability to share knowledge of healthy cooking with their communities.

Cooking for Salud Program Description

Participants attend a 7-week, bilingual series of weekly classes that focus on basic nutrition and provide hands-on training for participants to learn how to reduce their salt and sugar intake, as well as prepare healthy salad dressings, whole grains, lean meats and meat alternatives, and healthier versions of popular Mexican dishes. Classes are taught on Olivewood Garden's property, which is where most of the food used in class is grown. The program is taught by past graduates and designed for cohort learning to increase participant motivation and personal connections between participants.

The last class culminates in a family and community attended graduation celebration where graduates make a speech about what they have learned and their goals for themselves and their families. Graduates then become known as *Kitchenistas*, and Olivewood Gardens provides additional learning and networking opportunities for them in an effort to encourage them to connect with others in their community and teach them how to create their own healthy kitchens.

Since 2013, 15 generations or cohorts (228 participants) have graduated from the *Cooking for Salud* program, most of whom have school-aged children. The subject of this research study was Cohort 14, comprised of seniors ages 55+ and known as the age friendly community. In addition to living in communities that have limited food access, seniors are even more impacted because they are more prone to chronic illness, social isolation, limited resources, and poor nutrition – all of which make it difficult to maintain a healthy lifestyle.³

² Economic Research Service (ERS), U.S. Department of Agriculture. *Food Access Research Atlas*. Retrieved September 5, 2018 from: <https://www.ers.usda.gov/data-products/food-access-research-atlas/>.
County of San Diego, Health and Human Services Agency. 2014. *Live Well San Diego Community Health Assessment*.

³ Vesnaver, E., & Keller, H.H. (2011). Social influences and eating behaviour in later life: A review. *Journal of Nutrition in Gerontology and Geriatrics*, (30), 2-23.
Ahmed, T. & Haboubi.N. (2010). Assessment and management of nutrition in older people and its importance to health. *Clinical Interventions in Aging*, (5), 207-216.

METHODOLOGY

The findings presented in this report are based on a synthesis of multiple data sources collected between September 2018 and March 2019 from Cohort 14 of Olivewood Garden's *Cooking for Salud* program. The data collection strategy was designed to accommodate the unique needs of the participant population, which was comprised of 15 seniors over 55 years old, the majority of whom spoke only Spanish and some who had very low literacy skills. The data sources included pre and post clinical health measures, a pre-survey, a retrospective pre-post survey, field notes from the final day of the program, and a focus group discussion.

For the survey portion of the study, NPI researchers employed a hybrid traditional pre/post survey design with a retrospective pre-post design. In a retrospective pre-post survey design, participants are asked questions about their attitudes and behaviors following the program and then asked to reflect on the same items before the program started. Studies have found that this type of design more accurately demonstrates program impact because it provides participants with a 'baseline' level of knowledge so they are better able to reflect on the degree of change in their attitudes and/or behaviors.⁴ Descriptions of each data source are described in Table 1.

For the clinical health measures, NPI researchers partnered with qualified nursing staff from the Hahn School of Nursing and Health Science at the University of San Diego to collect all clinical health measures on the first and last day of the program. The nursing staff selected health measures that have been identified as indicators of nutritional behavior change. See Table 1 for a description of the specific health measures.

Data Analysis

The quantitative data (i.e., pre/post clinical health measures and surveys) analysis included participants who had both pre and post data. The analysis included the following:

- Descriptive statistics to summarize the data (i.e., frequencies, percentages)
- Paired-sample t-tests to test for statistically significant differences between pre and post mean (i.e., average) responses.⁵

The qualitative data (i.e., open-ended survey responses, field notes from the graduation ceremony, and the focus group) were analyzed using content analysis, a method for identifying themes in responses.

⁴ Bhanji, F., Gottesman, R., de Grave, W., Steinert, Y., & Winer, L. R. (2012). The retrospective pre-post: A practical method to evaluate learning from an educational program. *Academic Emergency Medicine*, 19(2), 189-194.

⁵ Because of the small sample sizes, statistically significant results were checked using Wilcoxon's signed-rank test.

