

Garden for Health

Project Report

The Garden for Health (GH) project provided gardening workshops for Texas Medical Center employees and students during the last academic year 2019-2020. The objective was:

To increase: a) knowledge, skills and awareness of gardening and growing fruits and vegetables, b) knowledge of composting and organic gardening, c) knowledge of health benefits of eating fruits and vegetables and d) preference and intake of fruits and vegetables among UTHealth employees and students.

Using the Nourish Program resources, we utilized the Holistic Garden and the Demonstration Kitchen at the UTHealth School of Public Health (UTHSPH) to



provide hands-on experiential workshops augmenting nutrition education and public health. The Nourish Program maintains the garden with a seasonal rotation of herbs, vegetables, and fruits and provides courses to students at UTHSPH. Using the seed-to-plate model of the Nourish Program we planned and delivered



workshops for the Garden for Health project including lectures and discussion, hands-on gardening activities, and preparation and



tasting of fruits and vegetables featured in the garden class. The Nourish faculty had existing gardening curriculum which was the basis for the development of the Garden for Health workshops. We adapted the existing curriculum incorporating preparation and tasting of the harvest into each workshop. We also created

surveys to distribute before and after the workshops to evaluate the program and describe participants. We also planned to have focus groups at the close of the project to get detailed feedback from participants. The following sections describe the program details and evaluation. The pictures show lectures, garden activities and preparation of food for tasting in the kitchen.

Program Implementation

Workshops. We planned to deliver 10 workshops, but were only able to deliver 7 due to the COVID-19 pandemic which in March closed UTHealth from in-person instruction. In a matter of days city and state guidelines required most people to stay home to prevent the spread of disease. This unprecedented event has interrupted the lives of everyone. Because of the COVID-19 interruption, we do have some unspent funds. Thus, we respectfully ask to have an extension of our existing project period through 12/31/2020 to allow us to provide workshops this fall and spend out our remaining funds as planned. UTHealth is planning for in-person classes in the fall, but we are also making back-up plans to do a combination of outdoor gardening with social distancing and recorded instruction on-line if the COVID-19 situation remains to be an issue restricting delivery options. Do to the closure in March, we also were not able to do the focus group evaluations planned at the end of the project and would like to do those this summer using an on-line format to get program feedback and re-connect with participants. Please let us know as soon as possible if this is possible prior to May 30 when the project will close out.

Each Garden for Health workshop consisted of 30 minutes of hands-on gardening, 30 minutes of lecture/discussion and 30 minutes preparing and tasting the fruit and vegetable associated

nourish
UTHealth | School of Public Health
The University of Texas
Health Science Center at Houston

2019-2020

Garden for Health

4:30-6:00 P.M.
1st floor RAS School of Public Health, Nourish Kitchen

FREE CLASSES COURTESY OF GRANT FROM
GARDEN CLUB OF HOUSTON

What is Holistic Gardening?
Holistic gardening includes all practical parts of garden construction, upkeep, maintenance, harvest, and learning to use the delicious produce. Holistic gardening is also nourishment to the psyche.

- Learn to create & maintain a Holistic Garden
- Participate in training and hands-on sessions in the SPH Holistic Garden
- Taste the garden harvest in the SPH Nourish Kitchen
- Classes taught by trained professionals under guidance of horticulturist
- Receive garden gloves & create a container garden to take home

DATE	TOPIC
October 2	Holistic Gardening
October 30	Year-Round Food Gardens
November 13	Organic Gardening
December 4	Pests and Disease Management
January 15	Soil Management and Fertilization
February 5	Composting
February 26	Fruits
March 11	Propagation
April 1	Container Gardens
April 22	Vegetable Gardening

Email to: Holistic.garden@uth.tmc.edu to register
Classes are limited in size
All TMC employees welcome

with the daily harvest. Workshops were offered at the end of the day, 4:30-6:00PM, to facilitate employees' ability to participate after their work day. A flyer was created for marketing with the list of workshop topics (inserted on this page). We marketed the workshops though the Texas Medical Center and UTHealth news, electronic mail resources, the Nourish website, and the UTHealth Employee Assistance Program (EAP) Wellness Committee, which has an extensive reach to employees. We used Sign Up Genius software to create an online portal for workshop registration and tracking. Each workshop allowed up to 20 participants, and a wait list was maintained to handle cancellations. Attendance at workshops ranged from 10-19 persons (average=13). In total, we had 94 people attending the 7 workshops. Several people took more than one of the different workshops. Of the 57 people completing the initial survey, 46% were staff, 39% students, fellows

or residents, and 15% faculty. About 55% were married or with a partner and 44% were living alone. Participants were from 10 different Texas Medical Center institutions:

- UT School of Public Health
- UT Cizzek School of Nursing
- UT Physicians
- UT School of Dentistry
- UT McGovern Medical School
- MD Anderson Cancer Center
- Memorial Herman
- Prairie View A&M
- UTHealth Central Administration
- UT School Biomedical Informatics

