Safe Harvesting

Giving kids the opportunity to grow, harvest, and eat delicious and nutritious vegetables, fruits, and herbs fresh from the garden is what school or youth gardening programs are all about. To keep this experience positive and safe, you need to pay attention to some basic harvesting guidelines to help to reduce the possibility of food-borne illnesses. This shouldn't discourage you from allowing children to enjoy all the benefits that come from gardening and eating fresh food. The following suggestions are, with a little planning, generally easy to implement. They'll help everyone involved in your garden program bring in a healthy harvest!

Safe Harvest Practices

Enlist Healthy Harvesters

Make sure everyone harvesting edibles, both children and adults, is in good health. Anyone who's not feeling well or who has cuts or sores on their hands or arms should refrain from picking produce.

Harvest with Clean Hands

Before picking edibles all harvesters should wash their hands thoroughly with soap and clean, potable water; then rinse under running water and dry with a single-use towel. A simple handwashing station can be set up if running water isn't available at your site. Check out the instructions from the University of Minnesota Agricultural Health and Safety Program for building a field handwashing station for less than \$20. Alcohol-based sanitizers are not as good an option for hand cleaning because they are not effective against Norovirus, one of the most common food-borne pathogens. While handwashing is the safest course, if this isn't possible have harvesters wear single-use, disposable gloves when harvesting. And, of course, washing hands after doing any work in the garden is always part of good garden hygiene.

Use Clean Containers

Gather your produce into clean, easily washable, food-grade containers. Recycled five-gallon containers that held foodstuffs are often readily available from your school food service and are easy to keep clean. If you use plastic bags to collect produce, make sure they are food-grade, and don't reuse them. Using potable water, regularly wash (in warm, soapy, water), rinse, dry, and then sanitize all reusable harvesting containers. Also wash and sanitize any harvesting tools like scissors or knives.

A solution of ½ fluid ounce (1 tablespoon) of unscented household bleach per gallon of water (or ¾ teaspoon bleach per quart of water) can be used as a sanitizing solution. Spray the sanitizing solution onto the cleaned surface; let stand for a least one minute; then air dry or wipe dry with a clean paper towel. As long as you don't exceed the recommended concentration of bleach, you don't need to rinse the sanitizing solution off. Kids can help with the washing of containers, but sanitizing is a task for adults. Store harvesting tools and containers where they will not get re-contaminated after they are cleaned.

Store Produce Safely

Brush off soil or debris on edibles with a clean paper towel before bringing them into your food storage or preparation area. If you choose to wash edibles before storing, be sure to dry them thoroughly with clean paper towels before storing, as moisture will promote the growth of microbes on them. Or you can store produce unwashed in clean, food-grade plastic bags and wash it right before you are ready to prepare or eat it. Berries should always be stored unwashed, then washed right before eating.

Store produce that needs refrigeration at 40 degrees F or less. Fruits and vegetables that don't need refrigeration, like potatoes, tomatoes, onions, and peaches, should be stored in a clean, cool, dry spot. For more detailed information, check out the University of Rhode Island Extension's advice on storing fresh garden produce.



Wash Produce Correctly

Make sure that the water used for washing produce is potable. It should also be no more than 10 degrees warmer or colder than the temperature of the produce. This is because if the water temperature is too different from the temperature of the produce itself, pathogens on the surface of fruits and some vegetables can be drawn into them through the stem or blossom end as the produce is washed. If you are washing produce still warm from the garden, use tepid or lukewarm water for washing; use cold water to wash produce that's been refrigerated. Wash all fruits and vegetables under running water, using a clean scrub brush on firm produce like melons, potatoes, and root vegetables.

Get Everyone on Board for Food Safety

It's important that everyone who harvests in the garden, from garden coordinators to adult volunteers to students, be familiar with safe food harvesting procedures. An informational meeting at the beginning of the season can be a good way to let adult volunteers know not only what the expected procedures will be, but the reasons behind them. When folks understand how these practices help to keep everyone safe from food-borne illnesses, they are more likely to remember and comply with them.

Many of these recommendations are really common sense, but it's easy to forget or let things slip at times. Children, especially, respond to routine. If fun in the garden always starts and ends with a visit to the handwashing station, they'll be less likely to think of washing up as a chore and more as simply a regular part of their garden experience.

Planning ahead helps streamline safe harvesting practices, making it easier for everyone to carry them out. Posting a safe harvest checklist on a garden bulletin board, sending reminders about safe harvesting procedures in garden newsletters and emails, and holding some age-appropriate activities for kids relating to food safety will help both kids and adults stay on track throughout the growing season, and keep the school garden experience safe and fun!

For more information on food-safe practices for school gardens, check out these helpful resources:

- Food Safety for School and Community Gardens (North Carolina State University Extension)
- Food Safety Tips for School Gardens (USDA)
- Food Safety in the School Garden (University of Maryland Extension)
- Five Steps to Food Safe Gardening (University of Maine Extension)