Table 1: Data Sources and Descriptions

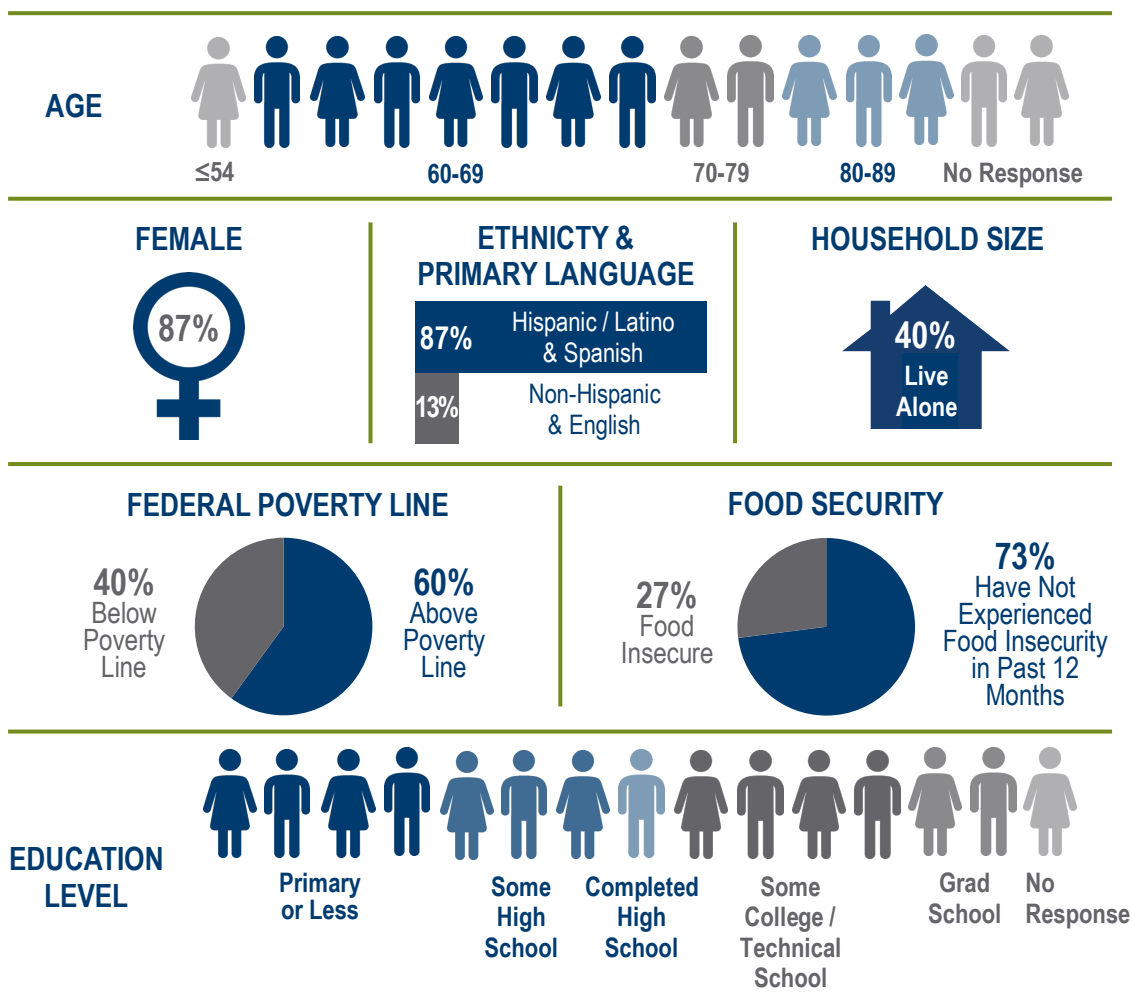
Note: Number of participants (n) reflects those who had both pre and post data

Data Source	Participants	Description
Blood Pressure and Body Composition Measures	n=13	Nursing staff took blood pressure and a number of body composition measures, including visceral fat, body mass index and weight on the first day of the program (September 2018) and the last day of the program (November 2018).
Blood Tests	n=13	Nursing staff took blood samples (5 mL) by a venipuncture on the first day (September 2018) and last day of the program (November 2018). Blood was analyzed for concentrations of total cholesterol, high density lipoprotein (HDL), low density lipoprotein (LDL), triglycerides, and hemoglobin A1c (HbA1c).
Participant Pre-Survey and Retrospective Pre-Post Survey	n=14	<p>In September 2018, NPI researchers administered a pre-survey to participants on the first day of the program. The pre-survey, which was translated into Spanish, collected demographic information, and included questions about dietary patterns, knowledge, food security, and motivation to participate in the program.</p> <p>In November 2018, NPI researchers administered a retrospective pre-post survey on the last day of the program. The survey, which was translated into Spanish, included two sets of questions about dietary patterns and nutrition knowledge that had been included in the pre-survey. The remainder of the survey asked participants to first rate their attitudes and behaviors currently and then reflect on their attitudes and behaviors before participating in <i>Cooking for Salud</i>. The retrospective questions asked participants about buying and cooking healthy food, mindful eating practices, and overall health, mental health, and life satisfaction.</p>
Graduation Field Notes	n=14	During the graduation ceremony on the final day of the program in November 2018, NPI researchers informally asked participants about how the program impacted them personally. Responses were documented and translated into English.
Cohort 14 Focus Group	n=5	In March 2019, NPI researchers conducted a focus group with five participants from <i>Cooking for Salud</i> 's Cohort 14. The focus group discussion was conducted in Spanish. The focus group questions were designed to understand the lasting impact of the <i>Cooking for Salud</i> program on participants in terms of their health, shopping habits and meal preparation, as well as their level of involvement as <i>Kitchenistas</i> in local community health advocacy.

PARTICIPANT DEMOGRAPHICS

There were 15 participants in Cohort 14 of the *Cooking for Salud* program. Overall, attendance was consistent across the seven weeks, with 14 out of 15 participants completing the program and attending at least six of the seven sessions.

