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

**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
ephtn.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=quMVVPYJIRg

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

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

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

Funding
kansashealthyyards.org/all-videos/video/community-gardens-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.
growingsafegardens.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

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

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Comments and Suggestions:
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Publications from Kansas State University are available at bookstore.ksre.ksu.edu
Publications from University of Missouri Extension are available at extension.missouri.edu/publications.

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