

Weld County School District 6 Farm to School Program

Garden to Cafeteria Toolkit

About the Toolkit

The Garden to Cafeteria (GTC) program is a unique opportunity for Weld County School District 6 students to grow, collect, and deliver fresh, unprocessed fruits and vegetables from their school garden to actively support their school's kitchen and its meals. This 'kitchen buy-back' program provides school garden groups with recurrent funding and allow it to be a sustainable part of the school community.

This Garden to Cafeteria Toolkit was created by the WCSD6 Farm to School Program to assure the safety of fruits and vegetables harvested from the school gardens. The following protocols and checklists were derived from Good Agricultural Practices (GAP) and Good Handling Practices (GHP) guidelines and approved by The Weld County Department of Public Health and Environment.

The toolkit is divided into the following major headings:

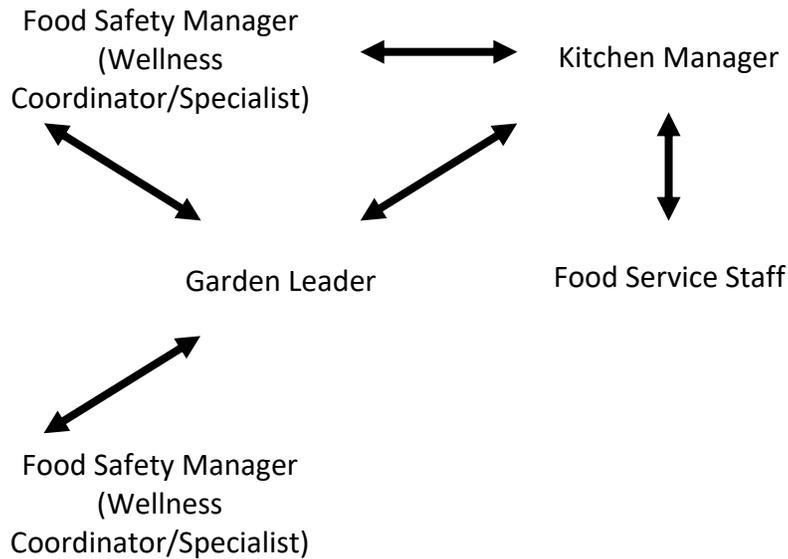
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Getting Started

1. Gain and Maintain Support
 - a. Gaining support from your site principal, teachers, food service staff, and other key personnel, is an important first step. It is essential to maintain this relationship of support by assembling a GTC Team committed to following the instructions outlined in this toolkit to ensure food safety. It is also important to effectively communicate your food safety goals with students and garden volunteers. This involvement is fundamental when sustaining your school's food safety initiatives.
 - b. Why School Gardens? Need help building your support team?
 - i. <http://www.csgn.org/why-school-gardens>
2. Identify your GTC Team
 - a. Food Safety Manager (Wellness Coordinator/Specialist)
 - i. The Food Safety Manager supervises the food safety program- ensuring food safety protocol is properly implemented.
 1. Is familiar with Good Agricultural Practices (GAP) specifically related to school gardens
 2. Ensures Garden Leaders are correctly trained in food safety best practices and practices are implemented
 3. Communicates with the Kitchen Managers and ensures the food safety plan is properly implemented
 4. Manages all garden documents and record sheets
 5. Ensures garden participants and garden volunteers are familiar with food safety protocols
 - b. Garden Leader(s)
 - i. The role of the Garden Leader(s) is to manage garden preparation, maintenance, responsibilities and harvesting. The Garden Leader can be D6 classroom teachers, Nutrition Services staff, parents, or authorized volunteers. They need to be familiar with the D6 food safety protocols and best practices outlined in this toolkit.
 1. Is trained in Good Agricultural Practices (GAP) specifically related to school gardens
 2. Ensures all Garden Participants (students and volunteers) are following food safety best practices
 3. Completes and submits the necessary food safety documentation and records (e.g., Garden to Cafeteria Program Application, Record Sheet, School Garden Food Safety Checklist, and Student Harvesting Permission Slip)
 4. Communicates with Food Safety Manager and Kitchen Manager to discuss harvest dates/times and the approximate quantity of produce expected to be harvested
 - c. Garden Participants (students and volunteers)
 - d. Kitchen Manager
 - i. The Kitchen Manager is a Nutrition Services staff member trained in all food service food safety protocols- including how to properly handle fresh garden produce
 1. Ensures all food service staff implement food safety best practices
 2. Communicates with the Food Safety Manager and Garden Leader(s)
 3. Manages all the necessary food safety documentation