Figure 1: Participant Demographics



FINDINGS

Impact on Clinical Health Measures

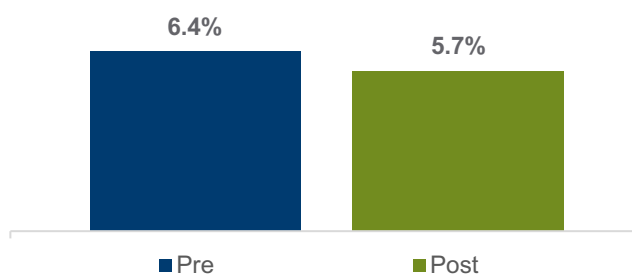
Every participant in the *Cooking for Salud* program made improvements in at least one health measure over the course of the 7-week program. The most notable improvements were in participants' decreased blood sugar and improved measures of heart health. All of these measures are directly impacted by diet.⁶

100%
of participants positively changed
one or more clinical health
measures by the end of
Cooking for Salud

Blood Sugar

The HbA1c (A1c) test reflects a person's average blood sugar level over a 90-day period. Reductions in the A1c can be an indicator of dietary change and/or good management of diabetes.⁷ Normal A1c levels are below 5.7%. Figure 2 shows that participants' average A1c had a statistically significant decrease from the beginning of the program to the end of the program. This reduction in blood sugar suggests possible positive dietary changes.

Figure 2: Pre and Post Average Blood Sugar Level (A1c)* (n=13)

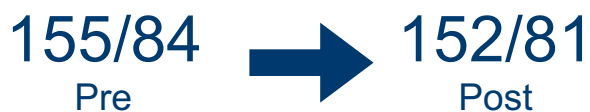


* The difference from Pre to Post was statistically significant ($p < .05$)

Heart Health

Three primary measures of heart health - blood pressure, cholesterol, and triglycerides - were all measured pre and post participation in *Cooking for Salud*. Average changes across all measures trended positively. Although not statistically significant,⁸ participants' average blood pressure decreased (See Figure 3) and half of participants had lowered their blood pressure by the end of the program.

Figure 3: Pre and Post Average Blood Pressure (n=13)



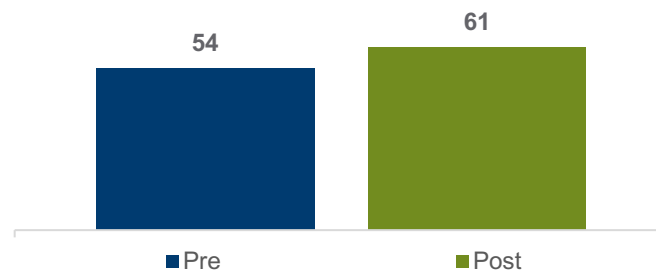
⁶ Seventy-three percent of participants reported they were on medication for blood pressure, cholesterol, or diabetes. Patients provided a list of medications prior to the start of the program, and no changes in medications were identified at the post test evaluation; thus, medications were not considered in the analysis.

⁷ McCulloch, D. K., Hayward, R. A. (2019). *Screening for type 2 diabetes mellitus*. UpToDate. Waltham, MA: UpToDate, Inc. <https://www.uptodate.com>

⁸ Neither the differences from pre to post between systolic nor diastolic blood pressure were statistically significant.

In terms of cholesterol, higher levels of HDL are associated with a lower risk of heart disease.⁹ As shown in Figure 4, participants' average HDL (i.e., "good" cholesterol) increased significantly by the end of the program. Participants' LDL ("bad" cholesterol) also increased slightly (from 106 to 108), but this change was not statistically significant.

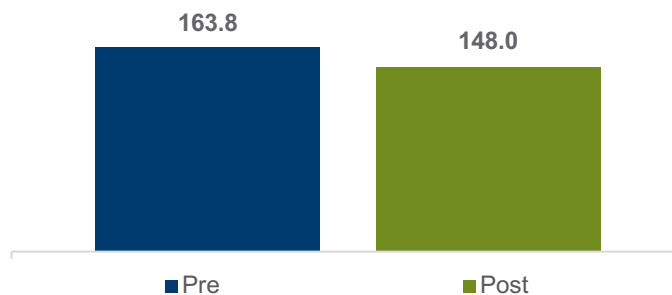
Figure 4: Pre and Post Average HDL "Good" Cholesterol Levels* (n=13)



* The difference from Pre to Post was statistically significant ($p < .05$)

In addition to blood pressure and cholesterol levels, the level of triglycerides (i.e., a type of fat) in the blood is another important measure of heart health. High triglycerides are associated with heart disease and other chronic health conditions and can be reduced with lifestyle changes.¹⁰ Figure 5 shows that average triglyceride levels also decreased from the beginning of the program to the end of the program. However, this decrease was not statistically significant.

Figure 5: Pre and Post Average Triglyceride Levels (n=13)



Weight and Visceral Fat

Being overweight and having excessive visceral fat (i.e., belly fat) is associated with many health problems such as heart disease and diabetes.¹⁰ At the start of the program, 80% (12 out of 15) of participants were overweight (Body Mass Index > 24.9), but none of the participants had elevated visceral fat (>12%). Although half of the participants decreased their weight from the beginning of the program to the end, participants' average weight did not change. Participants' average visceral fat increased from pre to post but the change was not statistically significant. Two participants had a visceral fat level on the borderline of normal (13.0% and 13.9%) at the end of the program. *Cooking for Salud's* curriculum is primarily focused on diet and nutrition and there is less emphasis on exercise. It may be that placing more emphasis on exercise could lead to weight loss and reductions in visceral fat.

⁹ Rosenson, R. S. (2019). *Patient education: High cholesterol and lipids (hyperlipidemia) (Beyond the Basics)*. UpToDate. Waltham, MA: UpToDate, Inc. <https://www.uptodate.com>.