The workshop series was delivered under the supervision of socio-horticulturist Joe Novak, PhD, retired Rice University professor. Two of our Masters of Public Health trainees in our Dietetic Internship led the workshops for participants and were supported by other volunteer interns rotating through our program. The lead interns took Dr. Novak's in-depth academic course in gardening and have personal gardening experience. Dr. Novak advised in curriculum modification and approved all the materials. He provides on-going direction for the Holistic Garden for Nourish, thus he contributed to selection of garden activities for the workshops as well. Workshop participants were able to work alongside highly trained nutrition professionals to enrich their education about fruits and vegetables from seed to plate. The



grant workshops were coordinated with Nourish Executive Director Laura Moore, MEd, RD, LD and Dietetic Internship Director Jeanne Piga-Plunkett MS, RD, LD for scheduling and intern placement. Ms. Moore and Piga-Plunkett played central roles in food selection for the tastings, kitchen production lists, and oversight of the interns' delivery. These novel workshops are truly a win-win, providing education, enrichment, physical activity, and a mental health break for participants, and supervised training experiences for our interns, all to support the UTSPH mission to improve the health of our community and serve our profession.

The workshops offered specific information about common fruits, vegetables, and herbs grown in Texas during the winter, spring, summer, and fall seasons of the year along with information pertaining to their successful cultivation. The unique role of fruits and vegetables in our diets as related to health was also emphasized.



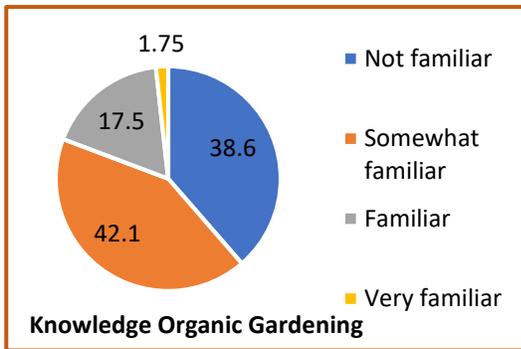
Techniques and hands-on experiences taught participants how to develop and manage an organic garden from composting, soil development, pest control, fertilization, planting, watering, pruning and harvesting.

Evaluation

First, we appreciate the site visit in November from three members of the Garden Club of Houston, Margaret Pierce, Julie Griffin, and Meg Tapp, and hope the experience provided was indeed positive. Albeit was a cold evening, we think everyone had a good time and we are so pleased you made the effort to see what we are offering to the medical center community.



A self-administered on-line survey was developed in Qualtrics software and incorporated into each garden workshop pre and post activities. Participants responded to knowledge, behavior and attitude questions about gardening and vegetable consumption. At the first class a person attended they were sked to complete the pre survey. Post surveys had similar questions, but also asked about the skills learned and evaluation of the class delivery. Highlights of these surveys are provided in the following sections.

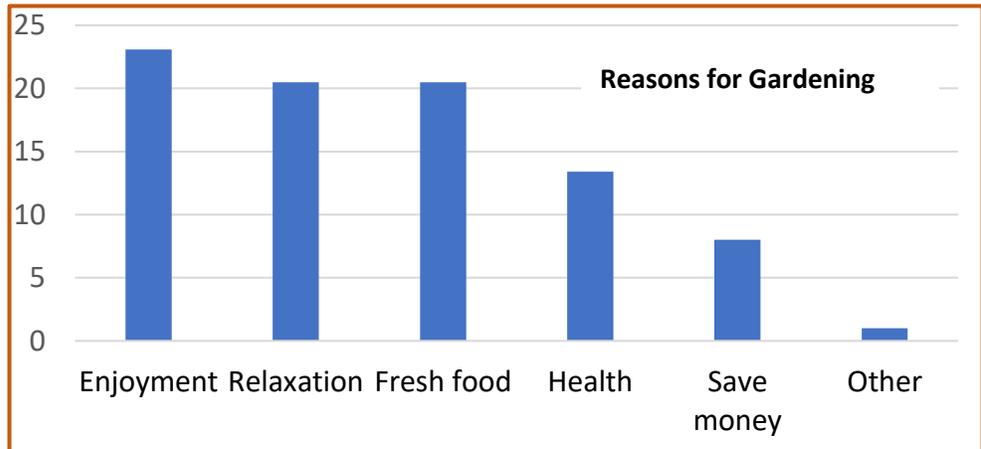


Participants began the workshops with varying levels of knowledge about organic gardening. Almost 39% of participants were not familiar at all with organic gardening (pie chart). Almost half of the participants (43%) indicated they had never taken a formal gardening class. Many (70%) were currently engaged in some type of gardening at home or in a public garden while 30% were doing no gardening.

Participants reported a variety of reasons why they did garden. Many reported enjoyment, relaxation and having fresh vegetables and fruit to eat as the key reasons for gardening (bar chart). These results indicate there were many motivators for making time to develop and nurture a garden. As well, since many had not taken a formal class in gardening they seemed to value learning more gardening skills through participation in this series of workshops.