- Note: Kitchen Managers are not permitted to use garden produce until adults harvesting with students in the school garden have been trained on the protocols.

e. Food Service staff



- If the Garden Leader needs to obtain the necessary gardening/harvesting materials and tools for the program, they will need to complete and submit a Supply Rental Agreement Form to Nutrition Services at farm2school@greeleyschools.org. Items will be shipped to the Kitchen Manager, and the GTC Leader will coordinate with the Kitchen Manager when to pick up these items. Garden materials are on loan for the harvest season. Should the garden materials not be returned, or if they are damaged, the school GTC Leader will be billed.
- Submit application to farm2school@greeleyschools.org, visit the WSCD6 Farm to School web page <https://www.greeleyschools.org/Page/23738> for all your school garden resources.
- Start growing!!

Health and Hygiene

The school garden is directly impacted by the health and hygiene of garden participants and volunteers. It is important that all participants and volunteers are trained on the proper hand washing technique. Garden Leader(s) and the Food Safety Manager must ensure all Garden Participants are trained.

When to Wash Your Hands

Before	Working in the garden, putting on gloves, when changing gloves, handling cleaning products, and cleaning/sanitizing tools
After	Working in the garden, handling cleaning products, eating/drinking, taking a break, sneezing, coughing, blowing your nose, or using a tissue, touching hair/face/body/clothing, handling garbage, and touching an open wound/cut

How to Wash Your Hands

1. Locate the nearest available handwashing station. Wet your hands with warm (preferred), clean water, apply soap, and lather.
2. Scrub your hands for at least 20 seconds. Scrub between fingers and under fingernails. Rub fingertips of each hand in suds on the palm of opposite hand. Wash your arms up to your elbows if exposed.
3. Rinse your hands and arms under warm (preferred), clean water.
4. Dry hands using single-use paper towels. Do NOT use a paper towel more than once OR share towels with others.
5. Use a single-use paper towel to turn off the faucet.

Use of Hand Sanitizers

Hand sanitizers can be used **IN ADDITION** to proper hand washing, but it must **NOT** be used as a substitute.

Participant and Volunteer Health

Illness – Poor participant health can compromise produce safety. Be sure no participants or volunteers who have recently been sick or are showing any symptoms of illness. An ill garden participant is not permitted to participate in any garden activities (e.g. maintenance or harvesting). Garden Participants will only be allowed to help in the garden 48 hours after symptoms have ended. Garden Participants **MUST** notify the Garden Leader if they are experiencing any of the following symptoms or conditions:

1. They have been diagnosed or were recently ill with a foodborne illness or communicable disease.
2. They have an infected sore or cut that is open or draining.
3. They are suspected of causing or being exposed to a foodborne illness outbreak.
4. They live with a person diagnosed with a foodborne illness, or a person who attends or works where there is a foodborne illness outbreak.
5. They have any of the following symptoms:
 - a. Diarrhea, fever, vomiting, sore throat with fever, jaundice (yellowing of skin and eyes), or persistent coughing, sneezing, or a runny nose

Bodily Fluid and Blood – If blood or bodily fluid ever comes in contact with the soil or produce, all contaminated surfaces must be immediately removed into a plastic bag and then placed in a waste basket.

First Aid Procedures – A first aid kit should be kept on site, or with the Garden Leader. Dial 911 first for serious injuries and asthma or allergy related incidents. Cuts, abrasions and other injuries that occur on the garden site must be treated immediately for the health of the participant and to minimize the risk of contamination to the garden and produce.

Health & Hygiene Training – All garden participants and volunteers must be trained on proper health and hygiene techniques. It is advised to schedule a time to train all garden participants at the beginning of each garden season. The topics you should cover in your Health & Hygiene Training include:

1. Proper hand washing techniques
2. Participant illness or injury procedures
3. Emergency/first aid procedures

Garden Requirements and Eligible Produce

Location

The location of the garden must be carefully selected as it can impact food safety. The location must be away from dumpsters, underground tanks or other underground sources of contamination, and any area near a facility that houses livestock. The area should be free of overhead trees and tree limbs where animal droppings can contaminate the garden. Fencing should be adequate to deter animals. Fence openings should be no greater than one (1) inch.

Soil

Schools with existing gardens that want to begin food production will be able to test the quality of soil at the Soil, Water and Plant Testing Laboratory at Colorado State University for a small fee.

1. When evaluating your garden site's soil, identify these contaminants:
 - a. Semi-Volatile Organic Compounds (e.g., benzo(a)pyrene)
 - b. Chemicals (e.g., herbicides and pesticides)
 - i. Heavy Metals (e.g., lead)
 1. Arsenic
 2. Benzo(a)pyrene
2. **Soil Amendments** – Soil amendments are added to improve your soil's physical properties whether it's aeration, water retention, or nutrient-holding capacity. Soil amendments include the following:
 - a. **Compost** – Compost involves the decomposition of organic materials. Microorganisms break down the organic matter to create a nutrient-rich material, called humus. Humus helps improve soil structure, adds nutrients to the soil, and improves water retention. However, you must ensure your compost is free of potential pathogens and handled properly. Contact the Food Safety Manager (Wellness Coordinator/Specialist) if you are interested in using compost.
 - b. **Manure** (Do NOT use raw manure. Use ONLY commercial composted manure that has been properly treated.) Commercial manure that has been properly treated at the correct temperature range can be used for school gardens. Schools should NOT use farm manure or pet waste.

Water Quality

Clean, healthy water is essential to grow safe produce. ONLY clean, potable water must be used.

1. Rain Barrel water is NOT potable and therefore, must not be used to water an edible school garden.
2. **Irrigation** – It is advised to water by hose, sprinkler, irrigation system or food grade container in the morning. A morning schedule will help conserve water and accelerate leaf drying time (reduces the survival of crop pathogens).

Animal/Pest Control

It is nearly impossible to eliminate all animal influences from garden sites and produce handling areas, but there are steps you can take to minimize their risk.

1. Garden Leaders need to ensure produce is harvested regularly and rotting vegetables are properly disposed.
2. Keep domestic animals and pets out of the garden. Animal waste can be a source of bacteria, parasites and viruses.
3. Do NOT feed birds near the garden. Bird feed can attract rodents.
4. If serious infestations occur, please contact the Food Safety Manager.

Eligible Produce

Produce items that are eligible for the GTC program include any fruit or vegetable that can be used as a raw item on a salad bar. Produce items that have proved successful in the program include:

1. **Vegetables** – tomatoes, cucumbers, lettuce, spinach, radishes, summer squash, bell peppers, jalapenos, celery, carrots, broccoli, cabbage, cauliflower, basil, onions
2. **Fruits** – melons, berries, apples, plums, peaches

All produce must be grown on school grounds, either in the school or community garden.

It is ideal for the GTC Leader and Kitchen Manager to work together in the spring to plan what to grow for the GTC harvest.