¹⁰ Perreault, L. (2019). *Obesity in adults: Prevalence, screening, and evaluation*. UpToDate. Waltham, MA: UpToDate, Inc. <https://www.uptodate.com>.

Impact on Diet and Food Choices

Dietary Changes

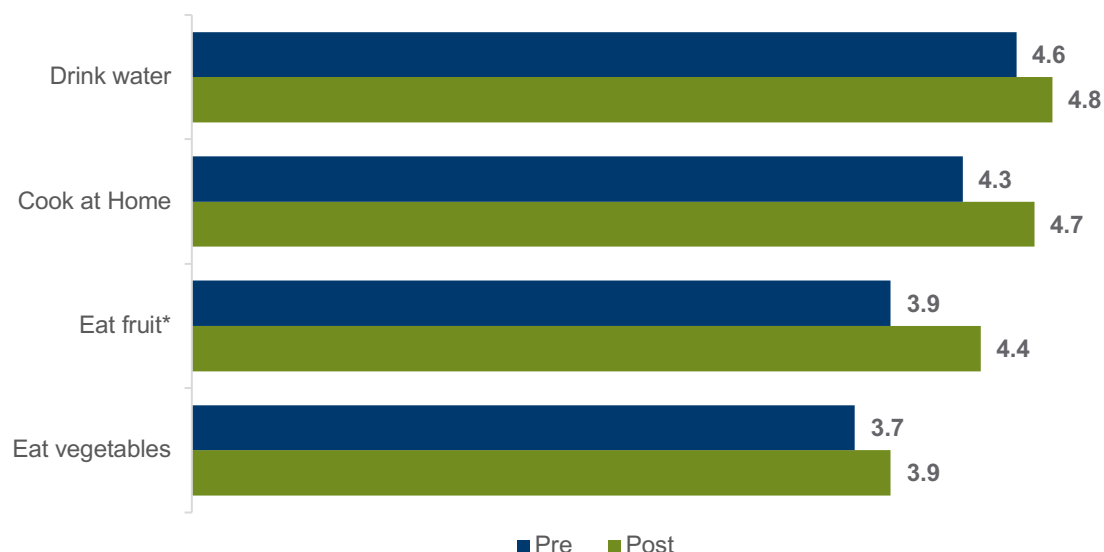
In general, participants reported relatively healthy eating habits before the program began, and the majority already knew the importance of including fruits and vegetables in their diet. For example, before starting the program, only two participants drank soda more than once a week and only one participant ate fast food more than once a week. Given the infrequency of these unhealthy behaviors at the beginning of the program, it is not surprising that the frequency of unhealthy dietary behaviors, on average, did not change dramatically at the end of the program. Figure 6 illustrates that participants reported some positive changes to their dietary habits, and their average consumption of fruit increased significantly over the course of the *Cooking for Salud* program.

86%
of participants
increased their
consumption of fruits

50%
of participants
increased their
consumption of
vegetables¹²

Figure 6: Pre and Post Frequency of Dietary Habits (n=14)

(Average on a 5-point scale where 1=Not at all, 2=Once a week or less, 3=More than once a week, 4=Once a day, and 5=More than once a day)



* The difference from Pre to Post was statistically significant ($p < .05$)

¹¹ Percent who increased their consumption of fruits and vegetables includes participants who responded with a 5 rating (More than once a day) on both Pre and Post

Food Choices

Participants were also asked to reflect on their food choices before and after *Cooking for Salud*. Figure 7 shows that at the end of the program, participants chose lean proteins and healthy food outside the home significantly more frequently than at the outset of the program.

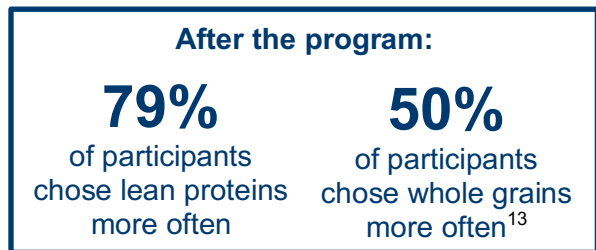
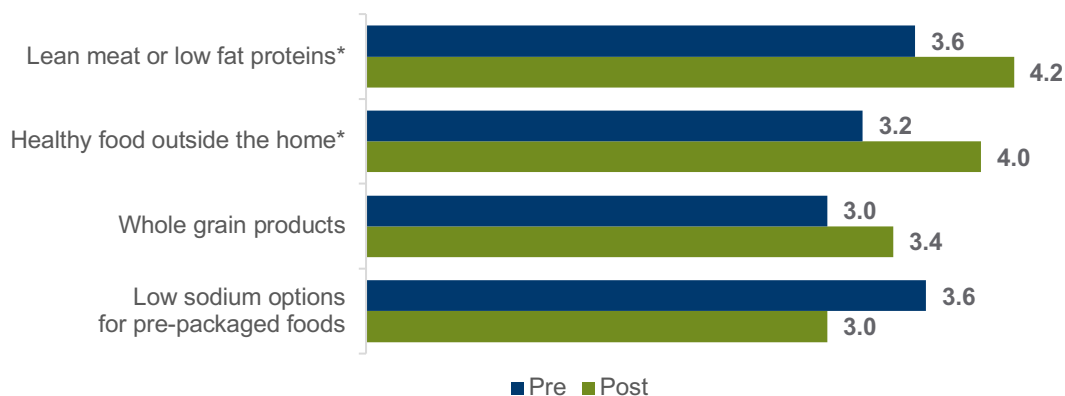


Figure 7: Pre and Post Frequency of Making Healthy Food Choices in Past Two Weeks (n=14) (Average on a 5-point scale where 1=Never and 5=Always)



* The difference from Pre to Post was statistically significant ($p < .05$)

In feedback from the survey, focus group, and graduation ceremony, participants elaborated on some of their dietary changes.

