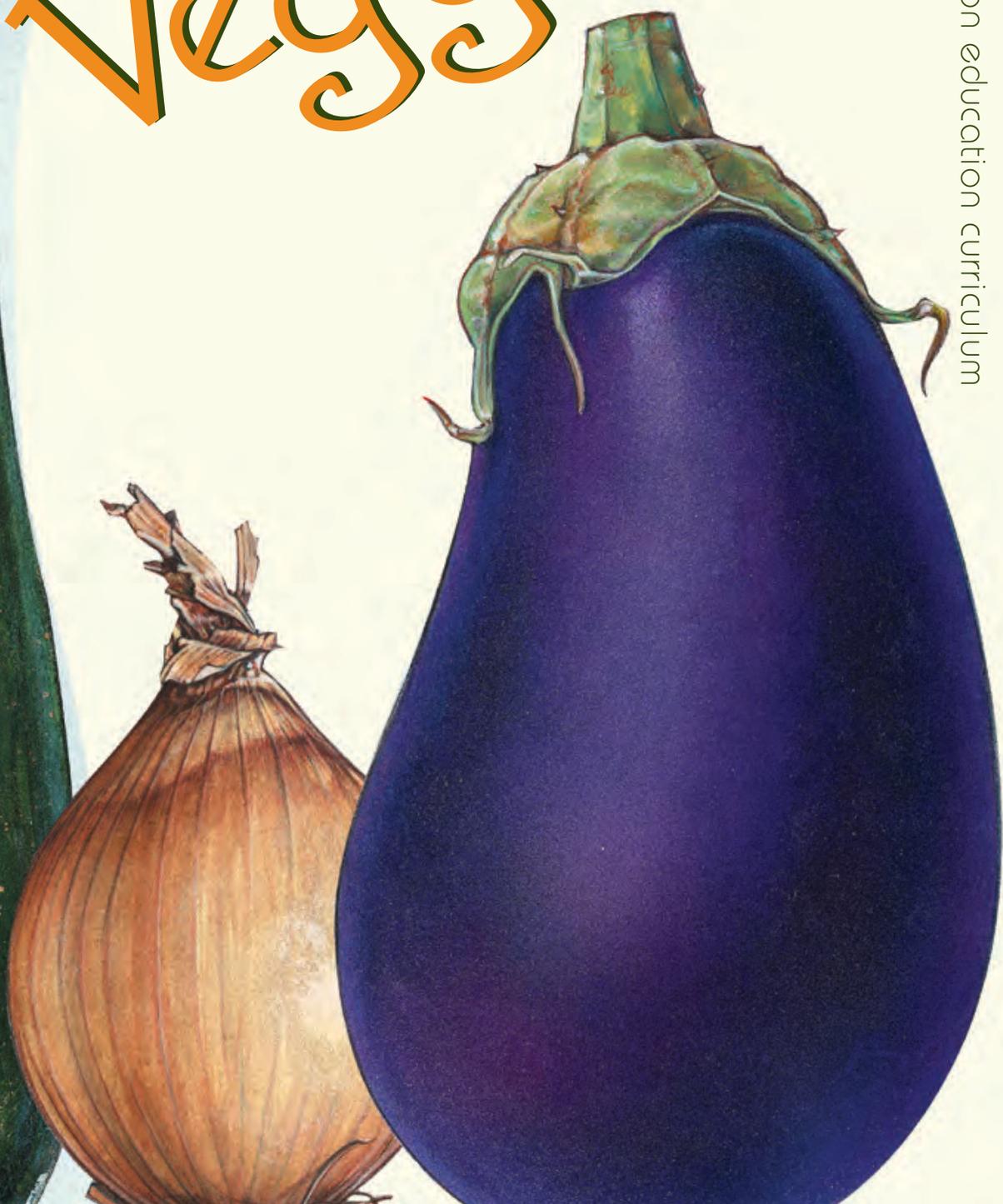


Got Veggies?

a youth garden-based nutrition education curriculum



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Foreword

I am thrilled to present *Got Veggies?*, a curriculum that combines the fun of gardening with nutrition education. Along with my partners at Community GroundWorks at Troy Gardens, Wisconsin Home Grown Lunch, University of Wisconsin-Cooperative Extension, and the Wisconsin Departments of Health Services and Public Instruction, I hope this inspires students, early childhood providers, and teachers.

