



# RESOURCE GUIDE



# WHAT IS FARM TO SCHOOL ?

Farm to School (FTS) is any activity connecting schools to local food and farms. The main goals of FTS are to serve fresh, high-quality, locally grown food in school cafeterias; to provide agriculture, health and nutrition education; and to support local and regional farmers. There are many names for FTS: “farm to fork,” “seed to table,” or “field to fork.” No matter the name, projects like these have one main goal: to serve fresh, high quality, locally produced foods in meals and snacks.

According to the National Farm to School Network (NFSN), there are over 9,000 K-12 schools participating in FTS in the U.S. today. And that number is growing. Some FTS projects are small, using only a handful of foods on special occasions. Other programs are so comprehensive that students not only eat fresh local foods, but grow and prepare them, too. Above all, FTS projects are flexible, and can fit any budget or emphasize any food category. In order to move forward, each school can identify its own goals and programs to best support its needs.

Getting a FTS project started often involves cooperation between:

- Food service directors and personnel;
- Farmers and/or food distributors;
- Parents, teachers and school leaders;
- Students; and
- Community members and organizations.

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## Farm to School IN MISSOURI

Based on research from the Missouri Farm to Institution Project, many FTS programs exist in the state and there is a growing demand for resources and access to locally grown produce and products. Key findings of a 2010 survey include:

- At least 78 Local Education Agencies (LEAs are school districts or private schools) used locally grown food in school meals or snacks during the regular 2009-2010 school year. This figure represents approximately 10 percent of the 754 public and private schools in Missouri that participate in the National School Lunch Program.
- Schools involved in farm to school tended to use a food service vendor or distributor more frequently, rather than working directly with a farmer, to acquire locally grown food.
- The most popular items purchased included apples, melons, cucumbers, tomatoes and peppers.
- For the majority of schools, local produce accounted for between one and five percent of the total amount of produce purchased.

The survey also uncovered an exceptional amount of interest in farm to school:

- 88.3 percent of respondents said they are either interested in using locally grown food in the future or would like to use more locally grown food in school meals and snacks.
- The primary reasons Missouri schools want to use locally grown food include:
  - o Supporting the local community, economy and farmers;
  - o Helping students and adults have healthier diets through increased access to fresh fruits and vegetables.

More details from the survey can be found online at:  
<http://mofarmtoschool.missouri.edu>.

## Some of Missouri's commonly grown fruits & vegetables:

Bell peppers  
Blackberries  
Blueberries  
Cantaloupe  
Cherries, tart  
Cucumbers  
Eggplant  
Garlic  
Green beans  
Okra  
Onions  
Peaches  
Potatoes  
Raspberries  
Summer squash  
Sweet corn  
Tomatoes  
Watermelon

# Why Farm to School IS IMPORTANT

Children and adults don't eat enough fruits and vegetables:

- According to the Centers for Disease Control and Prevention (CDC), nationally only 22% of youth in grades 9-12 and 24% of adults are eating 5 servings of fruits and vegetables per day. Only 20% of Missouri youth and 20% of Missouri adults eat this recommended amount. (CDC BRFSS and YRBSS, 2009)
- In Missouri, about 31% of children are overweight or obese. Because over 615,000 children participate in the National School Lunch Program in Missouri each school day, it is essential that these calories be nutritious. (Kaiser State Health Facts, MO DESE)
- FTS has the ability to improve the quality of school meals, and it can also enable children to change dietary habits and select healthier foods.
- Commercial fruit and vegetable varieties grown out-of-state often trade flavor for durability. With FTS, local produce growers can focus on quality of taste over shipping capability when selecting varieties and timing harvests. Teachers and parents are often surprised to see how much more students can enjoy the taste of locally grown fruits and vegetables!
- When presented with the choice of farm to school options in the cafeteria, students and adults consume more fruits and vegetables, with an average increase of one serving per day. (Bearing Fruit, National Farm to School Network)

- People are seeking a connection to their food. Missourians love food and want to know where it comes from. On average, most food today travels 1,500 miles before reaching its final destination. In the age of processed food and food-borne illness outbreaks, more people value knowing their farmers and how the food they eat is raised.
- While directly helping the bottom line of local farmers, farm to school also benefits local schools and the community as a whole. By purchasing locally, more money stays in the community, supporting local businesses and the local tax base. This benefit can help local economies stabilize and grow. FTS projects can help farmers diversify their markets, creating job security for new and existing producers.



