

## The Seed to Supper Program and Its Effect on Low-Income Beginning Gardeners in Oregon

### Abstract

Extension and community partner organizations work together to address complex problems such as food insecurity. One effort showing high levels of success in Oregon is the Seed to Supper program. This classroom-based beginning gardening curriculum targets low-income adults. Program participants indicated reducing their grocery bills as a result of growing their own food and eating more fruits and vegetables than usual during the growing season. Additionally, the program has increased participant awareness that Supplemental Nutrition Assistance Program benefits can be used to purchase seeds or transplants. The curriculum is available on request for use by other state Extension offices.

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## Introduction

Oregon's rate of food insecurity is higher than the national average (Coleman-Jensen, Rabbitt, Gregory, & Singh, 2015). Efforts to address this problem involve not only providing food assistance to meet emergency needs but also teaching skills for self-sufficiency, such as food gardening and healthful cooking. Home vegetable gardening is known to be cost-effective (Langellotto, 2014) and can help supplement grocery buying or food assistance efforts. Beginning gardeners often look to county Extension offices for assistance in learning how to grow a home garden. Extension's flagship gardening program, the master gardener program, provides a wealth of local information and resources. However, many beginners find the program's participation fee, volunteer hour requirements, and intensity as hurdles to using the program to meet the gardening goal of increased food production (Randle, 2015).

The Seed to Supper gardening program was developed in 2007 to fill gaps in educational offerings for adult beginner gardeners. The program specifically targets adults on limited incomes interested in developing food gardening skills. Withers and Burns (2013) conducted a study of Seed to Supper participants in the Portland, Oregon, metro area and noted an "overall positive impact of the Seed to Supper program impact on food literacy and self-reliance" ("Results" section, para. 2). In the past few years, the program has expanded beyond the Portland metro area (the target demographic of low-income adults is unchanged).

## Program Design and Delivery

### Participating Partners

The Seed to Supper program is administered by the Oregon Food Bank (based in Portland, Oregon) in collaboration with Oregon State University (OSU) Extension. In the Portland metro area (three counties), the Oregon Food Bank coordinates the delivery of the program. Outside the Portland metro area, local organizations (such as county Extension offices or regional food banks) in Oregon and in Clark County, Washington, apply to become satellite partners in local program delivery.

### Teaching Methods

The Seed to Supper program is a 6-week classroom-based course (previously offered over 5 weeks). The curriculum covers garden planning, planting, managing soils, growing season maintenance, and harvesting. The curriculum is flexible to meet participants' needs. For example, there is a presentation on container gardening that may be useful to urban gardeners.

Classes are taught by volunteers who are local OSU Extension master gardeners and community members with gardening experience. All educators attend an initial training that includes information on food insecurity and approaches for teaching diverse learners. Educators are provided with prepared slide sets, teaching kits (containing demonstration supplies and materials for hands-on activities), and access to an online educator support community. For the purpose of reaching the program's target audience, participants are recruited through local food share organizations, emergency food providers, and area low-income housing authorities. When participants register, they are asked to indicate whether they are in low-income households (185% of the poverty level). Participants are provided with a booklet (96 pages) plus additional resources the educators use to supplement their teaching.

### Program Evaluation

For determining the effectiveness of the Seed to Supper classes, a pre- and postprogram knowledge survey is administered. Results of the pre- and postprogram knowledge survey have indicated that participants are gaining horticultural knowledge from the program. Questions remained, however, as to whether participants were experiencing behavior change and integrating the knowledge gained into their gardening practices. For examining such outcomes, an institutional review board–approved survey instrument was developed. The instrument consisted of items involving a 4-point Likert-type agreement scale and open-ended items. The survey was sent electronically to 302 participants in five Oregon counties (Benton, Clackamas, Linn, Multnomah, and Washington) at the end of the 2015 growing season.

### Results and Discussion

Of the 302 survey recipients, 78 responded (26% return rate). Respondents expressed high levels of personal benefit and increased awareness of community resources resulting from participation in the Seed to Supper classes (Table 1). For example, they indicated that the food they grew helped offset their grocery bills and that they ate more fruits and vegetables than usual during the growing season. They also reported increased awareness that Supplemental Nutrition Assistance Program benefits can be used to purchase seeds or plant

starts. In the future, formally incorporating information on local resources into the curriculum could strengthen this outcome.

**Table 1.**

Selected Examples of Self-Reported Behavior and Awareness Changes by Participants in the 2015 Seed to Supper Program in Oregon's Linn, Benton, Multnomah, Washington, and Clackamas Counties

<b>Behavior</b>	<b>No. of respondents</b>	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Agree</b>	<b>Strongly agree</b>
Ate produce grown in personal garden	78	1%	0%	27%	72%
Reduced food bill by growing own produce	78	2%	14%	39%	45%
Ate more fruits and vegetables than normal	78	6%	23%	33%	38%
Became aware of Supplemental Nutrition Assistance Program (SNAP) benefits for purchasing seeds and plant starts	72	8%	18%	46%	28%
Became aware of additional resources that can help answer gardening questions	77	3%	6%	41%	50%

Answers to the open-ended survey questions indicated that participants also gained confidence in their gardening abilities and were introduced to resources in local gardening communities. Anecdotal answers to the open-ended question "What impact has the Seed to Supper program had on your life?" included the following remarks:

- "It gave me the confidence and know how [*sic*] to really give a vegetable garden a go for the first time and I plan to continue it." (Linn County participant)
- "I love that there is a community of gardeners out there that is interested in learning how to grow their own food! It's motivating!" (Benton County participant)
- "The class gave me a lot of wonderful ideas, confidence and it was wonderful to have questions answered. The book was a wonderful help too and is a great reference guide." (Multnomah County participant)

## Conclusion

The Seed to Supper program reaches audiences not typically served by existing Extension gardening programs. There are few barriers to participation—it is offered at no cost, has no volunteering requirement, and focuses on beginning-level material. Participants are reporting positive changes in behavior related to vegetable consumption and knowledge of community resources to support their gardening efforts. Seed to Supper is also acting as a transition program, with several participants going on to successfully complete the master gardener program.

OSU Extension and the Oregon Food Bank are building a long-term support network for participants that involves social meet-ups during the growing season, hands-on classes at community gardens and master gardener demonstration gardens, food preservation classes, and a garden mentor program. These follow-up

programs are tailored to specific community needs (urban vs. rural, available gardening sites, etc.).

The Seed to Supper program curriculum materials are available on the Oregon Food Bank website (<http://bit.ly/2mynmAc>). The program is expanding to New York State through Cornell University Extension and North Carolina through the North Carolina State University's master gardener program and a local food bank.

## References

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