Safe Growing and Harvesting Practices

Health and Hygiene Review

It is important that all garden participants follow the good hygiene practices that were mentioned in the Health and Hygiene section. The Food Safety Manager needs to make sure that all Garden Leaders and Garden Participants have been trained on good health and hygiene practices. Garden Leaders need to make sure that these practices are implemented whenever participants are helping in the garden, especially when harvesting fresh produce.

Tools and Equipment Maintenance Management

Tools and harvesting containers should be sanitized thoroughly using a food service approved sanitizer and rinsed with potable water. It is recommended that the tools be cleaned, repaired and/or inspected weekly.

1. **Harvest basket** – must be made of non-porous material (e.g., metal, stainless steel, or plastic) that is easily cleanable, with smooth surfaces and not porous. Items that are acceptable are food-grade Lexan containers, plastic bus tubs, and plastic shopping baskets; all must have smooth surfaces that are easily cleanable. Harvesting bins should not be used for any other purpose other than carrying produce. Wicker baskets, cloth, plastic or burlap bags are not acceptable.
2. **Scale** – most WCSD6 kitchens have a 20lbs. scale. Please work with the Kitchen Manager to use the scale on Harvest Days. A scale is needed to complete the record sheet. The scale should also be properly sanitized.

Preparation for Harvest

Weld County's harvest season generally falls between early June and September. Each school can participate as often as they wish. The GTC Leader should share the harvest schedule with the Kitchen Manager. The GTC Leader should also set up a schedule with the student group and their teacher(s) and volunteers, so as not to have a large impact on the academics of the day.

The garden leader needs to gather these items in preparation for the harvest:

1. Sanitized Harvest Containers (e.g., food grade plastic baskets)
2. Harvest Record Sheet
3. Sanitized Scale

Use the harvest record sheet to record date of harvest, participants assisted with harvest, list of produce harvested, and weight of harvest.

All participants should be trained how to record harvest activities and proper harvesting procedures.

How to Harvest

When harvesting, these procedures should be followed:

1. All participants and volunteers must wash their hands before and after harvesting.
2. Use single-use disposable gloves when harvesting.
3. Harvest in the morning (as early as possible).
4. Ideally, pick only dry fruits and vegetables.
5. Produce should not be eaten while harvesting.
6. Remove as much dirt and debris from the produce as possible.
7. **DISPOSE OF ANY PRODUCE THAT HAS FECES ON IT OR IS DAMAGED/DISEASED.**
8. Handle the produce carefully and as little as possible making sure not to bruise or damage the produce. Punctured or bruised produce are more susceptible to harmful pathogens.
9. Garden produce delivery needs to be clearly labeled providing the name of the garden, date of harvest, produce name(s) and weight.

Record Keeping and Documentation

Record keeping and documentation is a tedious, somewhat time-consuming, task; however, developing effective record keeping strategies is important to a successful GTC program. Record keeping assures the correct food safety precautions have been taken.

1. All records and documents should be frequently updated. It is advised that all documents be kept for a minimum of four years.
2. A self-audit of this GTC toolkit and its food safety protocols should be performed annually. The assigned Food Safety Manager (Wellness Coordinator/Specialist) should document that the audit was performed and record any corrective actions required.
3. Documents included in this toolkit:
 - a. Garden to Cafeteria Program Application
 - b. Record Sheet
 - c. School Garden Food Safety Checklist
 - d. Student Harvesting Permission Slip

Weld County School District 6 Nutrition Services Garden to Cafeteria Program Application

Please complete the following form to inform Nutrition Services of your plan to sell garden produce to be used in the school cafeteria. Please provide all contact information and school garden information so that Nutrition Services can be prepared to purchase any produce harvested from your garden.

Return completed application to farm2school@greeleyschools.org.

Garden Leader Contact Information	Kitchen Manager Contact Information
Name: _____ Position: _____ Phone Number: _____ Email: _____	Name: _____ Phone Number: _____ Email: _____

Garden Information
School or Site Name: _____ Garden Account Number: _____ Garden Description: _____ _____ _____

By submitting this application, you are agreeing that you have read, understood, and will enforce the School Garden Safe Handling Procedures in the GTC toolkit.