“Before, I was always eating on the street, fried things, but now it’s been six weeks that I have been cooking at home and I feel much better.”

“I have learned to choose to consume fresh fruits and vegetables in season and not frozen.”

“I have increased the grains, fruits, vegetables and proteins, such as almonds, nuts and less red meat.”

“Antes comía pura comida en la calle, cosas fritas, pero ya llevo seis semanas cocinando en la casa y me siento mucho mejor.”

“He aprendido a elegir a consumir frutas y verduras frescas de temporada y sin congelar.”

“He incrementado los granos, frutas, verduras y proteínas, como almendras, nueces y menos carnes rojas.”

¹² Percent who increased their consumption of fruits and vegetables includes participants who responded with a 5 rating (Always) on both Pre and Post

Mindful Eating

Recent research suggests mindful eating may be one strategy for weight loss and weight management.¹³ Therefore, participants were asked to respond to seven questions representing mindful eating practices. These were combined to create one Mindful Eating metric. The mindful eating questions came from a larger survey that has been validated in other nutrition studies and designed to measure a person's awareness of physical and emotional sensations around eating.¹⁴ Mindful eating involves paying attention to the smell and taste of food, recognizing signs of satiety, and recognizing feelings around food. As Figure 8 shows, participants reported an average increase in their mindful eating practices from before the program began to the end of the program. This increase was statistically significant.

Figure 8: Pre and Post Rating of Mindful Eating Practices* (n=14)

(Average on a 5-point scale where 1=Never and 5=Always)



* The difference from Pre to Post was statistically significant ($p < .05$)

During the focus group discussion and in conversations during the graduation, participants explicitly noted becoming more conscious and aware of the foods they ate, as well as flavors and textures.

"I crave salt and sugar much less. I can detect it. I do eat it, but not in the amount that I used to. [In the past] before I would start eating, I would put salt and sugar on my food, but now I try [it first]. I eat less, I eat in smaller portions. I don't know if it's in my head, but I can no longer eat so much like before. I don't know if it has impacted me more mentally."

"Now I know the difference with salt and sugar and how much better I feel when I decrease these two things."

"La sal y la azúcar me apetecen mucho menos. Lo detecto. Si lo como, pero ya no en la cantidad que los comí antes. Antes de empezar, la comida ya estaba poniendo sal y azúcar pero ahora trato [primero]. Como menos, como unas cantidades mas pequeñas, no sé si es mental mente, pero como ya no puedo comer tanto, como comí antes, no sé si me impacto mental mente, mucho, yo tengo aquí en mi mente."

"Ahora sé la diferencia de la sal y el azúcar y lo mejor que me siento al disminuir estas dos cosas."

¹³ Dunn C, Haubenreiser M, Johnson M, Nordby K, Aggarwal S, Myer S, Thomas C. (2018). Mindfulness approaches and weight loss, weight maintenance, and weight regain. *Current Obesity Report*, 7(1), 37–49.

¹⁴ Framson C, Kristal AR, Schenk JM, Littman AJ, Zeliadt S, Benitez D. (2009). Development and validation of the mindful eating questionnaire. *Journal of American Dietetic Association*, 109(8), 1439–44.

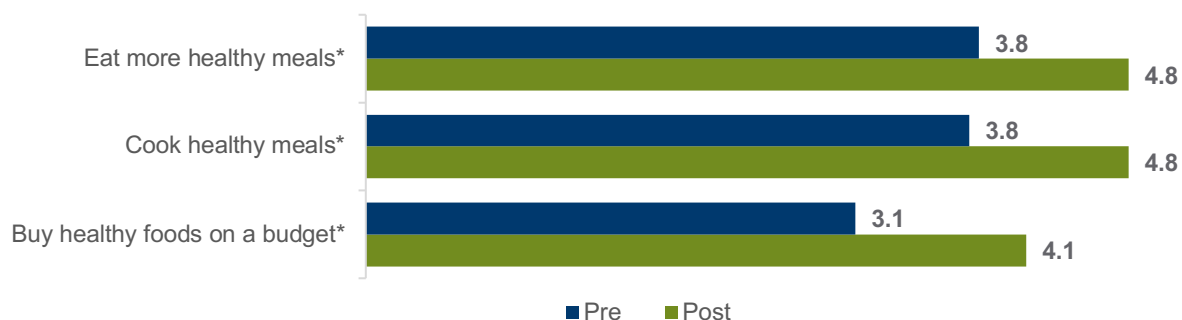
Impact on Confidence in Applying Healthy Eating Practices

In addition to changing dietary behaviors, participants also reported feeling more confident in being able to shop, prepare, and eat more healthy meals by the end of the program. As Figure 9 shows, on average participants' confidence in being able to eat healthy meals, cook healthy meals, and buy healthy foods on a budget increased, and these increases were statistically significant.

