



Leader's Guide

Garden to Plate: Food Safety for School and Community Gardens

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Introduction

Kids and families who grow their own produce are more likely to eat the fruits (and vegetables) of their labor.

Because gardening is an effective strategy for healthier food consumption, the number of school and community gardens is increasing across the state of Missouri. However, fresh produce has also been linked to outbreaks of foodborne illness.

Fruits and vegetables can be contaminated any time from planting to eating. Most pathogens are killed by cooking, but they are very difficult to wash off produce that will be eaten raw. To minimize contamination risks, this lesson outlines good practices for growing produce that school and community volunteers can take to keep their produce safe.

These prevention strategies include:

- site and soil selection,
- personal hygiene,
- sanitation and tool safety,
- water and irrigation,
- compost and fertilizers,
- pest and animal management, and
- food safety in harvest and storing produce.

Objectives

Participants will learn the importance of good practices for keeping produce safe from garden to plate.

- How to select and maintain safe soil.
- How to practice personal hygiene in regards to gardening.
- How to select and maintain safe water.
- How to practice food safety procedures in harvest and post-harvest.

Intended Audience

- Missourians
- School and community garden volunteers
- Educators and teachers

Before the Lesson

1. Review this leader's guide and the fact sheet (N1314), including the websites referenced.
2. Preview suggested videos in the fact sheet.
3. Nutrition and Health Specialists should visit with a horticulture specialist/educator. Consider team teaching with a horticulture specialist/educator or Master Gardener.
4. Visit a community/school garden site and interview community/school garden volunteers.
5. Take pictures of local gardens to show various sites and garden designs during programs.

Preparing for the Lesson

Before the lesson:

- Make copies of fact sheet and evaluations.
- Make copies of any optional supporting information.
- Select websites and videos to show.
- Gather potential lesson props:
 - Basket of fresh fruits and vegetables
 - Non-scented chlorine bleach
 - Disposable gloves
 - Food grade and non-food grade containers
 - Vegetable brush
 - Refrigerator thermometer
 - Examples of suitable materials for composting/sample of compost
 - Compost thermometer
 - Fruit and vegetable recipe samples

Presentation

1. Provide pens or pencils.
2. Provide contact information
3. Have participants introduce themselves and tell why they are attending.
4. Review and discuss each section:
 - Site and Soil Selection
 - Personal Hygiene
 - Sanitation and Tool Safety
 - Water and Irrigation
 - Compost and Fertilizers
 - Pest and Animal Management
 - Food Safety in Harvesting and Storing Produce
5. Distribute evaluations.
6. Answer questions.
7. Thank audience for attendance and adjourn.

Resources

For more information, visit these online resources:

Websites

University of Missouri Extension Food Safety
extension.missouri.edu/programs/food-safety

K-State Research and Extension Produce Safety
ksre.k-state.edu/foodsafety/produce/index.html

Food Safety Diseases
cdc.gov/foodsafety/diseases/index.html

MU Extension Food Systems website, including gardening information
extension.missouri.edu/foodsystems/home.aspx

Water quality Information
ephntn.dhss.mo.gov/EPHTN_Data_Portal/waterquality/index.php

Healthier Missouri Communities—Community Gardens
extension.missouri.edu/healthiermo/communitygardens.aspx?_ga=2.45872548.1215397199.1566240247-1525874109.1544807833

Videos

Composting:
kansashealthyyards.org/component/allvideoshare/video/composting-making-black-gold?Itemid=101

How to Test Your Soil for Nutrients
kansashealthyyards.org/component/allvideoshare/video/how-to-test-your-soil-for-nutrients?Itemid=101

Kansas Community Gardens, Video Series
kansashealthyyards.org/all-videos/search?q=Community%20Gardens

Why Start One?
youtube.com/watch?v=quMVVPYIJRg

Choosing a Site
kansashealthyyards.org/all-videos/video/community-gardens-choosing-a-site

Common Features
kansashealthyyards.org/all-videos/video/community-gardens-common-features

Different Types
kansashealthyyards.org/all-videos/video/community-gardens-different-types

Planning Ahead
kansashealthyyards.org/all-videos/video/community-gardens-planning-ahead

Preparing the Site
kansashealthyyards.org/all-videos/video/community-gardens-preparing-the-site

Typical Costs
kansashealthyyards.org/all-videos/video/typical-costs

Funding
kansashealthyyards.org/all-videos/video/community-gardens-sources-of-funding

Getting Gardeners Involved
kansashealthyyards.org/all-videos/video/community-gardens-getting-gardeners-involved

Becoming a Community
kansashealthyyards.org/all-videos/video/becoming-a-community

Publications

Disease Prevention in Home Vegetable Gardens. University of Missouri Extension.
extension.missouri.edu/g6202

Food Facts, Raw Produce: Selecting and Serving it Safely. U.S. Food and Drug Administration.
fda.gov/media/77178/download

Food Safety for School and Community Gardens. North Carolina State University and North Carolina Cooperative Extension.
growingsafergardens.files.wordpress.com/2012/10/foodsafetywebcurriculum-10-24-12.pdf

Food Safety Tips for School Gardens. USDA Food and Nutrition Service.
fns-prod.azureedge.net/sites/default/files/foodsafety_schoolgardens.pdf

Grow It Eat It. University of Maryland Cooperative Extension.
chapmanfoodsafety.files.wordpress.com/2011/08/foodsafety.pdf

Home Gardening Food Safety: Washing the Fruits (and Vegetables) of Your Labor Properly. University of Florida Extension.
sfyl.ifas.ufl.edu/archive/hot_topics/families_and_consumers/washing_fruits_and_vegetables.shtml

Missouri Vegetable Planting Calendar. University of Missouri Extension.
extension.missouri.edu/g6201

Community Gardening Toolkit. University of Missouri Extension.
extension.missouri.edu/mp906

Evaluation

Knowledge of Food Safety for School and Community Gardens

Disagree completely—1, Disagree somewhat—2, Neutral—3, Agree somewhat—4, Agree completely—5

Before Presentation:	1	2	3	4	5
I know how to handle produce in the garden safely.					
I know how to select safe garden sites and soil.					
I know how to keep my garden area and tools safe and sanitized.					
I know how to identify safe water sources for my garden.					
I know how to keep a safe compost pile.					

After Presentation:	1	2	3	4	5
I know how to handle produce in the garden safely.					
I know how to select safe garden sites and soil.					
I know how to keep my garden area and tools safe and sanitized.					
I know how to identify safe water sources for my garden.					
I know how to keep a safe compost pile.					

Comments and Suggestions:

Revised by

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