GTC Leader Signature: _____ Date: _____

Kitchen Manager Signature: _____ Date: _____

Please keep a copy for your records.

Nutrition Services Use Only	
Received By:	Date:

School Garden Food Safety Checklist

Garden Location: _____ GTC Leader: _____

Kitchen Manager: _____

All individuals assisting in harvest: _____

Clean soil, clean water, clean hands, clean surfaces

Soil and Water Use

- Soil has been tested to determine the level of contaminants such as chemicals, lead, etc. (annually)
- Non-municipal water sources have been tested to meet Environmental Protection Agency standards
- Use food-grade containers to transport water

Chemical and Fertilizer Use

- No pesticides or herbicides have been used
- Wear gloves and follow manufacturer's instructions if using fertilizer (must be performed by an adult)

Compost and Manure Use

- Use only plant-based compost (no animal products or animal waste)
- Wear gloves when distributing compost (must be performed by an adult)
- Avoid using raw or composting manure

Growing and Harvesting Produce

- Ensure all volunteers are registered through the District 6 policy
- Review received basic food and gardening safety instructions with harvest participants
- Require signed permission slip from all student gardeners
- Do not allow anyone to work in the garden while sick, or until 24 hours after symptoms, such as vomiting or diarrhea, have subsided
- Harvesters are required to wear closed-toed shoes to prevent cuts, stings, or other injuries
- Harvest the garden regularly and remove any rotten produce
- Inspect produce for obvious signs of soil or damage
- Use food-grade containers, such as plastic bins or buckets, that are cleaned and sanitized by kitchen staff to hold harvested produce
- Do not use garbage bags, garbage cans or any container that originally held chemicals
- Clean harvesting tools, such as knives, scissors, etc., with soap and potable water immediately before and after each gardening session

Hand Hygiene

- Ensure all harvesters have washed their hands thoroughly in warm, soapy water for at least 10 to 15 seconds and then rinse with potable water. Ensure that all open cuts or wounds on hands, arms, or legs are properly covered prior to participating in the harvest.
- Rewash hands after breaks, visiting restrooms, sneezing, coughing, handling trash or money, or any time hands become soiled or otherwise contaminated
- As an extra precaution, consider using single-use, disposable gloves when harvesting or handling fresh produce (this does not remove the need for frequent, proper handwashing)
- Always wash hands before putting on disposable gloves, change gloves when changing tasks and if they become contaminated, do not wash or reuse, and do not use if gloves are torn or damaged

Bookkeeping

- All garden produce is recorded on the GTC record sheet with the names of all harvesters, as well as the date and time of harvest
- Make sure the kitchen manager has signed records sheet as a receipt of received garden produce
- Submit GTC record sheet and checklist to both the kitchen manager and Nutrition Services to receive produce reimbursement
- Return borrowed harvest equipment to the kitchen manager

Garden to Cafeteria Record Sheet

Garden Location: _____ GTC Leader: _____

Kitchen Manager: _____

All individuals assisting in harvest: _____

Date and Time Harvested	Produce	Unit Price	Quantity	Total Price
	Beets	\$0.79/lbs		
	Berries	\$2.50/lbs		
	Broccoli	\$0.59/lbs		
	Carrots	\$0.90/lbs		
	Cauliflower	\$1.17/head		
	Celery	\$1.50/lbs		
	Cherry Tomatoes	\$0.79/lbs		
	Corn, Unshucked	\$0.18/ear		
	Corn, Shucked	\$0.28/ear		
	Cucumbers	\$0.29/lbs		
	Melon	\$0.27/lbs		
	Peaches	\$0.38/each		
	Pears	\$0.17/each		
	Peppers	\$0.48/lbs		
	Plums	\$0.15/lbs		
	Radishes	\$1.12/lbs		
	Red Cabbage	\$0.43/lbs		
	Red Onion	\$0.52/lbs		
	Romaine	\$0.54/head		
	Snow Peas	\$2.10/lbs		
	Spinach	\$3.49/lbs		
	Tomatoes	\$0.68/lbs		
	Yellow Squash	\$0.62/lbs		
	Zucchini	\$0.62/lbs		