82%
of participants increased
their confidence in applying
healthy cooking practices by the
end of Cooking for Salud¹⁵

Figure 9: Pre and Post Confidence in Healthy Meal Preparation (n=14)

(Average on a 5-point scale where 1=Not at all confident and 5=Very confident)

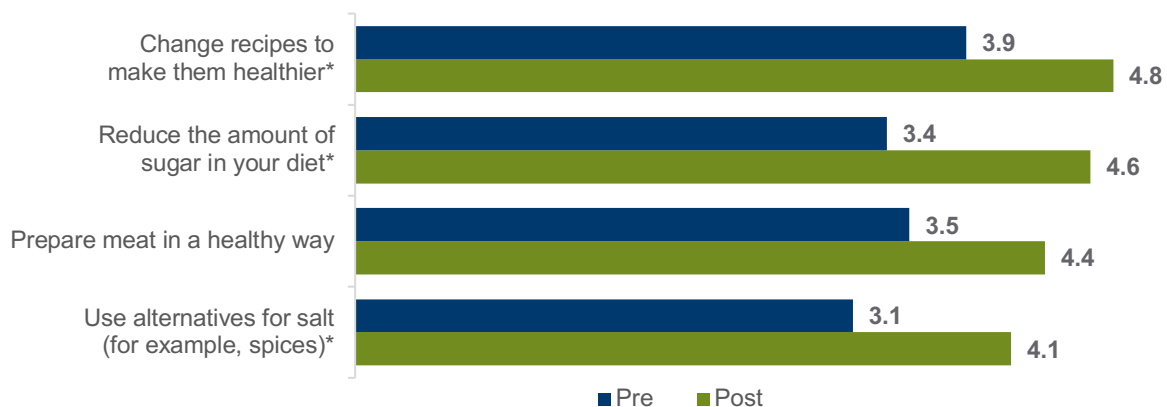


* The difference from Pre to Post was statistically significant ($p < .05$)

Participants also increased their confidence in being able to use healthy alternatives in their meal preparation and dietary choices. Figure 10 illustrates that participants felt more confident by the end of the program in reducing their sugar consumption, using alternatives to salt, preparing meat in a healthy way, and changing recipes to make them healthier. All of these increases were statistically significant.

Figure 10: Pre and Post Confidence in Using Healthy Alternatives (n=14)

(Average on a 5-point scale where 1=Not at all confident and 5=Very confident)



* The difference from Pre to Post was statistically significant ($p < .05$)

¹⁵ Calculated based on Pre/Post average of 4 questions (all questions in Figure 9 and first question in Figure 10)

During the graduation ceremony and focus group discussion, participants elaborated on their increased confidence and enjoyment for cooking.

“Before, I cooked everything with fat and oil, tortillas, meat and now I learned that I can cook food in different ways such as steamed vegetables without oil or fat, use less salt, use less oil, heat the tortillas without frying them, [and] grill or roast the meat or chicken.”

“I now learned what to choose and buy at the store, what healthy products to buy, which products were healthy. I did not know this before, I did not know about salt content and now I have learned new things I can use, to substitute the salt and give my food seasoning and flavor.”

“Now, I use different spices to season my food instead of salt.”

“I am very lazy when it comes to cooking, I did not like it because I cook with fat (oil) and made a mess and it was whole process and it takes time. And with this program I now feel I like cooking. I am enjoying cooking because now I know new ways of preparing the food.”

“Antes cocinaba todo con grasa, tortillas, carnes y ahora aprendí que puedo cocinar la comida de diferentes maneras tal como hervir verduras sin aceite, usar menos sal, menos aceite, tostar las tortillas, asar la carne o pollo.”

“Ya aprendí que escoger en las tiendas, que productos son los saludables antes no sabia nada acerca del contenido de sal, y ahora aprendí nuevas cosas que usar para sustituir la sal y darle sazón a la comida.”

“Ahora uso especies o plantas para sazonar la comida en lugar de sal.”

“Yo soy muy floja para cocinar no me gustaba porque me daba mucha flojera, usar el aceite y que todo se mancha y que toma tiempo y con este programa ya me siento mas a gusto al cocinar. Me esta gustando la cocina porque ahora sé otras maneras de hacer la comida.”

Kitchenista Impact on Community

One of the goals of the *Cooking for Salud* program is for graduates to become ambassadors for health and nutrition in their communities. *Cooking for Salud* graduates are called *Kitchenistas* and are invited to participate in community events to share the knowledge and skills they have learned with others. Participants were asked about their confidence sharing healthy eating practices with others in the community and although, on average, they rated their confidence slightly higher after participating in *Cooking for Salud*, the difference was not statistically significant (see Figure 11).

Figure 11: Pre and Post Confidence in Sharing Healthy Eating Practices with Community (n=14) (Average on a 5-point scale where 1=Not at all confident and 5=Very confident)



Olivewood Gardens hosts monthly *Kitchenista* meetings for all graduates to attend, where they plan the month's community nutrition events. In order to assess if participants continued to stay involved as *Kitchenistas* after the program ended and serve as nutrition ambassadors in their communities, NPI researchers invited all 15 graduates of Cohort 14 to participate in a focus group three months after the program ended. Five graduates attended the focus group. The findings suggest that participants informally shared what they learned within their communities, but many did not formally attend the *Kitchenista* monthly meetings or events, nor did they understand the purpose of the meetings. According to attendance records, eight participants attended the monthly meeting that occurred within one week of their graduation, but in March only one participant attended the meeting. Table 2 outlines both positive outcomes and challenges in terms of impacting the larger community.

Table 2. Focus Group Results: Kitchenista Reported Impact on Community (n=5)

Positive Impact on the Community	Challenges to Impacting the Community
<ul style="list-style-type: none"> Shared their knowledge with family and friends Cooked healthier foods for themselves and their loved ones Attended Olivewood Gardens events such as workshops on diabetes, food handling safety, and tamale making 	<ul style="list-style-type: none"> Not informed of the monthly <i>Kitchenista</i> meetings Wanted to stay involved but not sure how Unsure whether and how to invite others to become involved at Olivewood Gardens

"This program made me feel very special and important, because now my grandson asks me to cook healthy meals that I learned here. They loved this one recipe I made...I have decided to make another healthy dish for my grandson's birthday this Sunday."

"Este programa me hizo sentir especial e importante, ya que mis nietos ahora me piden que cocine comida saludable, y les encanto la receta que aprendí de aquí... Decidí hacerle otro platillo saludable que aprendí aquí el domingo que es el cumpleaños de mi nieto."

“I want to apply what I learned with my friends at the Seniors Club. I have already told them I will teach them new recipes and healthier ways to cook in our next meeting. I like to share and help others and this has helped me and I want this to help other people too. So that is why we are going to teach them what we learned here.”

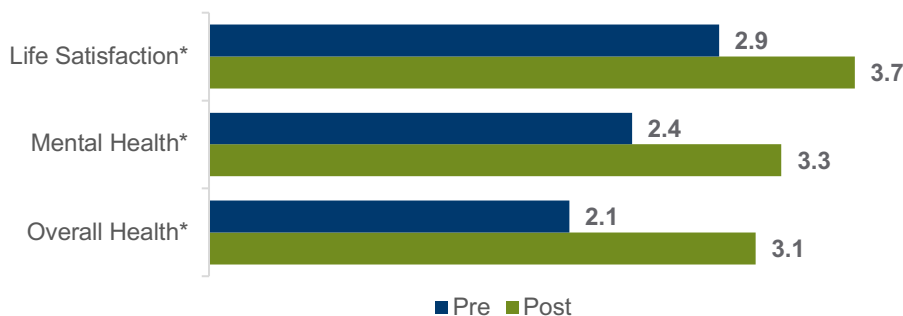
“Quiero aplicar lo que aprendí con mis amigas del club, ya les dije que la siguiente junta les voy a enseñar nuevas recetas y maneras de cocinar saludable. A mi me gusta compartir y ayudar a los demás y esto me ha servido a mi quiero que le sirva a otras personas también por eso vamos a enseñarle lo que aprendimos aquí.”

Impact on Well-Being

Participants were asked to rate their life satisfaction, mental/emotional health, and overall health before and after participating in *Cooking for Salud*. As Figure 12 illustrates, the average rating on all three well-being indicators increased almost one full scale point from before the program to after the program. These positive increases were all statistically significant.

Figure 12: Pre and Post Rating of Well-Being (n=14)

*(Life Satisfaction: Average on a 5-point scale where 1=Not at all Satisfied and 5=Very Satisfied
Mental Health and Overall Health: Average on a 5-point scale where 1=Poor and 5=Excellent)*



* The difference from Pre to Post was statistically significant ($p < .05$)

The perceived impact on participants' well-being was supported by their own reflections on the program during the graduation and the focus group.

“I am very happy with the program, I feel I have more energy, I feel lighter, like I am less heavy than before and I can move easier.”

“Estoy muy contenta con este programa, me siento con mas energía, me siento mas ‘ligerita’ como menos pesada me puedo mover mas fácil.”

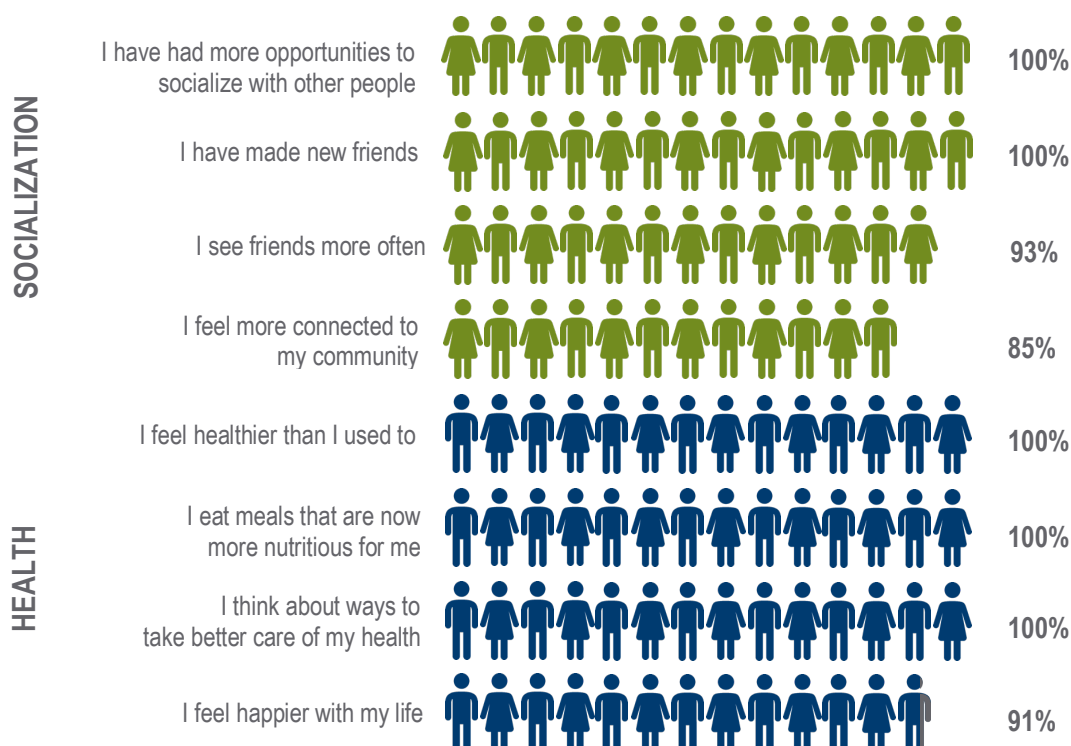
“I’m very happy that I came because I met new people, made new friendships, and that motivated me and made me feel better. Being alone at my home only depresses me and this helped me as a therapy to go out and not be just sitting at home alone.”

“Estoy muy contenta que vine conocí a mucha gente nueva, nuevas amistades y eso me animo y me hace sentir bien. Estando en la casa nomas sola, pues te deprimas y esto me sirvió como terapia para salir y no estar nomas sentada en la casa.”

Overall Impact of Cooking for Salud

Participants were very satisfied with the *Cooking for Salud* program. One of the primary risk factors for seniors declining health is feeling isolated, and as Figure 13 shows, they felt participating in *Cooking for Salud* had an impact on their socialization and their mental and physical health.

Figure 13: Percent who Agreed, “Because of Cooking for Salud...” (n=14)¹⁶



For many of the participants who attended the focus group or provided feedback at the graduation ceremony, being able to develop new friendships and have weekly opportunities for socialization were just as important as the nutrition education.

“I am very happy with this program, I met new people, I made new friends and everybody here is so nice. Everybody gives me a lot of love.”

“Estoy muy contenta y feliz con este programa conocí nuevas personas, hice nuevas amistades, toda la gente es muy amable, todos me daban mucho cariño.”

“The program staff is excellent, they are all very attentive and caring, very loving, very helpful, they helped us in everything, I felt they treated me like part of their family from day one without knowing me.”

“El equipo del programa es excelente, todas son muy atentas, muy cariñosas, muy serviciales, nos ayudaban en todo, me sentí que me trataban como de la familia desde el primer día sin conocerme.”

¹⁶ Some participants skipped items. The n for each item varied from 11 to 14.

LIMITATIONS

There were a number of limitations to this study to keep in mind when interpreting the results. First, there were only 15 participants in the program, and it is unknown if these results could be replicated with another population and/or more participants. Second, the post survey was administered immediately following the program, which only assesses the immediate, short-term impact of the program. In order to determine if the program had a longer-term impact on participants' physical health outcomes, behaviors and well-being, these measures would need to be reassessed at least 6-12 months after the program ended. Third, this evaluation did not utilize an experimental design and therefore we do not know if changes were actually the result of the *Cooking for Salud* program or other factors. In order to truly assess the efficacy of a program, a control or comparison group is needed, in which a comparable group of people who do not participate in the program are also assessed on the same measures over the same timeframe. A final limitation is that because participants had varying literacy levels and spoke different languages, the survey administration was not identical for each participant. These minor adaptations in the survey administration may have affected people's responses. For example, for participants with low literacy skills, the survey was read aloud and completed by another person. These participants may have felt more pressure to give a socially desirable answer.

CONCLUSIONS AND RECOMMENDATIONS

Olivewood Gardens' *Cooking for Salud* program shows great promise in positively impacting the health and well-being of seniors in southeastern San Diego. In only seven weeks, participants increased their health, improved their diet, increased their confidence in healthy cooking practices, and perhaps most importantly, developed friendships and a new community. There is also early evidence that Cohort 14 participants remained involved in Olivewood Gardens activities, increasing the likelihood that these early changes in their health and behaviors can be sustained over time. In light of Olivewood Gardens' demonstrated commitment to continuous improvement, the following recommendations can help with future programming and longer-term impact for participants in the future.

- **Ensure curriculum emphasizes the value for maintaining participants' cultural food traditions.** A few participants commented on how unhealthy Mexican food is and their sadness at having to give up certain foods. It is important to convey the message that all foods can be prepared in a healthy or unhealthy way.
- **Revise communication and recruitment methods for seniors after the program ends** in order for them to easily stay involved. Participants reported that they are less likely to visit a website for information, but a text or phone call would be helpful to remind them of events.
- **Develop a logic model and refine goals to specifically address the aging community.** Because seniors have unique nutritional and health needs, the goals for the program should reflect how the program is designed to meet those needs. For example, social isolation is a problem more prevalent among seniors and directly related to *Cooking for Salud's* programming but is not included as a goal of the program.
- **Consider conducting a future evaluation with a comparison group and over a longer period of time** in order to strengthen the findings. A stronger research design could potentially be used to leverage additional funding and serve more seniors.