Grow This! Garden Challenge

Outcomes & Impact

Reach

The 2020 Grow This! campaign launched amidst the COVID-19 outbreak and quarantine with a social media post with a wartime victory garden theme, inviting participants to grow a kitchen garden and increase their level of independence and control over their food supply. Within several weeks over 15,000 participants registered for the program and registration was closed shortly thereafter at slightly over 25,543. Those who indicated they were eligible for or participated in federal assistance programs such as SNAP, WIC or free or reduced school meals received seeds paid for by the WV SNAP-Ed program, however Extension recruited local funds for those who were ineligible.



Pre-Participation Survey Results

A total of 26,127 individuals completed the survey to participate in the challenge. The following are some of the results of the survey:





Participants were asked their reason for participating in the challenge. Several themes emerged including concerns about food security/income, an activity to do with kids, a desire to be self sufficient, increased time due to the pandemic, health concerns, support the community and something to do to get outside. Several participants mentioned not being able to see older relatives who usually grow a garden so they decided to grow their own. The following are some quotes from the survey:

"I am currently unable to work during the Covid crisis so I have went from working six days a week to being a stay at home dad to our 3 kids. My wife works in healthcare so I've been looking for ways to keep busy with the kids and we've started a small garden but I'd like to add to it"

"I have never grown butternut Squash, but love the soup. My husband had quadruple bypass in January, so I am trying to grow all of the foods I can and freeze/can them because I can control the salt content. My mom has cancer and his mom is 86, so nutrition is so very important to me"

"I have always wanted to grow my own food. This lockdown is the perfect time to do so many of the things I've wanted to do with my family and just never had the time"

"Something to do with the girls. We recently got custody of our granddaughters and they are quite active and always want "something to do". Gardening is perfect"

"During this crisis we have been having issues of there not being much food on the shelves in the store so we want to grow some vegetables of our own to eat and possibly can for later"

"With recent events in our world, I began to think back on the skills taught to me by my grandparents. We always grew a big garden and I feel like my children are at a good age to start learning how to start gardening as well"

Post Participation Survey

A total of 444 individuals completed the post survey. Some of the results are described below:

People were asking to list the top 3 benefits of home gardening. Almost half reported eating more vegetables than normal as a benefit.







Facebook Engagement

Engagement in the social media campaign are illustrated below as the number reached and the number of impressions (number of times content was displayed). In addition, the average number of recipients that received the E-newsleter of the course of the campaign was almost 22,000.

Grow This!	
Reach	36,734
Impressions	41,123
Grow This E-Newsletter	Average 21,773 recipients over 31 weeks

Reflective Critique

The Grow This! 2020 campaign was an amazing success in the sense of the reach to the public and the provision of education and outreach at a time when people needed it. The campaign garnered not only local but national attention and has already been adopted by Oregan State University. The campaign has been mostly the work of the Family Nutrition Program and a few ANR faculty but as it expands, coordination involves WVU Communications, social media marketing, in-person nutritional events, factsheet and other curriculum development, ask the expert content and video posts, more collaboration with SNAP/WIC and an increased grant/fundraising presence.

Collaborators and Funding Sources

Grow This! 2020 required a large amount of partners to be successful. FNP staff spent endless hours packaging and mailing seeds to meet the demands of the campaign. Due to the funding limitations of SNAP-Ed, not all participants would have been able to receive seeds if it wasn't for the support of the County Extension Faculty and Staff who were able to support the campaign with County funds, by fundraising from partnering organizations and by dedicating staff and faculty time for packing and mailing seeds. A list of contributors to the campaign is below as well as a map showing the number of individuals served by each county.

In addition, this years campaign gained a partner in Base Camp Printing Company. Base Camp was initially approached about creating a poster that could be used as a prize for garden challenges but after some Grow This! participants expressed interest in buying one, they agreed to use it as a fundraiser for the 2021 campaign.



Preparation

West Virginia consistently leads the nation in prevalence of chronic illnesses like obesity, heart disease and Type 2 diabetes (West Virginia Department of Health and Human Resources [WVDHHR], 2018; Raghupathi & Raghupathi (2018). People living with chronic disease are at higher risk for poor overall health. According to the WVDHHR (2018), WV adults reported the highest rates of both poor physical and poor mental health as well as limitations on physical activity attributed to these conditions. Contributing to these poor health outcomes are the state's elevated rates of poverty and food insecurity. The United States Department of Agriculture (2018) reported that over 15% of WV households are classified as food insecure, nearly 6% are very low food secure, and over 17% of the population lives below the poverty line, compared with 11.8% nationally (US Census Bureau, 2018). People in lower income brackets are

disproportionately affected by chronic illness, often making them a priority population for public health interventions (Braveman, 2003; Chokshi, 2018).