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Date and Time Harvested	Produce	Unit Price	Quantity	Total Price
	Other (with prior approval)			
	Other (with prior approval)			
	Other (with prior approval)			
	Other (with prior approval)			
	Other (with prior approval)			
Harvest Total				

By transferring produce and submitting this record sheet, you affirm that the produce from the school garden listed above has been handled according to the School Garden Safe Food Handling Procedures located in the Garden to Cafeteria Toolkit. You also understand that the transfer of funds can take up to 10 business days and that pricing is subject to change for future transactions.

GTC Leader Signature: _____ Date: _____

Kitchen Manager Signature: _____ Date: _____

Please keep a copy for your records.

Nutrition Services Use Only	
Received By:	Date:

School Garden Permission Slip

Dear Parent(s)/Guardian(s),

School gardens provide an engaging and dynamic learning environment for students to observe, discover, and experiment. They are living laboratories where interdisciplinary lessons are drawn from real life experiences, encouraging students to become active participants in the learning process. School garden activities will be closely monitored and structured by the Garden Leader(s).

Please fill out student information below to allow participation in school garden activities. If you do not wish for your student to participate in school Garden activities, additional assignments may be given to meet learning objectives.

On garden harvesting days, students will be required to wear appropriate protective clothing (i.e. closed toed shoes, lightweight long sleeves and long pants to cover more skin, and a hat to protect the face from the sun).

Please be aware that if your student has been sick within the past two weeks, they are not eligible to participate in garden activities.

Sincerely,

Garden Leader(s)

Student Name: _____

Homeroom: _____

_____ **Yes**, my child has permission to participate in school garden activities.

Please list any allergies your child may have: _____

_____ **No**, my child does not have permission to participate in school garden activities.

Print Name

Emergency Contact Information

Name: _____

Relation: _____

Phone Number: _____

Parent/Guardian Signature

Resources

“Community Food Systems - Food Safety FAQs.” *USDA*, www.fns.usda.gov/cfs/faqs-food-safety.

“Eat What You Grow! A School Garden Food Safety Manual for Chicago Public Schools.” *SchoolgardenfoodsafetyFINAL.pdf*, A Project by FamilyFarmed.org in Collaboration with Academy for Global Citizenship, The Chicago Botanic Garden, and Chicago Public Schools, www.lifelab.org/wp-content/uploads/2013/04/schoolgardenfoodsafetyFINAL.pdf.

“Food Safety in the School Garden.” *Food Safety in the Garden | Washington State Department of Agriculture*, agr.wa.gov/departments/business-and-marketing-support/farm-to-school-toolkit/school-gardens-and-farms/food-safety-in-the-garden.

“Food Safety Tips for School Gardens.” *foodsafety_schoolgardens.Pdf*, fns-prod.azureedge.net/sites/default/files/foodsafety_schoolgardens.pdf.

“Garden to Cafeteria Toolkit.” *GTC Toolkit FINAL.pdf*, Slow Food USA, www.farmentoschool.org/Resources/GTC%20Toolkit%20FINAL.pdf.

Gray, Demetris, and Andrew Taylor. *Food & Nutrition Services - Garden to Cafeteria*, foodservices.dpsk12.org/farm-garden.php.

“USDA Good Agricultural Practices Good Handling Practices Audit Verification Checklist.” *USDA GAP&GHP Audit Verification Checklist*, www.ams.usda.gov/sites/default/files/media/GAPGHPChecklist.pdf.