Got Veggies? is a wonderful way to engage children (and adults) in actively taking control of their own health. As a pediatrician specializing in childhood obesity, I am confronted every day with the challenge of helping children keep their bodies strong and healthy. Consistent eating of vegetables and fruits has been shown to decrease obesity, heart disease and some cancers. Healthy eating habits need to start young, and be reinforced through peers, mentors, teachers, and parents. This resource is part of the *Got Dirt? Garden Initiative* which seeks to provide practical resources for starting youth gardens—which can be used as a place to educate, provide opportunities for physical activity, acquire a useful skill, and have lots of fun! Nutrition education combined with gardening is an effective way to increase knowledge of fruits and vegetables, as well as reinforce teachers' and students' exposure to gardens as part of the academic curriculum. I hope *Got Veggies?* will further inspire the creation and use of youth gardens, and nurture a love for fresh fruits and vegetables.

Got Veggies? has been a collaborative effort, and the hard work of many partners has been essential to this project. Just as in the tilling, planting, weeding and harvesting of an actual garden, a group effort brings the best results.

Happy growing!

Aaron Carrel, M.D.
Medical Director,
University of Wisconsin Pediatric Fitness Clinic

Introduction

What is Got Veggies?

Got Veggies? is a garden-based nutrition education curriculum. The primary goal of garden-based nutrition education is to get children to eat more fresh fruits and vegetables. Gardens have long provided an excellent learning environment for teaching children about scientific concepts such as photosynthesis and decomposition. What we have discovered in the past decade, however, is that the garden is also the perfect learning environment for nutrition education. Students learn about nutrition in the garden through direct experience. When provided an opportunity to grow and prepare food in the garden, youth forge a deeply personal relationship with the food that sustains them. For example, a broccoli floret becomes more than a commodity when it is linked to the plant that bore it; the rain, soil, air, and sunlight that fed it; and the children and adults who nurtured it from seed to harvest.

Why Got Veggies?

In 2005, the Wisconsin Department of Health Services and collaborating partners launched the Got Dirt? Garden Initiative with the goal of increasing the number of youth gardens in Wisconsin as a means for increasing access to, and consumption of, fruits and vegetables. A main part of the Initiative included the creation of the Got Dirt? Toolkit, which was developed to provide a step-by-step guide for starting a youth garden. Feedback gathered from educators across Wisconsin revealed the need for curriculum and activities that connect the classroom to the youth garden. Thus, Got Veggies? Garden-Based Nutrition Education Curriculum was developed for school, after school, and early childhood teachers to make that connection.

Growing evidence demonstrates that nutrition education used in conjunction with a youth garden positively impacts child and adolescent nutrition. In the midst of a national obesity epidemic, it has never been so important to support children in improving their eating and physical activity habits. The Centers for Disease Control and Prevention has identified both daily physical activity and increased fruit and vegetable consumption as two of the six most important strategies for preventing obesity. Thus, growing and eating food in the garden is a good place to start cultivating healthy eating and physical activity habits.

What is in Got Veggies?

Got Veggies? features seven full lesson plans in the Main Menu section. Each lesson plan includes an overview, list of objectives (correlated to Wisconsin Model Academic Standards for Nutrition, Health, Science, and other related subjects), materials list, and directions for lesson activities including tasting.

The À la Carte section offers a variety of garden-based activities including Keeping a Garden Journal, Theme Gardens, and Garden Art. The Cooking & Eating in the Garden section provides a collection of fun recipes and helpful tips from the Troy Kids' Garden. These garden-based lessons and activities can stand alone or be used in conjunction with each other. Whether you have just a few minutes to spend with students in the garden or an entire lesson period, this curriculum is a great way to nurture students' interest in growing and eating fresh fruits and vegetables. Got Veggies? also includes an annotated list of garden-based and nutrition education resources.