West Virginians also have a long and rich history of homesteading, home gardening and food preservation with gardening playing a significant role in shaping the state's culture. (Schwartz, 2010). Gardening is positively associated with improved diet quality and lower Body Mass Index which can play a role in improving health outcomes on both individual and population levels (Algert et al, 2016). More specifically, both adult and youth populations show improvements in vegetable consumption when they garden (Algert et al, 2014; Carney et al, 2011; McAleese, 2007; Parmer, 2009). Other benefits associated with gardening include increased food security among lower income populations and improved stress relief and other psychosocial measures of health (Galhena 2013, Algert et al 2016, Cases et al. 2016).

In 2017 a group of West Virginia community leaders as well as local and state health advocates came together to discuss the feasibility of initating a statewide gardening campaign with the intention of positively impacting physical and mental health among all West Virginians with a particular focus on limited-resource populations. It was out of these discussions that the Grow This! West Virginia Garden Challenge was born. Led by the state's SNAP-Ed program, the campaign launched in 2018 to increase awareness of and interest in home gardening for food production and to promote gardening as a fun, low-cost activity that can enhance health. Initial funding came from SNAP-Ed, however a dramatic increase in participation in 2020 caused the program to seek additional funding from a variety of partners including the WV Department of Agriculture, The WV Conservation Agency, Unicare of WV, WVU Extension Service county offices as well as other local businesses and community agencies.

Goals & Objectives

1. Increase engagement in home gardening among individuals in West Virginia.

Increase access to and consumption of fruits and vegetables by individuals participating in the Grow This! challenge.
Promote long term food access and food security by providing knowledge and skills around home gardening, harvesting and preserving foods.

Methods

The Grow This! WV Garden Challenge uses both social media and in person community events to educate and engage individuals in gardening. The goal of the challenge is to reach gardeners of all abilities but especially to engage new gardeners. To this end, the approach of Grow This! campaign is to promote 3-4 crops a year to allow novice gardeners the chance to build efficacy by focusing on 1 crop at a time vs. establishing a full home garden.

Facebook Engagement

Facebook was chosen as the platform for engaging and delivering education to participants in the Grow This! challenge as it offers an easy way to reach people across the state and connect them with WVU Extension agriculture experts and to each other. A hallmark of the Grow This! challenge is the distribution of free seeds to individuals who sign up via the Facebook platform. In order to receive seeds, interested individuals complete a participation survey via Qualtrics which includes questions on how they plan to participate in the challenge (e.g., individually or in a group, such as family, worksite, church), their gardening experience (novice to guru), which crops they are interested in growing, reasons for participating, plans for the crops they grew, methods they planned to use (e.g., container, in-ground), the number of adults and children in the household, their location (county), the number of people they were requesting seeds for, what they intended to do with the produce they grew, and what assistance programs they participate in (WIC, SNAP/EBT, Senior Farmers Market Voucher, TANF, SSI Disability). Once registered, WV SNAP-Ed staff package and mail a small sample of seeds along with a growing guide for each crop to participants. Throughout the growing season information is regularly posted to the social media page to assist participants with planting, growing, managing pests and a variety of other gardening topics.

In addition to receiving education, participants are invited to share and celebrate their garden successes through garden challenges such as the most creative trellis or best use of a small garden space. The purpose of the challenges is not only to keep participants engaged but also to encourage sharing and informal education amongst participants.



Community Engagement

In addition to the Facebook page, in-person community events provided opportunities for adults and youth to plant seeds and receive education about gardening. Grow This! events have been held at a variety of community locations such as libraries, grocery stores and fairs. Grow This! educational events have also been held at schools and childcare centers.

Educational Outreach Stategies

The program has continued to grow and evolve, particularly with the barriers presented by COVID-19. While in the first 2 years, participants received printed grower guides, the explosion of participants paired with safety precautions of the pandemic led to the development of new strategies. In 2020, "Ask the Expert" segments were added which gave participants the opportunity to pose questions to the Facebook page for WVU Extension Service faculty to respond to via video interview. This years' topics included advice for cultivating specific crops, managing pests, and canning. An electronic newsletter delivered to participant emails via Mailchimp was also launched, providing participants with a list of suggested gardening activities for each week that align with the WVU Extension annual Garden Calendar. The weekly newsletter also provided updates on the campaign such as announcement of garden challenges or reminders to complete surveys.

As the pandemic hit and shut down in person interactions at schools and other sites, SNAP educators created and distributed "Grow Kits" to youth across the state, mainly in coordination with food school and community food distributions. Through funding from the Eye Foundation of America, "Recipe Kits" were also sent out to low income families in select counties participating in Grow This! The kits were distributed to over 14,000 individuals across 22 counties.

As an extension of the Grow This Challenge, seeds were offered to the Energy Express Site Coordinators so they could make growing kits to share with their participants. FNP distributed vegetable seeds for 31 Energy Express sites over 18 counties to serve 1,446 youth.

Presentation & Dissemination

The campaign not only received attention through local media but also was disseminated widely through SNAP-Ed and Extension networks. After learning of the campaign, representatives from New Jersey, Virginia and Oregan reached out to get more information on starting programs of their own. Oregon adopted the program in the late spring and had more than 975 sign ups within the first 2 days of posting and the most shares ever for any post.

Farm to School efforts during COVID-19 highlight resilient community food systems. National Farm to School Network. April 6, 2020.

http://www.farmtoschool.org/news-and-articles/farm-to-school-efforts-during-covid-19-highlight-resilient-community-food-systems?fbclid=IwAR37ammcUM8DTAbXf80wbsMUDIF8CStC3CM8U2Z-II9CzOsmTu8DNktqp7s

Thousands of people sign up for free seeds during COVID-19 shutdown. WOWK 13 News. April 8, 2020. <u>Thousands of people sign up for free seeds during COVID-19 shutdown | WOWK 13 News (wowktv.com)</u>

WVU Extension gardening program sees bumper crop of partipants after coronavirus shutdown. WVU Extension Service. April 7, 2020

WVU Extension gardening program sees bumper crop of participants after coronavirus shutdown | Extension Service | West Virginia University

Coronavirus Sprouts a Budding Interest in Gardening, Local Food in W.Va. West Virginia Public Broadcasting. April 14, 2020.

https://www.wvpublic.org/post/coronavirus-sprouts-budding-interest-gardening-local-foodwva?fbclid=IwAR27B575twKTmNmC493kcZ-BxBFa-UU2MUKkkZr01tN9GKnpo1-Rc2EKMhs#stream/0

WVU Gardening program sees rise in participation as a result of COVID 19. WDTV. March 30, 2020. <u>https://www.wdtv.com/content/news/WVU-Gardening-program-sees-rise-in-participation-as-a-result-of-COVID-19-569225321.html</u>

West Virginia Garden to Go. The Virginia Community and School Garden Network Webinar Series. May 26, 2020.

References

Algert, S. J., Baameur, A., & Renvall, M. J. (2014). Vegetable output and cost savings of community gardens in san jose, california. *Journal of the Academy of Nutrition and Dietetics*, 114(7), 1072–6. <u>https://doi.org/10.1016/j.jand.2014.02.030</u>

Braveman, P. A. (2003). Monitoring equity in health and healthcare: a conceptual framework. *Journal of Health Population and Nutrition*, *21*, 181–192.

Carney, P. A., Hamada, J. L., Rdesinski, R., Sprager, L., Nichols, K. R., Liu, B. Y., ... Shannon, J. (2012). Impact of a community gardening project on vegetable intake, food security and family relationships: a community-based participatory research study. *Journal of Community Health*, *37*(4), 874–81. <u>https://doi.org/10.1007/s10900-011-9522-z</u>

Cases, M. G., Frugé, A. D., De Los Santos, J. F., Locher, J. L., Cantor, A. B., Smith, K. P., ... Demark-Wahnefried, W. (2016). Detailed methods of two home-based vegetable gardening intervention trials to improve diet, physical activity, and quality of life in two different populations of cancer survivors. *Contemporary Clinical Trials*, *50*, 201–212. https://doi.org/10.1016/j.cct.2016.08.014

Chokshi D.A. (2018). Income, poverty, and health inequality. *Journal of the American Medical Association*. 319(13):1312–1313. <u>https://doi.org/10.1001/jama.2018.2521</u>

Galhena, D. H., Freed, R., & Maredia, K. M. (2013). Home gardens: a promising approach to enhance household food security and wellbeing. *Agriculture & Food Security*, 2(1), 1–13. <u>https://doi.org/10.1186/2048-7010-2-8</u>

McAleese, J. D., & Rankin, L. L. (2007). Garden-based nutrition education affects fruit and vegetable consumption in sixth-grade adolescents. *Journal of the American Dietetic Association*, 107(4), 662–5.

Parmer, S. M., Salisbury-Glennon, J., Shannon, D., & Struempler, B. (2009). School gardens: an experiential learning approach for a nutrition education program to increase fruit and vegetable knowledge, preference, and consumption among second-grade students. *Journal of Nutrition Education and Behavior*, *41*(3), 212–217. https://doi.org/10.1016/j.jneb.2008.06.002

Raghupathi, W., & Raghupathi, V. (2018). An empirical study of chronic diseases in the United States: a visual analytics approach. *International Journal of Environmental Research and Public Health*, 15(3), 431. <u>https://doi.org/10.3390/ijerph15030431</u>

Semega, J., Kollar, K., Creamer, J., & Mohanty, A. (2018). Income and poverty in the United States. https://www.census.gov/content/dam/Census/library/publications/2019/demo/p60-266.pdf

Schwartz, B. (2010). Vegetable gardening. The West Virginia encyclopedia https://www.wvencyclopedia.org/articles/860

United States Department of Agriculture Economic Research Service (2018) State fact sheets: WV. <u>https://data.ers.usda.gov/reports.aspx?StateFIPS=54&StateName=West%20Virginia&ID=17854#Pb12931c501324d0baa</u> <u>39268514e6ef57_2_39iT0</u>

West Virginia Department of Health and Human Resources (2018). Fast facts. <u>https://dhhr.wv.gov/hpcd/data_reports/pages/fast-facts.aspx</u>