Introducing children early to fresh, local food can start them on a lifelong path to healthy eating.

# Farm to School Overview

## PRACTICAL CONSIDERATIONS

### Working within the Growing Season

Schools and Missouri farms do not generally share the same schedule. Successful FTS food service directors (FSDs) have made flexibility the key to their menu planning. For instance, some FSDs have increased their flexibility by offering salads or salad bars. This approach allows children to choose only what they wish to eat, and also give the director the ability to easily switch in and out whatever produce is available. Likewise, some FTS FSDs have started to look for local vegetables with longer shelf-lives. Others buy products from farmers who can extend their growing season through hoop houses or other methods.

### Staff Skills and Kitchen Infrastructure

Using local foods may require more training for school personnel in knife or cooking skills (the National Food Service Management Institute has good resources at <http://www.nfsmi.org>). Kitchen equipment, like a food processor, tilt skillet, or walk-in cooler, may need to be upgraded or purchased to efficiently process, serve and store fresh foods and ingredients.

### Cost

The cost of locally grown food is often the most common concern for FSDs. However, a number of FSDs report that when local produce is in season, prices are normally lower than non-local produce. Other factors may affect the relative cost, including shelf-life and flavor. Additional staff time may also be required to work directly with farmers or additional vendors.

### Menu Development

While adding a new local fresh item or salad bar is fairly straightforward, adding it to the overall menu may require creativity. Incorporating new items provides an opportunity to change the normal menu to create new flavor profiles in a fresh, tasty meal.

### Marketing

Toot your horn! Successful FSDs find that marketing the FTS program to parents, students, staff and teachers matters. Designate local food items in the menu and on the cafeteria line so students and faculty can know the difference. Highlight farm to school programs on posters, in newsletters and in take-home flyers.

### Growing for Wholesale Markets

Just as schools are getting used to working with local food and farmers, farmers are getting used to working with schools, too. Farmers may need to develop or revise business plans, scale up production and implement new post-harvest handling and packaging practices. New equipment and supplies, like a sorting station or walk-in cooler, may need to be bought.

### Business Protocols, Logistics and Regulations

Determining business policies and coordinating logistics may be one of the larger challenges facing farmers and FSDs. Success often means working out the details: from developing systems for invoicing and payment, to agreeing on the details of packaging, delivery, traceability and food safety accountability. Building these systems and processes takes time and cooperation. It is important to maintain good communication about what is working and what is not with all involved. All parties must ensure proper sanitization, storage and handling of products and follow all applicable local, state, and federal rules.

# FARM TO SCHOOL OPPORTUNITIES

## Demand and interest among School Food Service Directors

In the 2010 Missouri Farm to School Survey, 88.3 percent of school FSDs surveyed noted that they are either interested in using locally grown food in the future or would like to use more in school meals and snacks. This growing interest offers an incredible opportunity for farmers and food vendors.

## Emergence of distributors who source locally grown

As demand for local food increases, distributors are responding. This increased demand may prove to be a boon for farmers, enabling them to reach more schools and other markets while keeping their focus on production.

## Examples to learn from

In Missouri, more schools are incorporating locally grown food in meals and snacks and more farmers are selling to institutions. There are many individuals who can share their strategies for success in getting started with farm to school. Learn firsthand what it takes. Contact the Missouri Farm to Institution Project or a local University of Missouri Extension office for contacts in your area.