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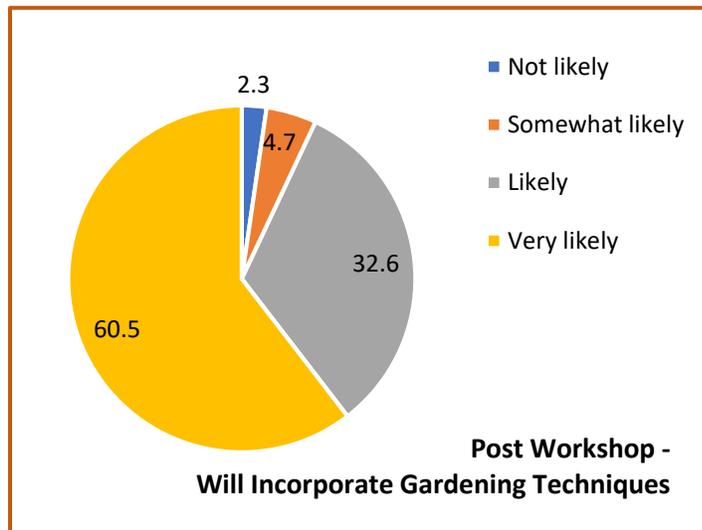
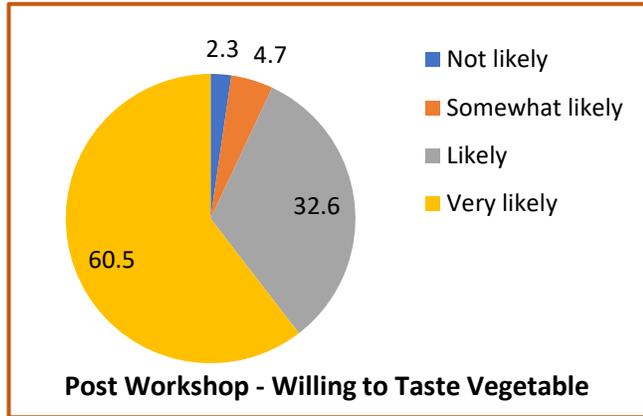
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In the pre-survey 95% percent of the participants believed vegetables taste good and 75% of said they would taste a vegetable they usually did not like if it was prepared differently.

Changing eating behavior requires openness to new foods and cooking techniques. These answers support the importance of having the preparation and tasting portion of the workshops along with the active gardening and knowledge delivery. These workshops provided an easy method for participants to have exposure to new preparation techniques and tasting vegetables they may not like. The impact of the workshops is shown in the post survey where 98% of participants indicated they would taste a vegetable they usually did not like if it was prepared differently, a large increase from before the workshops (pie chart). Importantly, 95.2% of participants said they would eat more vegetables after being in these workshops.

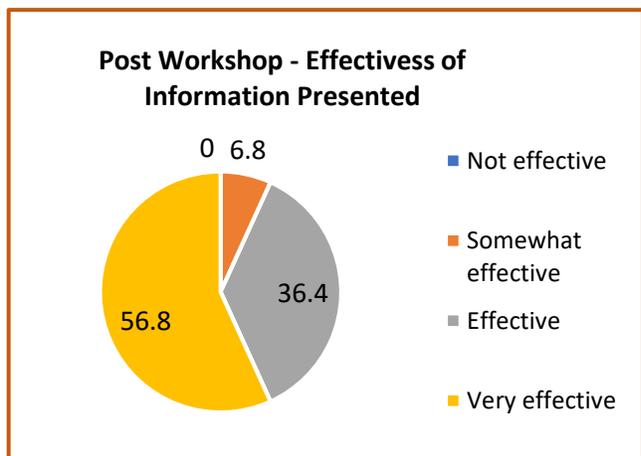


Participants provided responses to evaluate the quality and effectiveness of these workshops to achieve the intended aims. Overall 98% of participants reported the Garden for Health workshops met their expectations.

After participating in the garden workshops 95% of participants reported they were somewhat likely, likely or very likely to incorporate some of the gardening techniques learned in the workshops into their current lifestyle (pie chart). These responses indicate the techniques provided may help these

participants to successfully maintain or develop their gardens.

A total of 91% of participants reported liking the format of the workshops. Only a few suggestions were provided which included wanting more time for gardening and less classroom education. A total of 93.2% of participants rated the information presented as effective or very effective (pie chart). Lastly, every participant (100%) stated they would recommend the workshops to others in the future.



Summary

In conclusion, based on the high participation rate, the variety of participants we attracted from across the Texas Medical Center, and the positive feedback from participants, we feel the project was indeed successful in reaching the targeted community. We provide data to support the knowledge growth of participants and their desire to incorporate the gardening techniques after the workshops. We also provide data of the participants willingness to try eating more vegetables they did not like using new cooking techniques after the workshops. In closing, we sincerely thank you for the opportunity to receive funds and deliver our program to the medical center community. We also respectfully note the Garden for Health project was abruptly ended due to the COVID-19 pandemic, and our request for consideration to extend our project end date until 12/31 to allow completion of planned activities.

We sincerely thank you for the support!