Stealth Health

As poor nutrition and lack of physical activity are central causes of childhood obesity, we need to find ways to make the healthy choice the easy choice for kids. How do we do this? We begin by finding ways to improve kids' environments, which includes where they live, learn, and play. Putting in a garden at a school, afterschool, or early childhood site is certainly changing their environment! Offering more fruits and vegetables with meals or adding healthier options to a vending machine are also good examples of things that can be done ... all the while kids are unsuspecting of these changes you are making! When we change environments to support healthier eating and physical activity, we increase the likelihood that better choices can be made.



— Amy Meinen, Nutrition Coordinator
Wisconsin Department of Health Services

Youth Grow Local

When youth tend their food from seed to harvest, they are more adventurous about eating fresh fruits and vegetables. In the garden, children eagerly snack on a wide range of homegrown treats—such as spring garlic, broccoli, cucumbers, cherry tomatoes, and kohlrabi. By teaching young people how to grow their own food, they are introduced to the ultimate local food system. Young gardeners take on the dual role of grower and consumer. When presented in the proper way, growing and eating food in the garden is a particularly powerful way for youth to connect to nature. It allows them to witness first-hand the life-giving energy that flows from the Sun to a plant to one's own body. These types of garden learning opportunities have the power to change the way that youth commonly experience food. In the children's garden, the interpretation of food moves beyond that of a resource or commodity—it becomes a delicious symbol of life itself.



— Nathan Larson, Education Director
Community GroundWorks at Troy Gardens

What should I know about this curriculum?

Got Veggies? was developed for 2nd and 3rd grade students with attention to current Wisconsin Model Academic Standards, including those for nutrition education. These lessons and activities can be easily adapted for younger and older children. We encourage school, after school, and early childhood teachers to modify lessons and activities based on what is developmentally appropriate for different age groups.

This curriculum was developed for use in a garden learning environment. We understand that not every teacher has access to a garden, so many of these lessons can easily be adapted for use in the classroom. If your school, after school, or early childhood learning environment does not currently have a garden and you are interested in developing one, please visit www.dhs.wi.gov/health/physicalactivity/gotdirt.htm for more information and resources for starting a youth garden.

Can I evaluate the effectiveness of this curriculum?

If you wish to evaluate your students' progress based on the seven core lessons and short activities contained in this curriculum, we suggest the following:

- Consider collecting pre or baseline evaluation measures before beginning to use the curriculum and post measures after using the curriculum.
 - A pre/post measure might include documenting the change in knowledge about fruits and vegetables. Students could be asked questions about how many fruits and vegetables they should be eating each day or why dark orange and dark green vegetables are extra special.
 - Evaluation measures may include—but are not limited to—measuring change in students' knowledge of fruits and vegetables, willingness to try fruits and vegetables, and attitude toward or likeability of fruits and vegetables.

There are other ways to evaluate the success of your garden program, including use of the following techniques:

- Photo journaling—taking pictures of the students gardening and of the garden as it grows.
- Journaling—keeping a log of student observations of the gardening experience including their feedback on trying new fruits and vegetables.

Gardening & Farm to School

As the farm to school movement grows, schools are beginning to procure more foods (including fruits and vegetables) locally for use in school meals and snacks. Gardening is a great addition to farm to school efforts! As new varieties of local fruits and vegetables begin to appear in school lunches across the country, children may be reluctant to try these new items. However, if children learn about how their food grows or where it comes from through gardening and nutrition education, they may be more accepting of and willing to try new foods. Thus, when creating a comprehensive farm to school program within your school, after school program, or early childhood learning environment, consider using the Got Dirt? Garden Toolkit and Got Veggies?.

A Comprehensive Farm-to-School Program:

