# Gardento, Cardena Toolkit



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# Table of Contents

#### 9 Chapter 1: Introduction to Garden to Cafeteria

Definition of Garden to Cafeteria GTC Programs: Perceived Barriers Approach of this Toolkit

**WORKSHEET 1: District Garden to Cafeteria team** 

#### 15 Chapter 2: What are the Food Safety Concerns for a GTC Program

Safe growing and harvest practices in the school garden HACCP: Handling fresh produce in the school kitchen

WORKSHEET 2: What are the safety concerns of the district for a GTC program?

#### 21 Chapter 3: Examination of GTC protocols from other districts

Similarities of GTC protocols across school districts Differences of GTC protocols across school districts

WORKSHEET 3: Building a template for the GTC protocols

#### 25 Chapter 4: How to construct your own GTC protocols

**WORKSHEET 4: A calendar for GTC meetings** 

#### 31 Chapter 5: How to pay for the school garden produce

WORKSHEET 5: Calculating the cost for school garden produce

#### 37 Chapter 6: How to Launch a Pilot GTC Program

How to market a GTC program to students, families and the community

WORKSHEET 6: Marketing ideas for your GTC program

- 43 APPENDIX A: Important links
- 44 APPENDIX B: USDA Good
  Agricultural Practices/Good
  Handling Practices:
  Audit Verification Checklist
- 45 APPENDIX C: Relevant statements from the GAP/GHP audit for a school garden setting
- 47 APPENDIX D: Denver Public School's HACCP-based Standard Operating Procedure (SOP)- Washing Fresh Fruits and Vegetables
- 49 APPENDIX E: Denver Public School's HACCP-based Standard Operating Procedure (SOP)- Farm to Table Produce Safety
- 52 APPENDIX F: GTC Training Workshops for School Garden Leaders
- 53 APPENDIX G: Denver Public Schools GTC Harvest Sheet
- 54 APPENDIX H: 2009 USDA memo: School Garden Q&As
- 56 APPENDIX I: 2015 USDA memo: Farm to School and School Garden Expenses
- 61 APPENDIX J: USDA Fact Sheet: Procuring Local Foods for Child Nutrition Programs
- 63 APPENDIX K: Denver Public School's GTC Survey to Garden Leaders



## ntroduction

#### Welcome to the Garden to Cafeteria Toolkit

his toolkit will provide the important steps to develop GTC protocols that emphasize food safety and the training protocols necessary to make sure that the food safety protocols are followed closely. There is no need to start from scratch with the GTC protocols since there are numerous examples of successful implementation of GTC programs across the country.

The purpose of this toolkit is to help you develop a GTC Team that will represent the different concerns in the district and create workshops to train the school garden leaders and the kitchen staff on how to implement the GTC protocols. Once these important people are trained, the toolkit assists in launching a pilot phase where 5-10 schools are recruited to be the first ones in the district to grow fresh produce for the school kitchens. The toolkit contains a **Harvest Form** to track the amount of fresh produce that is coming into the kitchens. There are also surveys to get feedback from the school garden leaders and kitchen manager on how the program was run for its first year and whether there is any need to tweak the program for a full district launch the following year.

Throughout this whole process, Slow Food USA and Whole Kids Foundation will be available to support any district with technical support and resources to have a successful GTC program. The toolkit will highlight other resources that are available from the USDA Farm to School Program and the National Farm to School Network.



# Chapter 1: Introduction to Garden To Cafeteria

#### **HIGHLIGHTS OF THIS SECTION:**

Definition of Garden to Cafeteria Basic Issues with Garden to Cafeteria Programs Approach to this toolkit

#### **Definition of Garden to Cafeteria**

The purpose of this toolkit is to help school districts develop their own GTC program to help educate students on how food is grown, harvested and delivered to the school kitchens to be used in the preparation of the school meals. This toolkit contains templates, lessons learned and best practices from multiple school districts, NGOs and governmental agencies that have helped design successful programs across the country.

To start this journey of building a GTC program, it is important to start out with a clear definition of a GTC program and its components. For the purposes of this toolkit, we will define GTC as:

Garden to Cafeteria is a program in which students grow, harvest and deliver fresh, unprocessed fruits and vegetables from a school garden to the cafeteria at that same school. A school garden is defined as a space whose primary purpose is to educate students on agriculture and nutrition, including classes that teach children how to prepare healthy dishes using fresh produce. A school garden can have traditional raised or flat beds, large pots, or even a greenhouse.



Across the country there are several variations of growing food on school grounds and using it in the cafeteria that will NOT fall under this definition of GTC programs:

The delivery of fresh produce from one garden or school farm to school cafeterias at different locations.

The reason why this example is not included in our definition of GTC programs is that the need to transport fresh produce introduce food safety issues that are beyond the scope of this toolkit. If you are interested in *on farm food safety plans* for large scale school farms and transporting produce off the school farm, please contact Anne Wilson, Denver Public Schools, <code>anne\_wilson@dpsk12.org</code> to learn more about Denver's school farm program that is growing food for the entire district.

#### **GTC Programs: Perceived Barriers**

In many schools, the school garden sits less than 100 feet from the doors of the school cafeteria. But when you ask parents, teachers, principals and even school kitchen managers about the possibility of the school garden growing food for the school cafeteria, the garden may as well as be over 100 miles away given all the barriers and restrictions that people perceive to be in the way for a GTC program. So what are the basic issues that tend to rise to the top when the topic of school garden produce being used in the school cafeterias is discussed?

#### **Food Safety**

School kitchens are expected to have high standards for handling food, food temperatures, and procedures for serving food. Of course focusing on food safety makes sense as children are a highly vulnerable population to food risks. We will show in this toolkit that with proper training on food safety protocols that are recognized to minimize risks in the garden, students with adult support can grow, harvest and deliver fresh produce from a school garden to a school cafeteria with a high degree of food safety.

#### **Garden Safety**

The inclusion of produce gardens on school yards has introduced a whole new range of possible safety concerns for administrators. For instance, growing food on school yards has the potential to attract wildlife to the school yard. Just as important are the food safety protocols and the training associated with them, so is having an effective school garden manual which details safety guidelines and appropriate training for garden leaders and the students. Luckily, with lots of support from community groups and school officials, school gardens have proliferation across the nation, and this guide will assist you in addressing these perceived barriers. For an example of a district school garden manual, please check out this one by Jefferson County Schools in Colorado: https://sites.google.com/a/jeffcoschools.us/healthy-schools/wellness-supports/jeffco-school-gardens



#### Students' Choices in the Cafeteria

It is commonly accepted that children's appetites for fresh produce has waned in the past few decades, primarily to the deadening of the youth palate due to fast food and the lack of fresh food in lots of home cooking. However, the strength of school garden programs is that the hands-on experiential learning associated with growing, maintaining and harvesting fresh produce usually highly motivates the students to want to try the fresh produce. Studies have shown that children need 8-12 exposures with a new food before they will try it. The activities in the school garden can support those goals and will result in students that are more likely to eat the fresh food.

An often forgotten aspect of school gardens is that they are in a great position to support the positive transformations of the menus that are occurring in the cafeteria. A good partnership with the Food Service Director can result in the school gardens growing fresh produce items that the school kitchens are starting to use in the breakfast and lunch menus. The students can see that these new foods can easily be grown in the garden and thus they become less scary on the lunch plate. In addition, the cooking classes associated with the school gardens can feature some of the same recipes that are being introduced in the cafeteria so that the students can see what goes into the recipes and can taste the different components of the final dish. The partnership between the school garden program and the cafeteria can result in an increase in participation in the school meal program and an increase in the consumption of the new foods that are being offered in the school meals.

#### Major Stakeholders in a GTC program

With the GTC program, each of these stakeholders will have a different role and responsibility in the food supply chain from the school garden to the cafeteria.



Students—Since GTC programs can happen in any school garden setting from K-12 schools, any descriptions of roles and responsibilities for students will need to account for the wide age range in K-12 schools. In most cases, students will be supervised by adult volunteers or teachers to help ensure that food safety is not forgotten.

Garden Leaders—This category will represent the adults that have a leadership role in the gardens. In some cases, these are parents and community members that want the school children to have a garden experience as part of their school day. In lots of cases, the garden leaders are teachers that have added this role onto their classroom responsibilities. This toolkit will address the roles and responsibilities of the garden leader as if either a parent volunteer or a teacher is in charge.

Principal—In most cases, the principal is not involved on a daily basis with the activities from the school garden or the cafeteria. Most principals assume that these areas are running smoothly and may receive periodic updates. It is a good idea that the principal know about the GTC program as this is something that they can brag about to parents and to other school officials across the district.

Kitchen staff—In most cases, the leader of the GTC program from the cafeteria will be the kitchen manager. It is feasible to assign other staff members in the kitchen to watch over the GTC program, but ultimately the kitchen manager is responsible for the food safety in the kitchen.

Food Service Director—GTC programs almost always are approved and directed from the district-level and then put into action at the school level where the gardens exist. At the district level, the food service director will be the person that has the ultimate say on the protocols and the launch of the program.

**Health Department**—The USDA requires that school kitchens get inspected twice a year by the local health officials. Since the GTC program involves sourcing raw ingredients for the school cafeteria from the school garden it is recommended to involve the local health department in the development of the food safety protocols and the execution of the program. Most districts use the Health Department in an advisory role. It is a very good idea to inform the Health Department that the District is designing this program and even to share some of the early drafts of the protocols so that the Health Department knows that this work is going on. Once the final protocols are adopted by the district, share them with the Health Department so they are not surprised by any of the statements in the document.

#### Approach of this toolkit

This toolkit will provide the necessary steps to develop GTC protocols that emphasize food safety and the training protocols necessary to make sure that the food safety protocols are followed closely. There is no need to start from scratch with the GTC protocols since there are numerous examples across the country of successful implementation of GTC programs.

This toolkit will help you develop a GTC Team that will represent the different concerns in the district and create workshops to train the school garden leaders and the kitchen staff on how to implement the GTC protocols. Once these important people are trained, the toolkit assists in launching a pilot phase where 5-10 schools are recruited to be the first ones in the district to grow fresh produce for the school kitchens. The toolkit contains Harvest Forms to track the amount of fresh produce that is coming into the kitchens. There are also surveys to get feedback from the school garden leaders and kitchen manager on how the program was run for its first year and whether there is any need to tweak the program for a full district launch the following year.

In Austin Independent Schools, their GTC team was called the "Harvest Action Team" and consisted of a representative of the School Garden Collaborative, City of Austin Office of Sustainability, Sustainable Food Center (a local non profit community garden and farmers market organization), Austin Health Department and the District's Sustainability Department. As this group got together to develop the GTC protocols, there was much excitement to create this opportunity for the students and the school gardens. They also realized that this could be



a challenging program and that there would be lots of opportunities for the key stakeholders to learn about the necessary food safety requirements. The program is now in its second year in Austin and has been very successful and popular.

Throughout this whole process, Slow Food USA and Whole Kids Foundation will be available to support any district with technical support and resources to have a successful GTC program. The toolkit will highlight other resources that are available from the USDA Farm to School Program and the National Farm to School Network.

We are now ready to begin the process of creating your GTC program. The first step is to form a District GTC team that will oversee the development of the protocols and monitor the launch of the program. This team should consist of representatives of key departments in the district, such as Food and Nutrition Services, Facilities, and Risk Management. Other possible team members could be a teacher and/or principal representative and a school garden leader that would bring knowledge about the school gardens and classrooms. **Worksheet 1** will help you create the GTC team and get the necessary contact information from the team members.

#### **Worksheet 1: District Garden to Cafeteria team**

**Purpose:** The district GTC team represent key stakeholders in a Garden to Cafeteria program that will work together to develop and write the GTC protocols for the district. This team should include special skill sets that will contribute to the overall protocol development and the members should be able to work well together.

Name	phone	
Email		
Role/Department:		
Name	phone	
Email		
Role/Department:		
Name	phone	
Email		
Role/Department:		
Name	phone	
Email		
Role/Department:		
Name	phone	
Email		
Role/Department		

**Team Leader** 

# Safety concerns for a GTC program?

#### HIGHLIGHTS OF THIS SECTION:

School garden safety and GAP/GHP practices School kitchen handling and HACCP

Garden produce inherently carries no greater food safety risk than produce from any other source. In the GTC program, there are three areas that seem to pose the greatest amount of risk to food safety concerns:

1.

Growing practices in the school garden

2.

Harvesting practices and delivery to the school kitchen 3.

Handling fresh produce in the school kitchen

When GTC programs with food safety protocols were first being developed at the district level nearly 10 years ago, there were no guidelines being offered by the USDA for Garden to Cafeteria programs. Early designers of GTC programs had to look elsewhere for guidance in growing, harvesting and delivery food safely. The most logical place to receive guidance turned out to be USDA's *Good Agricultural Practices (GAP)* and *Good Handling Practices (GHP)* from the perspective of farmers and *Hazard Analysis of Critical Control Points (HACCP)* from the position of school kitchens. These are industry standard guidelines and were not created with school gardens in mind. However, we can use the practices as gold standards to develop food safety protocols. Below we briefly examine these food safety guidelines and how they played a role in developing the food safety protocols for GTC.



## Safe growing and harvest practices in the school garden

Across the country, fruit and vegetable gardens are appearing on school grounds to provide students with hands on opportunities in growing, harvesting and eating fresh produce and to learn about healthy eating habits. In general, these gardens are being led by volunteers, either parents or teachers, and the gardens are managed using organic garden practices. Since young children are very active in the garden, there is a strong effort to eliminate or use sparingly any chemical fertilizers, pesticides or fresh manures that could harm the health of children working in the garden. When it concerns the food being grown in the garden, the assumption has been that if reliable safe garden practices are being used, then the food coming from the garden should be safe to eat if simple washing practices are observed.

When it came time to use school garden produce in school meal preparation in Denver cafeterias, we reached out to the local health department to ensure we were in compliance with local food safety standards in the growing and harvesting of the fresh produce. The local health department's response was that the jurisdiction of the health department did not start until the food crossed the threshold of the school kitchen. Their advice was to consult with the USDA for food safety protocols for food growing in school gardens and harvesting safely for the cafeteria.

The best guidelines offered by the USDA in 2010 for growing and harvesting food safely on farms were the GAP/GHP audit procedures. According to the USDA website, "Good Agricultural Practices and Good Handling Practices are voluntary audits that verify that fruits and vegetables are produced, packed, handled, and stored as safely as possible to minimize risks of microbial food safety hazards. GAP & GHP audits verify adherence to the recommendations made in the U.S. Food and Drug Administration's "Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables" and industry recognized food safety practices."

To checkout the GAP/GHP audit requirements, you can easily download this pdf version of them from the USDA website. https://www.ams.usda.gov/services/auditing/gap-ghp/audit

A review of the GAP/GHP audit checklist In Appendix B of this toolkit shows that only the sections of *General Questions*, *Part 1: Farm Review*, and *Part 2: Field Harvest and Field Packing Activities* are most relevant for a school garden program and harvest for the cafeterias (highlighted in red). The other sections deal with a packing house, transportation, wholesale distribution and the flow of visitors through the facility. Since we are keeping the GTC program to a simple school garden harvest and delivery to the cafeteria at the same school, these latter considerations are not necessary for us to pursue.

When we look closer at the first relevant sections of the GAP/GHP audit, there are a number of statements listed under each header for the farmer to consider (See Appendix C). To design protocols for a school garden setting, we can pull out the statements that are most relevant and manageable for a volunteer school garden leadership team and a bunch of students. For example, Water Usage is one major category under Farm Review. In a typical school garden setting, almost all gardens are watered using the same municipal water that goes into the school kitchen, so there are no issues concerning testing for water quality for pathogens.

Given recent cases of lead in municipal water supplies across the country, it will be prudent to check with the school district to see if water sources coming to the school have been tested to be safe. In the rare cases where the water supply for a school yard is something other than the municipal water system (such as wells, ponds, ditch water or rain barrel systems), then water safety checks need to be added to the GTC protocols.

In a similar manner, Worker Hygiene is an important part of food safety on the farm and should be in the school garden. Students that participate in the harvesting for GTC can be trained how to wash their hands well and how to use other simple measures so that they do not contaminate the food they are harvesting.

Overall, the items listed below from the GAP/GHP audit are the most appropriate for consideration when developing GTC protocols for a school garden (Appendix C):

1. 2.

Implementation Traceability of a food safety plan

3.

Worker Health & Hygiene

4.

Water Usage

**5.** 

Manure and Biosolids

**3.** 

Field sanitation and Hygiene

**7.** 

Field Harvesting and Transportation

**Chapter 4: How to Construct Your Own GTC Protocols**, will guide you through a process to select the important food safety measures based on the GAP/GHP standards to go into your GTC protocols.

### HACCP: Handling fresh produce in the school kitchen

Once the fresh produce from the school garden is delivered to the kitchen, GAP/GHP principles are not the key food safety guidance that direct school kitchen procedures. Instead, school kitchens follow a system called *Hazard Analysis and Critical Control Points (HACCP)*. According to the Food and Drug Administration, HACCP is "a management system in which food safety is addressed through the analysis and control of biological, chemical, and physical hazards from raw material production, procurement and handling, to manufacturing, distribution and consumption of the finished product." School kitchens are tightly governed by HACCP and the kitchen staff are well trained to identify possible hazards, how to prevent them and to deal with a hazard when they are identified.

In respect to fresh produce coming from the school garden, there are several possible hazards that could arise in the school kitchen. The FDA defines a hazard as a "biological, chemical or physical agent that is reasonably likely to cause illness or injury in the absence of its control." In most GTC protocols, the best way to minimize any hazards with school garden produce is with proper handling, washing and storage of the fresh produce in the school kitchen. For example, produce from the garden arrives in the kitchen in harvest baskets that were sterilized prior to harvest and then the produce goes into a standard produce washing procedure to remove any dirt and other contaminants. Since many school districts are active in farm to school procurement from local farms, the kitchen staff are usually trained on how to wash fresh produce in their



kitchens. Produce from the school garden does not need to be handled any differently than produce coming from a local farm.

For the purposes of this toolkit, it does not make sense to go in detail on how to develop a HACCP plan for the school garden produce. For most school kitchens, they already have in place a HACCP plan for fresh produce coming from local farms or a local distributor. Produce from a school garden can be worked right into those plans. For those school districts that have not been handling fresh produce and a GTC program is the first time that whole, raw, fresh produce is coming into the kitchens, this toolkit contains examples of HACCP protocols for handling fresh produce from Denver Public Schools (See Appendices D and E).

Based upon the discussion in this chapter, what are the general safety concerns of your district? Please use **Worksheet 2** to identify the major concerns from the GTC team using the prompts provided. The toolkit will address these concerns in later sections.

#### **Worksheet 2: Safety Concerns for a GTC Program**

**Purpose:** Before we begin to design protocols specifically for the GTC program, the district probably has some general concerns for a new program. Using the prompts below, try to identify some general concerns that the district has expressed previously when developing new programs.

Wh	at are the food safety concerns from the GTC team?
1	
Wh	at are the garden safety concerns from the GTC team?
1	
_	
Wh	at are the student safety concerns from the GTC team?
1	
Wh	at are the media concerns from the GTC team?
1	
Wh	at are the marketing concerns from the GTC team?
1	
Are	there other concerns from the GTC team?
1	
3.	

# Chapter 3: Examination of GTC protocols from other districts

#### HIGHLIGHTS OF THIS SECTION:

Similarities between GTC protocols of other districts Differences between GTC protocols of other districts

The goal of this toolkit is to help school districts develop their own set of GTC protocols that are suited for their school garden programs, the procedures used in the school kitchens and to be in compliance with local health departments and concerns of the districts. Fortunately, there are a number of school districts that have already done this work and we can study their protocols for ideas and inspiration. In this toolkit we have included GTC protocols from San Diego Unified School District, Denver Public Schools, Chicago Public Schools, and Austin Independent School District. We will look at these protocols to see what they share in common and where they are different. Through this process, a school district can start to identify what is important to them to



include in their own set of protocols. Using these other protocols as templates for developing you own not only saves time, but also helps to identify all the topics that need to be addressed.

## Similarities of GTC protocols across school districts

As you take a look at the sample GTC protocols in this toolkit, you will quickly notice similarities between them. In this next section, we will highlight these similarities and why they are important to include in your protocols.

Contact information. Most GTC protocols start with a page of contact information so that the GTC team at a school is able to reach out to other key players if there are any issues to overcome, topics to discuss or information to share. Usually, the GTC team at a school is made up of the following people:

**Garden Leader** (if there is more than one garden leader with different duties, best to list multiple Garden Leaders and their contact information)

**GTC Leader** (someone from the Garden team that will be the lead for the GTC harvests)

#### Kitchen Manager

#### **Principal**

Program introduction and basic information. Often, there are several paragraphs about the GTC program, the history of the program and how the protocols were developed. This sections also defines the limitations and restrictions of the program, such as produce can not be shipped from one school to another school.

Food safety checklist. The bulk of most GTC protocols is some sort of food safety checklist or a description of procedures to minimize any food safety risks. San Diego Unified School District has a list of "10 Conditions for Use of Garden-Grown Produce in School Kitchens" that is modeled after the USDA GAP and GHP protocols. Garden teams must go through the checklist to make sure they are in compliance with all the statements. Most can be directly tied to a GAP or a GHP standard, but some are unique to the school district's special needs. For example, Denver Public Schools recently added protocols for hydroponic systems as some schools in the district are buying Tower Gardens and other hydroponic systems.

As we look at some of the existing GTC protocols from school districts around the country, we see some obvious links to the USDA's GAP and GHP protocols and many similarities between protocols from different school districts. Obviously, school districts and local health officials have found a high degree of comfort with starting with the USDA GAP and GHP guidelines.

Approved produce list. Most districts include a list of produce items that they will accept from the garden to be used in the cafeteria. This list generally comes from what is used in the existing menus for the school meals. If the school kitchens have not been roasting root vegetables, they may not want to take things like beets, turnips and rutabagas that generally require roasting. Salad bars have been a huge boon for GTC programs because generally anything that can be eaten raw can be added to a salad bar. This list can grow over time as the school kitchens add menu items to the meal service all the time.

Signature page. Most protocols include a page of signatures from the GTC team to make sure that everyone has read and understood the protocols and their part in the program. This page is important for record keeping and to show the Health Department that the district took the time and effort to get everyone trained on the same page for the program.

Example of a log sheet. For purposes of record keeping and traceability, it is important that every GTC harvest be recorded on a formal log sheet with dates, names of participants, weights, and signatures. As Chicago Public Schools says "If you did not record it, it did not happen". Although we are in the age of electronics, it is best to have these sheets printed out so that they can be used in any setting. The final act in a GTC program is when the Kitchen Manager is presented with the produce from the students and the completed log sheet. The Kitchen Manager will treat this log sheet just like any other invoice she gets from her produce distributor. She should inspect the produce, reject any pieces that she cannot use in the kitchen or may be damaged, and then sign a copy of the log sheet. Typically the signed log sheet stays with the Kitchen Manager and turned over to the central office at some point. The Garden Leader can make a copy of this sheet for her own records. If the district is paying for the produce, this sheet will get recorded on some spreadsheet where the financial calculations are performed.

### **Differences of GTC protocols** across school districts

The real differences between GTC protocols from other districts are quite subtle. These differences usually reflect some unique issues within the district that a stakeholder inserted into the protocols to meet a specific need for the district. For example, San Diego Unified School District lists the following rule: "Gardens shall not be planted over septic systems or leach fields." When asked why this standard is included in the protocols, the current leadership of the GTC program had no explanation. It was suggested that this was inserted because someone found it in another set of protocols.

As you develop your set of GTC protocols, it is certainly permissible to insert standards that are unique to your district if they are going to have a direct impact on the success of the program. We need these protocols to satisfy the concerns of all the stakeholders involved but at the same time we don't want the protocols to be too overbearing. The GTC program will never be a success if the protocols are too restrictive and cumbersome for volunteers and students to follow.

#### Worksheet 3: Building a template for the GTC protocols

There is no single way to lay out the document that contains the GTC protocols, there are some common sections that are important for any GTC document. This worksheet will help you lay out your GTC document. You will use this worksheet with the GTC Committee to develop your protocols.

Section 1: Header with school district information, probably some sort of letterhead

Section 2: Contact information for the major stakeholders at a given school.

This list should include blanks for the following people at the school level:

School Garden Leader

GTC Leader (from the school garden; if different than the school garden leader)

**Principal Kitchen Manager** 

**Key Staff person** (if one exists that oversees the program for the principal)

#### **Section 3: Program Introduction and Purpose**

This is a statement from the GTC team that clearly lays out the purpose of the program. You don't need to describe the GTC rules in this section but it is a good idea to provide an overview of the program and how it fits into the overall mission of the school district.

#### **Section 4: Food Safety Checklist**

This section is the body of the document, where the food safety protocols are described for the garden leaders and the kitchen manager to follow. This section can be a series of statements that the garden leader and kitchen manager check off as they are completed. Or it could be a narrative that describes the different steps in details, providing guidance for the garden leader and kitchen manager to follow.

#### **Section 5: Approved fresh produce list**

School gardens typically grow many types of fruits and vegetables for the students to explore. Some of these items may easily fit into the school meal program. Other items may need more preparation by the kitchen or may not fit in directly to the current menu.

#### Section 6: Signature page

This section should look a bit like Section 2, in that it has titles and lines for the the major stakeholders to sign off that they understand the protocols and the responsibility to follow them.

#### Section 7: Produce log sheet

This should be a template of a Log Sheet that the students and GTC leader will list the produce items that are being delivered on any harvest day.

#### Other sections

Does your district require any other documents, forms or details to be included in the GTC protocols?

#### Chapter 4:

# How to **construct your own** GTC protocols

#### **HIGHLIGHTS OF THIS SECTION:**

Schedule of meetings for the GTC team Assignments for the GTC team

This toolkit up to now has prepared the user for getting ready to write their own GTC protocols. In this section, we will lead you through a series of steps designed to support your GTC team as they go through some of the templates included in this toolkit. By the end of this section, you will have a set of GTC protocols ready to pilot in a group of schools.

This section is written to guide the Team Leaders and the district GTC team through a series of meetings and work tasks to develop the GTC protocols. You can use this work plan as guidance and



adjust it according to the capacity of the GTC team. This plan details four separate in-person meetings of the GTC team with assignments before the meetings start and in between the meetings. This is one way to develop the GTC protocols while not putting a large burden on the GTC team.

#### **ASSIGNMENT 1:**

#### Assemble your district GTC team

In Worksheet 1, the Team Leader started to detail the major stakeholders from the district that would develop the GTC program. The district GTC team should include the major stakeholders involved in moving fresh produce from the school gardens to the school cafeterias. This list will have some common titles across districts as well as some unique players within some districts. As you build your list, try to populate the team with people that have key skill sets in support of the GTC program, have proven track records of working well in a team setting, and completing tasks that are assigned to them.

#### On the district GTC team, the team should include these skillsets:

School garden harvest experience

Food service experience from the school kitchen perspective

Food safety experience from the district perspective, often a manager from the Food Service department

Community partner that supports school gardens, often a non-profit

We would not recommend having a representative from the local health department on the district GTC team but rather have this person be a reviewer of the draft GTC protocols. Typically, the local health department is happy to review a plan but not to help develop the plan from the start. To prepare for Meeting 1, assign **Worksheet 2** for the GTC team to complete.

#### **MEETING 1:**

### The district GTC Committee comes together to begin the process necessary to come up with a set of GTC protocols.

The GTC Committee should discuss as a group the goals of a GTC program for the district and what are the priorities and concerns of each member of the Committee that should be reflected in the final GTC protocols. The responses in Worksheet 2 may be helpful in this discussion. It is not necessary to develop the GTC protocols from scratch as there are several great examples of existing GTC protocols in this toolkit. Appendix A has the links to the GTC protocols of other school districts. Hand out the templates from at least 3 districts for the GTC team to review. As a team, talk through this toolkit and review the process moving forward.



#### **ASSIGNMENT 2:**

Read through the three district GTC protocols handed out at Meeting 1. Your task is to determine which set of protocols best represent the program for your district. As you read through each set, circle the areas that you like best and cross out areas that don't represent your program. Come to the next meeting ready to choose one of these GTC protocols that you feel is a great place for the committee to start developing your GTC protocols."

#### **MEETING 2:**

"Thanks for reviewing the GTC templates handed out in the last meeting. In this meeting, we will as a group try to select one of the templates as best representing our district's interest. Once we select the best template for our efforts, let's go through this template and discuss the parts that we like and those parts that we don't need to include. We will start to build our GTC protocols based on what we like from this template. The goal of today's meeting is to have a working draft of our own GTC protocols."

#### **ASSIGNMENT 3:**

Read through the remaining templates in Appendix A and identify any parts from these templates that need to be added to the working document generated from the last meeting. Each team member should copy and paste these sections to the team leader in an email to be added to the GTC protocols.

#### **MEETING 3:**

Discuss an updated version of the GTC protocols with the additions suggested by everyone. As a team, read through this version and discuss any changes or additions that need to be included. By the end of this meeting, you will have GTC Protocols that are 95% finished.

#### **ASSIGNMENT 4:**

Share the nearly completed toolkit with the necessary people in your district (eg., Food Service Director, Legal Department, Risk Management) and with local government officials (most likely the Health Department). Gather all these comments to be shared with the GTC team in the next meeting.

#### **MEETING 4:**

Share all the feedback from the health department and other district departments with the GTC team. Discuss any final changes to the GTC protocols based on this feedback.

#### **ASSIGNMENT 5:**

Prepare a final document based on all the recent feedback. Add some design features to the document like district letterhead and logo and the logos of any support groups. Be sure to have the signature pages at the end so that the different departments can sign off on these protocols.

#### **MEETING 5:**

**Gather stakeholders to sign the final document.** Make plans to launch a pilot program. See **Chapter 6.** 

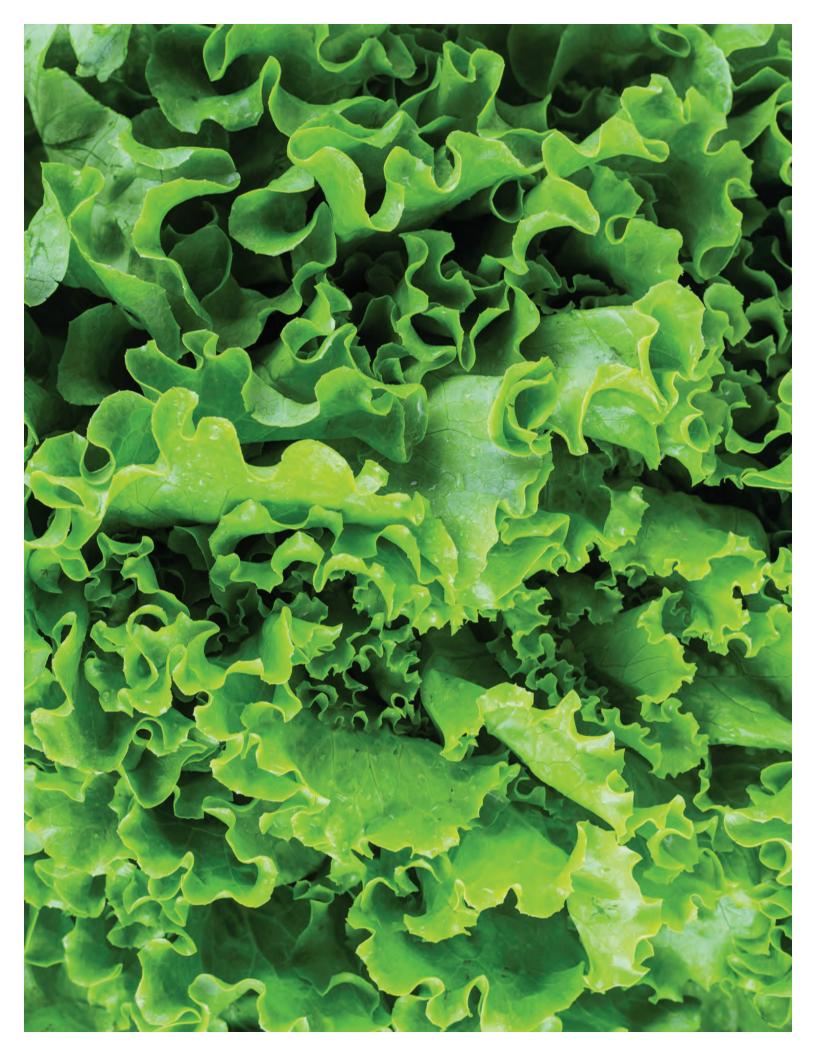
#### **ASSIGNMENT 6:**

**Distribute the final GTC protocols to all the major stakeholders.** Ask them to review this final document and add their signature to the document.



#### **Worksheet 4: A calendar for GTC development meetings**

ASSIGNMENT 1:	MEETING 1:
Assemble your district GTC team	Discuss the goals and priorities for the GTC program.  Hand out or email copies of the GTC templates found in this toolkit.
Date and Location of Meeting:	
ASSIGNMENT 2:	MEETING 2:
Review the GTC templates and pick your favorite.	As a group, select one GTC template as a favorite. Use the best parts in your draft GTC protocols.
Date and Location of Meeting:	
ASSIGNMENT 3:	MEETING 3:
Read through the remaining templates and identify any important parts to be added to your GTC protocols.	Let's review the final draft of our GTC protocols before we send to Health Department to review.
Date and Location of Meeting:	
ASSIGNMENT 4:	MEETING 4:
Send GTC protocols to district and local officials for their review.	Share all the feedback from stakeholders and tweak GTC protocols
Date and Location of Meeting:	
ASSIGNMENT 5:	MEETING 4:
Prepare a final document based on all the recent feedback.	Gather stakeholders to sign the final GTC protocols.
Date and Location of Meeting:	



# Chapter 5: How to pay for the school garden produce

#### **HIGHLIGHTS OF THIS SECTION:**

USDA strategies for SFAs to purchase school garden produce How to calculate prices for school garden produce based on wholesale prices

In this chapter we will show how SFAs can use their federal funde to purchase food trom the school garden.

One of the largest roadblocks often to setting up a GTC program is the misconceptions surrounding the USDA rules for using School Food Authority's (SFA) funds to pay for the school garden produce that goes into the school meal program. Food Service Directors hedge in paying for the produce because they feel they need to bid out the purchase like any other purchase for the meal program. So instead, some Directors ask that the produce to be donated to the school meal program. While it is important to show the students that school gardens are a viable source for healthy food for the cafeteria, there are costs associated in growing the food so it is reasonable to expect some sort of compensation from the SFA for the produce. In addition, if the students see that the Food Service Director is paying for the produce, they will see their hard work and the fresh produce to be highly valued.

In this section of the toolkit, we will provide the most update policies from USDA on how the SFA's funds can be used to purchase school garden produce and how these purchases support the overall school food program. There are several USDA memos and guides that speak to these policies and how they can be implemented by Food Service Directors:

Appendix H: School Garden Q&As Memo (SP 32-2009)

Appendix I: Farm to School and School Garden Expenses Memo (SP 06-2015)

Appendix J: 10 Facts About Local Food in Child Nutrition Programs

The USDA provides the following questions for SFAs to assess if costs associated with school gardens are allowable from the nonprofit school food service account:

Is the school garden program (including nutrition education, taste tests, aiding in the procurement process, offering marketing support, purchasing garden supplies and equipment) supporting the operation or improvement of the school meal program and are the expenses reasonable?

In cases where only a portion of the school garden coordinator's time is spent directly supporting the school food service operation, does the nonprofit school food service account only cover the portion of the coordinator's salary that is deemed necessary, reasonable, and allocable for the operation of the school meal program?

Essentially, are the activities of the school garden program supportive of the school meal program? The USDA even answers this question for us in the 2015 memo by listing ways that school gardening can improve school food service operations:

- Improving student attitudes towards fruits and vegetables
- Increasing consumption of fruits and vegetables
- Improving job satisfaction and staff retention
- Providing quality fresh product at competitive prices or no cost, and
- Increasing school meal participation.

So according to the USDA, school gardens do support the school meal operations and thus are eligible for support from SFA funds. The next step is to examine the different ways that a SFA can spend their funds on the school garden programs. There are at least four different ways supported by the USDA for the SFAs to use their federal funds to pay for products coming from a school garden:

**School Food Service Investment**—To support education about healthy eating, SFAs can purchase seeds, seedlings, and amendments for school garden projects. In this scenario, SFA provides these inputs to the gardens at the beginning of the season and then receives garden produce throughout the season.

Intergovernmental Agreement—This arrangement only works if the garden is run by a public agency such as the school or district, a department within the district, or by another state or local government agency such as a local Department of Recreation or a state Department of Agriculture rather than a non-profit partner. With this option, the SFA enters into an agreement with the school to provide fresh produce from the school garden for a fair market price.

**Small Purchase (Informal procurement)**—The SFA can purchase the produce straight out, since in most cases the value of the produce will fall below the most restrictive applicable small purchase threshold. The SFA may request a quote from the school garden leader to verify a competitive price for the garden produce compared to at least 3 other vendors. This is the best option when a non-governmental entity, like a non-profit organization, runs the school garden program.

**Micro purchase**—The USDA allows SFAs to make purchases from vendors with a \$3,500 threshold. This process does not require the SFA to seek out multiple bids for comparisons. If a district has multiple garden sites contributing to the GTC program, the SFA can use the micro purchase plan individually at each school thus increasing its purchasing capabilities.



In most of these scenarios, the school garden leader may be asked to come up with a fair market value for the produce it provides to the cafeteria. Since most garden leaders are not familiar with wholesale prices, there are several guides to help determine a fair price:

1.

Contact local distributors to get fair market pricing for that season.

2.

There are USDA Standard Terminal Market reports that give current wholesale prices for fruits and vegetables around the country: https://www.ams.usda.gov/marketnews/fruit-and-vegetable-terminal-markets-standard-reports

**Worksheet 5** will allow the school garden leader to use whole prices obtained from the above resources to calculate prices for individual pieces of produce or to determine the price per pound for different kinds of produce.

#### **Spotlight: Denver Public Schools**

From the beginning of the GTC program in Denver, the SFA insisted on purchasing the fresh produce from the school garden programs. At the start of the program, the food service department did not have the infrastructure to process the volumes that were harvested and handle the payments back to the schools. Slow Food Denver helped to develop the GTC program for DPS, so they offered to help with the data collection and act as a "go through" for the payments to the schools. After each week's GTC

harvest, the schools would report their harvest totals to Slow Food Denver, which were tabulated on an Excel spreadsheet. At the end of the year, Slow Food Denver researched prices from local distributors for comparable produce items and calculated an amount due to each school. DPS then wrote a check to Slow Food Denver for the Grand Total. Slow Food Denver then cut separate checks to each school for their fair amount based on their harvest totals (average \$50–\$300 per school). After three years of this process, DPS food service was ready to take over the payment processing and has been in charge of payments ever since.



### Worksheet 5: Calculating the cost for school garden produce

Use this worksheet to calculate a price for each produce item coming from the garden, either by the piece or by the pound. These values will be very useful to determine the value of the small quantities coming out of the school garden.

#### If the vendor's price sheet list "price per pound":

Cost from vendor: \$ \_\_\_\_\_ per pound.

How many pieces per pound? \_\_\_\_\_ approximately

Final price per piece = \$ price per pound / number of pieces per pound

#### Example:

Produce item: Tomatoes

Cost per pound from vendor: \$5.25 per pound How many pieces per pound: 3 approximately

\$5.25 / 3 = \$1.75 per tomato

#### If the vendor's price sheet list "per case":

Cost from vendor: \$ \_\_\_\_\_ per case.

How many pieces per case? \_\_\_\_ approximately

Final price = \$ price per case / number of pieces in a case

#### Example:

Produce item: broccoli heads

Cost per case of broccoli heads: \$35.00 per case How many heads per case: 15 approximately

\$35.00 / 15 = \$2.33 per head





#### Chapter 6:

# How to launch a pilot GTC program

#### **HIGHLIGHTS OF THIS SECTION:**

Launching a pilot GTC program

Marketing the GTC program to the school community

Evaluation of the GTC program

Now that the GTC protocols have been developed, it is time to design a pilot program to test out the protocols. The pilot program can be as small or large as you want, but we recommend that at least 5-10 school gardens be included in the pilot phase so that enough data can be collected to test out the protocols. **There are five steps in a pilot program to test out the GTC protocols:** 

1.

Recruit schools

2.

Train school garden leaders and kitchen managers

3.

Launch and monitor the program in progress

4.

Market the GTC program to the school community

5.

Evaluate the program after the harvest season

#### **Recruit Schools**

First, you need to recruit school garden leaders that are interested in the GTC program and have the capacity in their school garden program to take on the GTC program. While there may be excitement around the GTC program, some garden leaders may not have the volunteers to help out on harvest day or the gardens may not have enough or the right kind of produce for the GTC program. As the school garden leaders respond to the opportunity to participate in the pilot program, you will also want to check in with the kitchen manager at that school to make sure they have the capacity and infrastructure to participate in the pilot

program. It is possible that the school kitchen is not ready to participate in the program due to missing infrastructure (produce wash sinks, adequate refrigeration) or lack of staff time, even though the garden leaders are ready. Some of these challenges will be overcome with training of the kitchen staff on how to handle fresh produce. But infrastructure challenges may be too great to overcome if the budget does not allow for modifications to the kitchens.

#### **Training Workshops**

Once you have identified the schools that have garden leaders and kitchen managers on board, the second step is to develop a training workshop to introduce everyone to the GTC protocols. Typically, an hour workshop will be necessary to introduce the school garden leaders to the GTC protocols and what needs to be done in the garden to insure a safe harvest and transfer of the fresh produce to the school kitchen. A typical training workshop would include a group of school garden leaders gathered with some members of the GTC Committee to go over and discuss the GTC protocols. It is helpful to walk through the protocols in a garden setting so that the garden leaders can see actual examples of how the protocols are enforced in a real garden. If special equipment is also a part of the protocols, for example harvest baskets, the training workshop is a good place to show off this equipment and even pass out the equipment to the garden leaders if available. See **Appendix F** for an outline for a GTC Training Workshop for School Garden Leaders.

Depending on the state of food preparation in your school kitchens, it may be necessary to do some training for your kitchen staff. If your kitchens just receive washed, cut and bagged produce from your distributor, then it may be necessary to conduct a workshop for your kitchen staff on how to handle whole, raw and fresh produce. The Institute of Child Nutrition has a series of resources on produce safety that describe best practices for receiving, storing, handling, and purchasing fresh and fresh-cut produce through videos, fact sheets, and PowerPoint presentations. http://www.nfsmi.org/ResourceOverview.aspx?ID=394

#### Launch and monitor the program

Once the training workshops have been conducted (ideally the month or so before the harvest season would start), allow your schools to start the GTC program from their gardens. It is a good idea if one member of the GTC team visits a school on their harvest day to observe how the protocols are being put into action. This monitor can provide helpful feedback on how the school garden leader and the kitchen manager are following the protocols to insure food safety. This visit by the GTC team needs to only happen once per season in most cases.

## Market the GTC program to the school community

Once the GTC program is up and running, even in the pilot phase, this is a good time for the Food Service Department to share with the community that student meals are benefitting from fresh produce from the school garden. Programs like GTC are very well received by parents and community members and are seen as steps forward to healthier and tastier school meals. Marketing efforts should be employed to bring the GTC program to the attention to all stakeholders in the school community.







### Signage in the cafeteria

Students are the direct beneficiaries of the GTC program so they need to know that it is up and running. The best way to capture the students' attention is to post a colorful sign at or on the salad bar showing what items are from the school garden. In a typical GTC program, a small handful of students actually harvest from the school garden for the cafeteria. So great signage on or near the salad bar showing all students which items on the salad bar came from the school garden is a very effective way to generate excitement about the program.

#### **Share with parents**

It is very important to get the message home to the families that the GTC program is up and running. All schools have communication channels to get info home to the parents about their child's school day. Whether the communication channels are via emails, paper folders or social media, a simple flyer can be prepared to send home to families describing the GTC program. Parents will be very excited to hear that fresh produce from the school garden is being served



as part of the school meals. The GTC program is something that the parents will get behind and could convince them to allow their children to participate in the school meal programs.

### Prepare statements for the principal

Principals like to brag about their school and all the activities and resources they offer to students. Whether it is giving school tours to prospective families, meeting with the school board or even in staff meetings, principals love to share positive news with anyone that will listen. It would be a great idea for the school garden committee to prepare some talking points for the principal about the GTC program and how it is impacting the students and the school food culture. Especially if the program is new to the district, the principal can brag that this school is breaking new ground which is always a big hit with parents, school board members and teachers.

#### Share with the community

Members of the greater community are also good targets for marketing efforts around the GTC program. School Board members love to hear about the successful programs in their schools. The general public is interested in how the schools are supporting the children and programs like GTC show the public that the school district is keenly interested in the greater health of its students. Facebook and Instragram posts and Twitter messages are great ways to inform the greater public about the GTC program.

### **Evaluate**

Finally, at the end of the harvest season, the GTC team should reach back out to the pilot schools to see how things went. Usually a short survey to the garden leaders and to the kitchen managers will reveal if there were any problems and if they have any suggestions on how to make things go better. Denver Public Schools conducts an annual survey of the school garden leaders following the GTC season to hear about any necessary tweaks of the program and to collect success stories. See **Appendix K** for a sample survey from Denver.

# Worksheet 6: Marketing ideas for your GTC program

The success of the GTC program, as well as the school meal program, depends on getting the word out to the community that there are positive changes happening for the students' meals. Use this worksheet to identify different audiences that are good targets to hear about the new GTC program and how you are going to reach out to them. Consider both existing communication channels and perhaps some new ideas of reaching out to these audiences.

larget audience: Parents
Communication Channel:
Message:
Target audience: Students
Communication Channel:
Message:
Target audience: School administrators and teachers
Communication Channel:
Message:
Target Audience: School Board Members
Communication Channel:
Message:
Target Audience: Taxpayers
Communication Channel:
Message:
Target Audience:
Communication Channel:
Message:
Target Audience:
Communication Channel:
Message:



## **Appendix A: Important Links**

### **USDA** websites

### How to purchase local foods

https://www.fns.usda.gov/farmtoschool/procuring-local-foods https://www.fns.usda.gov/sites/default/files/f2s//Local\_Procurement\_Decision\_Tree.pdf

### Pricing guides for fruits and vegetables from Terminal Markets across the US

https://www.ams.usda.gov/market-news/fruit-and-vegetable-terminal-markets-standard-reports

### Strategies for buying school garden produce

https://www.fns.usda.gov/sites/default/files/f2s/F2S\_Procuring\_Local\_Foods\_Child\_Nutrition\_Prog\_Guide.pdf

#### **Institute of Child Nutrition**

http://www.nfsmi.org/ResourceOverview.aspx?ID=394

# **Websites from GTC programs**

### San Diego Unified School District

https://www.sandiegounified.org/garden-caf%C3%A9

Protocols: https://www.sandiegounified.org/sites/default/files\_link/district/files/food-nutrition-services/SDUSD%20G2C%20Protocol%203%204%2015.pdf

### **Denver Public Schools**

http://foodservices.dpsk12.org/farm-garden.php

**Protocols:** Middle of web page.

### **Austin Independent School District**

https://www.austinisd.org/nutritionfoodservices/garden-cafe

Protocols: https://www.austinisd.org/sites/default/files/dept/nutrition/docs/Austin\_ISD\_School\_Garden\_to\_Cafe\_Program\_0.pdf

#### **Chicago Public Schools**

http://www.lifelab.org/wp-content/uploads/2013/04/schoolgardenfoodsafetyFINAL.pdf http://cps.edu/About\_CPS/Departments/Pages/farmtoschool.aspx

# **Appendix B: USDA Good Agricultural Practices/ Good Handling Practices**

### **Audit Verification Checklist**

### **General Questions**

Implementation of a Food Safety Plan Traceability

Worker Health & Hygiene

### **Part 1: Farm Review**

Water Usage

Sewage Treatment

Animals/Wildlife/Livestock

Manure and Municipal Biosolids

Soils

Traceability

# Part 2: Field Harvest and Field Packing Activities

Field Sanitation and Hygiene Field Harvesting and Transportation

### Part 3: House Packing Facility

Receiving

Washing/Packing Line

Packing House Worker Health & Hygiene

Packing House General Housekeeping

Pest Control

Traceability

### Part 4: Storage and Transportation

Product, Containers, & Pallets

Pest Control

Ice and Refrigeration

**Transportation** 

Worker Health and Personal Hygiene

Traceability

### Part 6: Wholesale Distribution Center/ Terminal Warehouses

Receiving

Storage Facility/Temperature Control

Pest Control

Repacking/Reconditioning

Worker Health & Personal Hygiene

Shipping/Transportation

Traceability

# Part 7: Preventive Food Defense Procedures

Secure Employee/Visitor Procedures Secure Facility Procedures

#### RED = relevant to school gardens

**BLACK** = not relevant to school gardens

To checkout the GAP/GHP audit requirements, you can easily download this pdf version of them from the USDA website. https://www.ams.usda.gov/services/auditing/gap-ghp/audit

# Appendix C: Relevant Statements from the GAP/GHP Audit for a School Garden Setting

# Implementation of a Food Safety Program

- 1. A documented food safety program that incorporates GAP and/or GHP has been implemented.
- 2. The operation has designated someone to implement and oversee an established food safety program.

## **Traceability**

1. A documented traceability program has been established.

# Worker Health & Hygiene

- 1. All employees and all visitors to the location are required to follow proper sanitation and hygiene practices.
- 2. Training on proper sanitation and hygiene practices is provided to all staff.
- 3. All toilet/restroom/field sanitation facilities are serviced and cleaned on a scheduled basis.
- **4.** Employees who handle or package produce are washing their hands before beginning or returning to work.
- 5. Workers are instructed to seek prompt treatment with clean first aid supplies for cuts, abrasions and other injuries.
- 6. Workers with diarrheal disease or symptoms of other infectious diseases are prohibited from handling fresh produce.

## **Water Usage**

- 1. What is the source of irrigation water? (Pond, Stream, Well, Municipal, Other). Please specify:
- 2. How are crops irrigated? (Flood, Drip, Sprinkler, Other) Please specify:
- **3.** A water quality assessment has been performed to determine the quality of water used for irrigation purpose on the crop(s) being applied.

### **Animals/Wildlife/Livestock**

- **1.** Crop production areas are not located near or adjacent to dairy, livestock, or fowl production facilities unless adequate barriers exist.
- 2. Crop production areas are monitored for the presence or signs of wild or domestic animals the entering the land.
- 3. Measures are taken to reduce the opportunity for wild and/or domestic animals from entering crop production areas.

## **Manure and Municipal Biosolids**

### Please choose one of the following options as it relates to the farm operations:

- **1.** Raw manure (untreated) or a combination of raw and composted manure (aged manure that was composted to create temperatures at least 131 degrees for 15 days to kill any weed seeds and pathogens) is used as a soil amendment. Raw manure should not be used in school gardens and any composted manure should come from a commercial source.
- 2. Only composted manure/treated municipal biosolids are used as soil amendments.
- 3. No manure or municipal biosolids of any kind are used as soil amendments.

### Soils

- **1.** A previous land use risk assessment has been performed.
- 2. When previous land use history indicates a Soils Questions possibility of contamination, preventative measures have been taken to mitigate the known risks and soils have been tested for contaminants and the land use is commensurate with test results.
- **3.** Crop production areas that have been subjected to flooding are tested for potential microbial hazards.

# **Field Sanitation and Hygiene**

**1.** Field sanitation units are located in a location that minimizes the potential risk for product contamination and are directly accessible for servicing.

# **Field Harvesting and Transportation**

- **1.** All harvesting containers and bulk hauling vehicles that come in direct contact with product are cleaned and/or sanitized on a scheduled basis and kept as clean as practicable.
- **2.** All hand harvesting equipment and implements (knives, pruners machetes, etc.) are kept as clean as practical and are disinfected on a scheduled basis.
- 3. Harvesting equipment and/or machinery which comes into contact with product is in good repair.
- **4.** Harvesting containers, totes, etc. are not used for carrying or storing non- produce items during the harvest season, and farm workers are instructed in this policy.
- **5.** Water applied to harvested product is microbially safe.
- 6. Efforts have been made to remove excessive dirt and mud from product and/or containers during harvest.



# Appendix D: Denver Public Schools HACCP-Based Standard Operating Procedure (SOP)

# Washing Fresh Fruits and Vegetables

### **Purpose:**

To prevent or reduce risk of foodborne illness or injury caused by contaminated fruits and vegetables.

### Scope:

This procedure applies to foodservice employees who prepare or serve food.

### Instructions:

Employee involved in the production or service of food must follow the procedures as outlined in "Washing Fresh Fruits and Vegetables."

### Kitchen Manager:

- 1. Ensure that all raw fruits and raw vegetables, including those that will be cut, combined with other ingredients, or otherwise processed into food products shall be vigorously rinsed under cold running potable water (do not soak produce). Gloves do not need to be worn during this process.
- **2.** Ensure that gloves are donned when handling produce, which will not be cooked *after* washing raw fruits and raw vegetables during processing.
- 3. Ensure that when washing produce, DPS employees use an indirectly drained food preparation sink with an approved eighteen inch self-draining drain board. In kitchens where vegetable preparation is limited to a few items and in limited quantity, the empty three-compartment sink may be used for food preparation if the sink is indirectly drained and the empty sink and drain board are cleaned and sanitized between changes in use.
- 4. Packaged fruits and vegetables labeled as being previously washed and ready-to-eat are not required to be washed.
- **5.** Train foodservice employees who prepare or serve food on how to properly wash and store fresh fruits and vegetables.

### **Employees and Kitchen Manager will:**

- 1. Wash hands using the proper procedure.
- **2.** Wash, rinse, sanitize, and air-dry all food-contact surfaces, equipment, and utensils that will be in contact with produce, such as cutting boards, knives, and sinks.
- **3.** Wash all raw fruits and vegetables thoroughly before combining with other ingredients, in an approved sink as described in number 3 in the above instructions including:
  - a. Unpeeled fresh fruit and vegetables that are served whole or cut into pieces.
  - b. Fruits and vegetables that are peeled and cut to use in cooking or served ready-to-eat.
- 4. Rinse fresh produce vigorously under cold running water (do not soak produce).
- **5.** Scrub the surface of firm fruits or vegetables such as melons or potatoes using a clean and sanitized brush designated for this purpose. Gloves do not need to be worn during this process.
  - **a.** Stickers must be removed before rinsing produce unless the produce item is being served whole as part of the Fresh Fruit and Vegetable Program/Breakfast in the Classroom or if the item is served whole and the peel is not edible (i.e. oranges, bananas, etc.).
- 6. After washing the produce and during processing, gloves must be worn.

- **7.** After produce is cleaned it must be placed in a clean and sanitized food grade reusable container; if the produce is returned to the original box, it must be re-cleaned and then placed in a clean and sanitized food grade reusable container.
- 8. Remove any damaged or bruised areas.
- **9.** Label, date, and refrigerate fresh-cut fruits and vegetables.
- **10.** Serve cut melons within 3 days if held at 41°F or below (see SOP for Date Marking Ready-to-Eat, Potentially Hazardous Food).
- 11. Do not serve raw seed sprouts to persons highly susceptible to foodborne illness such as preschool-age children.
- **12.** School garden and school farm produce should be washed using the procedure outlined above and these vegetables must be placed in a separate clean and sanitized storage container (kitchen staff can use any of their existing food grade storage containers) that is labeled "School Garden Vegetables" and the date of harvest. The school garden/school farm vegetables must be stored in the cooler/refrigerator for one day to reduce their temperature to 41°F or below.

### **Monitoring:**

A supervisory or other designated employee will visually monitor that fruits and vegetables are being properly washed, labeled, and dated during all hours of operation. In addition, food service employees will check the quality of fruits and vegetables in cold storage on a regular basis.

### **Corrective Action:**

Unwashed fruits and vegetables will be removed from service and washed immediately before being served. Fruits and vegetables placed in the original box must be re-cleaned and placed in a clean and sanitized food grade reusable container. Produce that shows any signs of decay (mold, etc) must be discarded immediately. Unlabeled fresh cut items will be labeled and dated. Discard cut melons or washed/ cut fruits and vegetables held after 3 days. Retrain any foodservice employee found not following the procedures in the SOP.

### **Verification and Record Keeping:**

A supervisory employee or other designated employee will complete the Food Safety Checklist to indicate that monitoring is being conducted as specified in this procedure. Maintain the Food Safety Checklist for a minimum of 3 years.

Date Implemented:	 	 
Ву:		
Kitchen Manager		
Date Reviewed:		
Ву:	 	 
Date Revised:	 	 
Bv:		

# Appendix E: Denver Public Schools HACCP-Based Standard Operating Procedure (SOP)

# **Farm to Table Produce Safety**

### **Purpose:**

To prevent foodborne illness caused by contamination by enhancing the safety of fruits and vegetables grown in school gardens.

### Scope:

This procedure applies to all who are responsible for growing, preparing, storing, and serving food, to include, food service, teachers, parents, volunteers, etc.

### **Keywords:**

Time-Temperature, Cold Holding, Good Agricultural Practices, Good Handling Practices

#### Instructions:

- 1. Train foodservice employees on using the procedures in this SOP.
- 2. Follow State or local health department requirements.

### Site Selection, Materials, and Water Use

- **1.** Locate gardens away from potential contamination sources and/or on higher ground.
- 2. Locate the garden near municipal water sources for ease in watering and cleaning.
- **3.** Contact the utility companies or 811, the national *Call Before you Dig\_number*, a few days before digging to ensure you avoid gas or electric lines.
- **4.** Test ground soil to determine levels of contaminates such as chemicals, pesticides, and heavy metals (i.e. lead, barium, cadmium), especially if located near high-traffic zones or industrial areas.
- **5.** Test all non-municipal water sources at least annually, for potentially harmful organisms to make sure they meet the standards of the Environmental Protection Agency (EPA).
- **6.** Consider purchasing soil that has been commercially packaged and labeled for growing food crops. Soil purchased from a commercial source ensures traceability and protects from any potential physical contaminants that might be found in the soil.
- 7. Create reasonable barriers to keep animals (wild and domestic) away from the garden. In high-risk areas, consider fencing with a locked gate to prevent unauthorized individuals from gaining access to the area in order to deter both intentional and unintentional contamination.
- **8.** Use non-toxic, non-leaching materials for raised-bed gardens, containers, stakes, or trellises. Pressure treated wood, used tires, single use plastics, old railroad ties, etc. are not safe to use because of potential contamination.
- **9.** Select non-allergenic and non-toxic plants. Check with your local Cooperative Extension office if you need assistance determining plant safety or toxicity.
- **10.** If not using potable, municipal water, maintain water testing records.
- **11.** Use clean, food grade containers to transport water.
- **12.** Do not allow students to drink from the watering hose; the water may be safe, but the hose may harbor parasites.

### **Chemical and Fertilizer Use**

- 1. Do not use any pesticides or herbicides due to potential health hazards to children.
- 2. Read and follow the manufacturer's instructions when using fertilizer.
- 3. Secure all fertilizers in a safe and locked location when not in use.
- 4. Allow only adults to handle fertilizers.
- 5. Check with your local health department about applicable Occupational Health and Safety Administration (OSHA) hazard communication requirements. Maintain Material Safety Data Sheets (MSDS) as required. More information is available at: http://www.osha.gov/dsg/hazcom/index.html.
- **6.** Maintain information on safe use and potential hazards that is available on product labels or from the manufacturer, for all fertilizers.
- **7.** Label the container with the common name of the fertilizer if transferring fertilizers into a dispensing container. Never use a food container.
- **8.** Dispose of fertilizer and its containers according to the manufacturer's instructions.

### **Compost and Manure Use**

\*Not comprehensive—contact local Cooperative Extension office or composting expert for assistance

- **1.** Avoid the use of raw manure. Composting raw manure for school gardens is not recommended due to increased risk of contamination from pathogens that are not completely destroyed.
- **2.** Consider purchasing traceable, commercially prepared compost that is safe for use in edible gardens if manure-based compost is desired.
- 3. Consider using worms to form vermicompost.
- **4.** Add only plant products, such as fresh fruit and vegetable culls from food production (apple and pear cores and vegetable trimmings), to a school compost pile. Other plant material, such as grass clippings, leaves, and twigs may be added to fruit and vegetable waste.
- **5.** Do not use animal products, animal waste, or any cafeteria waste that might have animal products in compost. Harmful pathogens might be introduced through animal products in compost material. These products must be properly managed to ensure their destruction.
- 6. Always wear gloves when handling compost material.
- **7.** Locate the compost pile in a secure location away from potential contamination, such as garbage, water runoff, etc. Restrict access by animals as much as possible.
- 8. Avoid contact with compost if you have a mold allergy.

### **Growing and Harvesting Produce**

- **1.** Ensure all persons, including staff, students, and volunteers receive basic food and gardening safety training to include hand washing, personal hygiene, cleaning and sanitizing equipment, handling produce, and glove use. Refer to SOPs outlined in your HACCP plan.
- **2.** Do not allow anyone to work in the garden while sick.
- **3.** Ensure harvesters wash hands thoroughly in warm, soapy water for at least 20 seconds and rinse with potable water. Ensure open cuts or wounds are properly covered prior to participating in the harvest. Hand washing must occur away from harvested produce.
- **4.** Harvesters should maintain proper attire; ensure closed-toed shoes are worn.
- 5. Consider using single-use disposable gloves when harvesting, or handling, fresh produce as an extra precaution.
- **6.** Harvest the garden regularly and remove any rotten, damaged, potentially contaminated (bird droppings, animal nibbles) produce. Unusable produce may be added to the compost pile.

- **7.** Use cleaned and sanitized food grade containers, such as plastic bins or buckets, to hold harvested produce. Do not use garbage bags, garbage cans, and any container that originally held chemicals. These types of containers are made from materials that are not intended for food use.
- 8. Clean harvesting tools, such as knives, scissors, etc., with soap and potable water immediately before harvesting.

### **Using School Garden Produce in your School Meals Program**

- 1. Check with State and local health department rules and regulations.
- **2.** The school garden coordinator should work cooperatively with the school nutrition director to plan the use of harvest from the garden. Discuss crops to grow, quantity, estimated harvest time, food safety practices, product quality, delivery, logistics, etc.
- 3. School garden coordinators should be in compliance with food safety practices.
- **4.** Do not use any produce that has been damaged or noticeably contaminated by animals or insects.
- 5. Refrigerate garden produce immediately, unless particular item is normal held at room temperature.
- 6. Store school garden produce separately from other sources of produce to maintain traceability.

### **Monitoring:**

A supervisor or other designated employee must visually observe proper food safety practices are being implemented.

### **Corrective Action:**

Retrain any foodservice employee not in compliance with the procedures. Discard any produce with signs of contamination or that does not meet school nutrition program standards.

### **Verification & Recordkeeping:**

A designated employee will complete the Food Safety Checklist and maintain all documentation for a minimum of three years plus the current year.

<b>Date</b>	nplemented:	
By: _		
ŀ	hen Manager	
Date	Beviewed:	
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Ву: _		
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By: _		

# **Appendix F: GTC Training Workshop for School Garden Leaders**

Welcome to the Garden To Cafeteria (GTC) Training Workshop for your School District! In this workshop, we will go over the new GTC protocols that were developed so that school gardens can harvest fresh produce for the school cafeteria. We will show you the proper equipment, procedures and paperwork that is necessary to ensure food safety from the garden to the cafeteria. As you complete this workshop, your school garden will be ready to contribute fresh produce to the school cafeteria.

## **Review the GTC protocols**

### 1. Read the mission and purpose of the GTC program

### 2. Look over the different sections

- a. Contact info page
- **b.** GTC protocols
- c. Approved produce list
- d. Signature page

### 3. Review Harvest Recording Sheet (See Appendix G for an example)

- a. How to weigh the produce
- **b.** How to record the weights
- c. List all participants
- d. Approval and signature of Kitchen Manager

### 4. Demonstrate how to work with students and harvest in a school garden

- a. Pick up students in class
- **b.** Wash hands
- c. Walk students through the garden to discuss what is ready to harvest
- d. Divide students into small groups to harvest
- e. Demonstrate a field wash of the produce
- f. Take produce to cafeteria to weigh
- $\mathbf{g.}$  Demonstrate how to weigh produce to nearest  $\ensuremath{\ensuremath{\%}}$  pound
- h. Demonstrate how to mark the weights on the Harvest Recording Sheet
- i. Show how the Kitchen Manager approves and signs off on the Recording Sheet

# **Appendix G: Denver Public Schools GTC Harvest Sheet**

Date 1	Time	Site Produce Came From (Community Gardener name or School Garden)	Name of GTC Leader or Individual Harvesting with Students	Names of Students Harvesting	Harvesting Produce Item (be specific)	Weight (in lbs.)	Kitchen Manager Signature
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GTC Leaders - Please keep a copy of this record sheet so we have a backup in case the original gets lost in transit!

## Appendix H: 2009 USDA Memo/School Garden Q&As



# United States Department of Agriculture

Food and Nutrition Service

3101 Park Center Drive Alexandria, VA 22302-1500 MEMO CODE: SP 32-2009

DATE: July 29, 2009

SUBJECT: School Garden Q&As

TO: Regional Directors

**Child Nutrition Programs** 

All Regions

**State Directors** 

**Child Nutrition Programs** 

All States

Recently, we have received several questions regarding the operation of a school garden. Attached are questions and answers to address this issue. As in the past, please share this information with your school food authorities.



CYNTHIA LONG Director Child Nutrition Programs

Enclosure

- 1. **Q:** Can the school food service use funds from the nonprofit school food service account to purchase seeds for a school garden?
- **A:** Yes, with the understanding that the garden is used within the context of the program, i.e. selling the food or providing food in the classroom as part of an educational lesson.
- **2. Q:** Can the school food service use funds from the nonprofit school food service account to purchase items for the school garden such as fertilizer, watering cans, rakes, etc.?
- **A:** Yes, as long as the items are used for the purpose of starting and maintaining the garden.
- **3. Q:** Can a school sell food grown in their school garden that was funded using the nonprofit school food service account?
- **A:** Yes, as long as the revenue from the sale of the food accrues back to the nonprofit school food service account. Schools can serve the produce as part of a reimbursable meal or sell it a la carte, to parents, to PTA members, at a roadside stand, etc.
- **4. Q:** Are there health/safety issues involved with school gardens?
- **A:** Yes. SFAs need to familiarize themselves with the Federal, State, and local requirements regarding health and sanitation issues.
- **5. Q:** Can the school food service purchase produce from another school organization that is maintaining and managing the garden, such as Future Farmers of America (FFA)?
- **A:** Yes, the school food service may purchase produce from a garden run by a school organization such as FFA, which is an agricultural education program for students.
- **6. Q:** Can funds received through the Fresh Fruits and Vegetables Program (FFVP) be used to purchase seeds/tools/equipment for a school garden?
- A: No. FFVP funds may not be used for the purchase of any materials for school gardens.
- **7. Q:** What if there is excess produce from the garden left over at the end of the school year?
- **A:** The school should first see if the excess food can be used to benefit another program such as the SFSP. If that is not possible, they could try selling the food (as always, the profit must accrue back to the nonprofit school food service account) or donate it in accordance with State and local health/safety regulations.

### **Appendix I: 2014 USDA Memo** Farm to School and School Garden Expenses



**United States** Department of **Agriculture** 

DATE: November 12, 2014

Food and Nutrition Service

MEMO CODE:

SUBJECT. Farm to School and School Garden Expenses

3101 Park Center Drive Alexandria, VA 22302-1500

TO: Regional Directors

**Special Nutrition Programs** 

All Regions

SP 06 - 2015

**State Directors** 

**Child Nutrition Programs** 

All States

Recently, we have received several questions about the use of funds from the nonprofit school food service account to cover expenditures related to farm to school activities and school gardens. The questions and answers below address specific scenarios that school food authorities (SFAs) may be dealing with when considering the allowability of such costs. Please see SP 32-2009, School Garden O&As for additional information about school garden expenses.

Food and Nutrition Service's (FNS) goal is to ensure that program funds are used to operate and/or improve the school food service and that schools maintain a financially sound nonprofit food service account. We also encourage innovative ways of meeting the goals of the school meals programs; nutrition, food, and agriculture education and school garden activities may offer a viable opportunity for supporting the programs.

School gardening and other farm to school educational activities can improve school food service operations in a variety of ways. Below is a list of the positive impacts associated with school gardens:

- Improving student attitudes towards fruits and vegetables
- Increasing consumption of fruits and vegetables
- Improving job satisfaction and staff retention
- Providing quality fresh product at competitive prices or no cost, and
- Increasing school meal participation.

Recent research supports the above statements. Please see the USDA Farm to School **Program website** (usda.gov/farmtoschool) for a full synopsis.



Q1: How should SFAs determine if costs associated with nutrition, food, and agriculture education; school gardening; or other farm to school activities are allowable?

A1: School nutrition directors must comply with Federal regulations related to resource management, procurement, and cost principles regarding allowable costs when spending funds from the nonprofit school food service account. The primary purpose of the nonprofit school food service account is to operate or improve a school meals program that serves nutritious meals meeting the meal pattern requirements. When evaluating expenses (including program food, supplies, labor, equipment, services, educational activities indirect costs, etc.), SFAs must ensure the funds are supporting the operation and/or improvement of the school meals program and that all expenses are allowable (i.e., necessary, reasonable, and allocable) in accordance with Office of Management and Budget (OMB) Guidance under the "Cost Principles for State, Local, and Indian Tribal Governments"

SFAs may want to use the following questions to assess if costs associated with school gardens or farm to school activities are allowable expenses from the nonprofit school food service account:

- 1) Are the farm to school activities or school garden development (including nutrition education, taste tests, aiding in the procurement process, offering marketing support, purchasing garden supplies and equipment) supporting the operation or improvement of the school meal program and are the expenses reasonable?
- 2) Is the SFAs' food service program currently providing meals in compliance with National School Lunch Program and School Breakfast Program meal patterns and in compliance with resource management (i.e., compliance with the net cash resources in 7 CFR Part 210.14(b) and the availability and priority for use of excess net cash resources per 7 CFR Part 210.19(a)(1))?
- 3) In cases where only a portion of the school garden coordinator's, or farm to school coordinator's, time is spent directly supporting the school food service operation, does the nonprofit school food service account only cover the portion of the coordinator's salary that is deemed necessary, reasonable, and allocable for the operation of the school meal programs?

Once an SFA has completed this assessment, it may determine that funding a staff position or activities related to nutrition education, school gardening, or farm to school will support the operation and improvement of the Program, and that the associated costs are necessary, reasonable and allocable in accordance with the OMB Guidance under the "Cost Principles for State, Local and Indian Tribal Governments." Continual assessment of these costs is essential to ensure that the nonprofit school food service account can support these activities without placing the SFA at risk for failing to meet the key mission of serving nutritious meals to students meeting the meal pattern requirements.

Note that staff positions strictly supporting horticulture classes, Future Farmers of America clubs or other school associations cannot be funded by the nonprofit food service account.

# Q2: Can an SFA use nonprofit school food service funds to buy supplies or equipment for the school garden or school farm?

**A2:** As noted in SP-32-2009, *School Garden Q&As*, if the garden is used within the context of the school meal programs and serves the purpose of operating and improving the school meal program, supplies and equipment for the school garden may be purchased with funds from the nonprofit school food service account. Many costs associated with the school garden or farm to school efforts are for infrastructure which may last for several school years. Depending on the cost, hoop houses and high or low tunnels may be considered a supply or equipment.

Classifying moveable structures (e.g., hoop houses, high and low tunnels) as a supply or equipment is dependent upon the acquisition cost. 2 CFR Part 225 Appendix B Section 15 defines equipment as an article of nonexpendable, tangible personal property having a useful life of more than one year and an acquisition cost which equals or exceeds the lesser of the capitalization level established by the governmental unit for financial statement purposes, or \$5,000. Therefore, items with an acquisition cost less than the capitalization threshold established by the governmental unit or the federal threshold, \$5,000, are considered supplies. Supplies, such as seeds, fertilizer, water cans, rakes, etc., may be considered allowable with the understanding that the products grown in the school garden or school farm are used within the context of the Program.

As with any cost, the SFA should evaluate the expense using the previously listed assessment questions. However, equipment costs (as defined above) require prior written approval of its awarding agency before incurring the cost, unless the equipment has been identified on the State agency list approved by FNS, per SP 31-2014, *State Agency Prior Approval Process for School Food Authority (SFA) Equipment Purchases*, dated March 28, 2014.

# Q3: Can an SFA use nonprofit school food service funds to build structures for the school garden or school farm?

**A3:** Per 7 CFR Part 210.14(a), "revenues received by the nonprofit school food service are to be used only for the operation and/or improvement of such food service, except that, <u>such revenue</u> must not be used to purchase land or buildings unless otherwise approved by FNS, or to construct buildings."

Further, FNS existing policy has been and continues to be to not approve the cost of building purchases because program funds are made available to help support the costs of nutritional benefits for children in school settings. The goal of the nonprofit school food service account is to ensure that an SFA maintains the necessary funding to operate the school meals programs, not used to cover major expenses that should be borne by the school district's general funds (i.e., capital infrastructure costs).

# Q4: Can an SFA enter into an intergovernmental (or interdepartmental) agreement to purchase products from the school garden or school farm?

**A4:** Yes, SFAs may enter into an intergovernmental (also referred to as an interdepartmental) agreement with the school garden or school farm to purchase products from the garden. The entity operating the school garden must be the local educational agencies or another governmental entity. As noted in 7 CFR 3016.36 (b)(5), "to foster greater economy and efficiency, grantees and subgrantees are encouraged to enter into State and local intergovernmental agreements for procurement or use of common goods and services," and in this case the school garden and products from the garden can be considered a common good. A price analysis must be conducted to ensure that products purchased from the school garden are purchased at reasonable prices.

# Q5: What are an SFA's options for using products grown in a school garden in the school meal programs?

**A5:** SFAs have three options for using school garden products in school meals. Note that USDA does not impose specific food safety requirements; however, many State and local health departments have school garden food safety guidance and requirements.

1) Donation – In this case the products grown or raised in the school garden are donated to the cafeteria and may be used in meal preparation and/or for taste testing purposes. Procurement regulations do not apply when products are donated. Schools should ensure the product meets their general food safety requirements. Sometimes, SFAs purchase the inputs for the garden, as allowed under SP 32-2009, School Garden Q&As, and then the produce is donated to the cafeteria at harvest.

A5: Continued.

- 2) Intergovernmental Agreement With this option, the SFA enters into an agreement with the public entity (usually a school or district) that operates the garden. The agreement may outline the price for the produce, relative timelines and expectations of both parties. This option is most relevant when the school garden is operated by the school or district itself, a department within the district or by another state or local government agency that wishes to sell produce such as a local department of recreation or a state department of agriculture.
- 3) Purchase SFAs can conduct a procurement for garden produce. In many cases, the purchase may fall below the most restrictive applicable small purchase threshold, so the SFA may request a quote from the school garden operator and other entities. Geographic preference may be used. Due to the low transportation cost of the garden products, it is likely the price for garden products will be competitive with other suppliers. This option is most relevant when the school garden is operated by a non-governmental entity (e.g., nonprofit organization) that wishes to sell to the school meal programs.



Sarah E. Smith Holmes Director Program Monitoring and Operational Support Division

# Appendix J: 10 Facts About Local Food in Child Nutrition Programs



**United States Department of Agriculture** 

# 10 FACTS ABOUT LOCAL FOOD IN CHILD NUTRITION PROGRAMS



Increasingly schools are including expectations regarding local sourcing in their contracts with food service management companies and/or distributors. Even without contractual obligations regarding local, many distributors already offer local products so all an operator needs to do is find out what items on the contracted list are local and order those products. This approach is a very easy way to bring local products into schools without creating separate distribution channels.

### 5. Locally sourced fruits and vegetables are available through the DoD Fresh Program.

Schools can elect to spend a portion of their USDA Foods entitlement money on fresh fruits and vegetables through the DoD Fresh Fruit and Vegetable Program, operated by the Department of Defense. To supply fresh fruits and vegetables to schools, DoD contracts with over 45 produce vendors across the country. DoD Fresh vendors often have local products and they identify them as such in the FFAVORS catalog.

## 1. USDA supports and encourages the procurement of local foods.

In USDA's vision, child nutrition programs championing U.S. agriculture and proudly promoting locally sourced foods are the norm, not the exception.

### 2. The definition of "local" is different from district to district.

Definitions for local vary widely depending on the unique geography and climate where a school is located and on the abundance of local food producers and manufacturers. Many programs define local as within a certain number of miles from the school, within the county, or within the state. Alternatively, definitions might include more than one state (i.e., Georgia, Alabama, and Florida) or discrete parts of several states (i.e., specific counties in southwest Washington, northeast Oregon, and Idaho). In addition, some operators use different definitions of local depending on the product or season.

#### 3. Many local products are easy to find and source.

Some products are more likely to be local than others. For example, fluid milk is produced in almost every state. Since milk is perishable and expensive to transport, milk is often local. Similarly, programs in California serving avocado are likely using local avocados, while schools in Florida probably serve local citrus. Local products that are unique and/or abundant in a region are generally easier to find and source.





### The small purchase threshold determines whether to use a formal or informal procurement method and is key to understanding options for buying local.

The federal small purchase threshold is \$150,000, however, state and local regulations often set lower small purchase thresholds and programs must follow the most restrictive threshold. If the value of a procurement is over the small purchase threshold, schools must use one of the formal procurement methods (invitation for bid (IFB) or request for proposal (RFP)). If the value of the procurement falls below the small purchase threshold, schools can use the informal procurement method when buying local products.

### Program operators are free to choose from three or more local vendors in an informal procurement.

When the value of a purchase falls below the small purchase threshold, schools can get quotes exclusively from local producers instead of issuing a formal IFB or RFP.

# 8. Certain product specifications can help when sourcing local foods.

Product specifications, either required or preferred, may be written for a wide variety of qualitative factors designed to complement a preference for local products. For example, including a specification that foods be fresh (harvested within a day or two of delivery) may increase the likelihood that a local vendor will win the contract. Similarly, specifications related to specific varieties can have the same effect. For example, schools can opt to purchase a type of seafood unique to the region or a variety of apple grown primarily by local farmers.

### In any solicitation for unprocessed agricultural products, operators can indicate a preference for local foods.

Schools are allowed to indicate a preference for local products when procuring unprocessed locally grown or locally raised agricultural products. The federal regulations do not prescribe the precise way that geographic preference should be applied, or how much preference can be given to local products. Many schools opt to assign extra points in the selection phase to vendors offering local products, making them more competitive.

## 10. Buying local foods is about more than fruits and vegetables.

Local offerings can span the school meal tray and include everything from the salad bar and fresh fruit and vegetable servings to the wheat in the pizza crust, beans in the chili, rice in the stir fry, turkey in the sandwiches, and cheese in the quesadillas. Local buying includes all types of producers, such as farmers, ranchers, and fishermen, as well as many types of food businesses, including food processors, manufacturers, distributors and other value-added operations that enable school meals to showcase the full range of food products available in their respective regions.



For more information, and to sign up for the bi-weekly e-letter from the Food and Nutrition Service's Office of Community Food Systems, please visit www.fns.usda.gov/farmtoschool.

Questions? Email us at farmtoschool@fns.usda.gov.

USDA is an equal opportunity provider and employer. Updated June 2016.



# **Appendix K: Denver Public Schools 2016 Garden to Cafeteria Survey for Garden Leaders**

Please complete this survey. Denver Public Schools is working on the Denver Plan 2020 and one of the goals (under the larger goal of Supporting the Whole Child) is to increase the percentage of schools participating in the garden to cafeteria program by 50% over the next few years. This survey will help improve the administration of the Garden to Cafeteria program and help us determine what marketing/ support is needed in the future. If you have questions about this survey, please contact Anne Wilson, Denver Public Schools' Farm to School Coordinator, at 720-423-5608 or Anne\_Wilson@dpsk12.org.

FACT: Garden to Cafeteria programs have provided 6,779 lbs. of school garden produce to Denver school kitchens from Fall 2010 – 2015; school gardens have been paid \$8,062 for this produce.

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