## Season extension

Farm to school in Missouri has functioned primarily during the late spring and early-to mid-fall semesters (and summer if school is in session). To “extend the season,” consider some of the following:

- 1) Greenhouses: Even unheated greenhouses can add a month to the growing season in the spring or fall.
- 2) Proteins: Animal products, especially red meats, can be made available in the cold season.
- 3) Storage crops: Potatoes, sweet potatoes, winter squash, apples, and onions are a few examples of produce that can retain their quality through the winter in cold storage.
- 4) Freezing: Vine-ripened produce frozen directly out of the field can have higher vitamin content than produce shipped in from far away and ripened in transit. Farms and processing facilities must have appropriate food safety and handling certifications.

## HOW IS LOCALLY GROWN SOURCED IN MISSOURI?

Some of the most common methods are:

- Farm → School
- Farm → Distributor → School

Other methods include:

- Farm → Farmers' Market → School
- Farm → Grocery Store → School

## GETTING STARTED

### Food Service

Many successful food service directors report starting their own FTS projects with just one locally grown item. The key is to start with a product that is readily available, affordable, and easy to transport and use in a menu. After a trial run, farm to school programs can grow to include more local foods more often.



Some tools of the trade.

## 6 Steps towards an effective Farm to School team

### STEP 1 – Connect & find support

Successful farm to school programs often have supportive people behind them. From getting your school leadership on board, to collecting information and ideas from staff, a network of players can help you get started or offer help, if needed.

Possible people to include in your support network:

- Food service staff;
- Parents;
- Educators, administrators, and staff;
- Gardeners or farmers;
- Teachers;
- Students;
- Community groups and non-profits;
- Local Extension representatives;
- Local businesses, restaurants, and grocers;
- Faith organizations; and
- State departments or other governing boards.

### STEP 2 – Think big picture

Once you have your players together, figure out why you want to do farm to school. Is it to improve the health of students and teachers? For good publicity? For budget reasons? Knowing your primary reasons and ranking them by importance will help you figure out how to start and how to expand.

### STEP 3 – Set goals and the ways to get there

Goals could include things like increasing consumption of fruits and vegetables or reducing obesity in the school. Create clear and achievable benchmarks or targets towards your goals to keep the program on track.

### STEP 4 – Build the farmer network

Work to establish communication with producers. Learn about different local products, who sells what, and who grows what.

### STEP 5 – Use your resources

Have your team members help build support within the school and the community. The more people that support your cause, the easier it will be to move forward.

### STEP 6 – Promote. Promote. Promote.

Host a local foods dinner in the school cafeteria to involve parents and gain community support. Invite farmers in to meet the students. Let people know what you're trying to do and how you're doing it and provide examples of successes.



Fresh zucchini and squash are some of the locally grown produce used by FSDs.

## Bidding and procurement

Schools participating in Child Nutrition Programs (CNP) that choose to buy locally grown or raised agricultural products must:

- Solicit bids from separate distributors, vendors or growers;
- Observe all procedures that apply to the CNP when using nonprofit school food service account funds, including using formal or informal purchasing protocols.

### Formal and informal purchasing

Informal bids must be offered for purchases below \$25,000, or a lower amount depending on local small purchase thresholds set by a school district (check with your local district to determine your small purchase threshold). For purchases of \$25,000 or above, a formal bid process must be followed.

With an informal bid, school food authorities can formally advertise or they can contact and seek price quotes from three or more potentially qualified sources. In either case, the school must still develop a written specification document outlining the products they are seeking, as well for the criteria for selection and award.

Schools may establish and apply their own definition and preference for local. However 'local' cannot be the only consideration against other bidders. Rather, locally-qualifying bidders can be scored additional points in their bid evaluation.

For formal bids above \$25,000, there are two available processes to be used: Competitive Sealed Bids (i.e. an Invitation for Bid or IFB), and Competitive Proposals (i.e. a request for proposal or RFP).

Each school district will have information on bid thresholds. Additional information on bidding is available online at <http://mofarmtoschool.missouri.edu> and at [http://www.fns.usda.gov/cnd/f2s/faqs\\_procurement.htm](http://www.fns.usda.gov/cnd/f2s/faqs_procurement.htm).

### Working with an existing distributor or vendor

If locally produced food can be sourced through an existing distributor or vendor, a request for locally grown food and approximate usage can be included in the bid packet.

## Planning Ahead

### Do some homework

- Pick a month where seasonal foods are bountiful, determine volumes or amounts needed, and price ranges.
- Prepare information regarding packing or grading preferences.
- Know the district's requirements for accepting a new vendor. If school food services are contracted to a food service management company, additional requirements for accepting new vendors may exist.
- Become familiar with the school's liability coverage requirements.

### Talk with a farmer

- Communicate clearly and thoroughly.
- Call or contact the farmer well in advance of the growing season.
- Find out if the farmer already participates in farm to school.
- Learn what foods the farmer grows and sells and when the food will be available.
- Ask how and when the food will be delivered.
- Find out if the farmer is willing to help promote farm to school.
- See if the farmer would host school field trips or give presentations at school.
- Be clear about expectations and have backup options in place.

### Talk with a vendor or distributor

- Find out what local farms they work with and what local products they sell.
- Ask how often the vendor will communicate seasonal availability of products to you.
- Learn how the vendor tracks the origin of the products.
- See if the vendor can provide farmer profiles and other information to help promote the FTS program.

## Managing Costs

- Take advantage of peak growing and harvest seasons.
- Consider all costs, including labor, kitchen facilities and total costs per serving, into the complete produce price.
- "Move costs around the tray." This idea pairs a more costly fruit or vegetable on a given day or week with a lower-cost item elsewhere on the menu.
- The cost of local produce can be offset by a product's longer shelf life, better flavor and potentially higher nutritional quality. Since local items are delivered closer to harvest, there should be less loss due to spoilage.
- Costs may be offset by increased meal participation rates and less waste.



Many food service directors and nutrition staff in Missouri have already made the move to farm to school projects. Chef Robert Rusan (top) and Food Service Director Colleen Johnston (bottom) have made farm to school projects work for their schools. Learn more about what they're doing at:

<http://mofarmtoschool.missouri.edu>.



Many Missouri children have learned about agriculture from farm to school programs.

### Menu cost savings

- List “fresh seasonal vegetable” or “fresh seasonal fruit” on the menu instead of a specific one to take advantage of peak harvest seasons.
- Work with a local farmer or distributor to plan menus. Farmers and distributors need to know what schools need, how much and when. Schools need to know when different products are in season.
- Embrace the simplicity and flexibility of salad bars. They are a great way to feature minimally processed items that are affordable and in-season. Early empowerment in their own eating decisions can help kids develop healthy, life-long eating habits.
- Find out which menu items could be prepared with less expense if prepared from scratch.

### Purchasing strategies

- Smaller sized or nonstandard grade items may be less expensive. A small apple could work better for small children. Also, if produce is going to be chopped, a uniform shape is less important.
- Larger quantities may be available at a lower price.
- Schools that can handle last-minute surplus produce may be able to get a discount on an unexpected abundance of an item.
- Keep talking to your supplier. Good communication can lead to future opportunities and savings.
- Determine how much product you need, and how much it will cost per serving, by using the Produce Calculator Tool at:

<http://www.okfarmtoschool.com/resources/fts-distro-foodsafetymanual/>.

### Labor cost savings

- Food processors, potato peelers or other time-saving kitchen equipment could be used.
- Pre-cut or minimally processed items might be available. Check that processing facilities have the appropriate food safety and handling certifications.
- Light processing can be a good opportunity to invite school involvement (e.g. shucking corn). Ensure that all food handling requirements are met.

*The Managing Costs section adapted in part from Farm to School: Strategies for Managing Food and Labor Costs at <http://www.health.state.mn.us/healthreform/ship/techassistance/>.*

## Making It Happen

### Staff training and facilities

Using fresh, unprocessed food requires different preparation and cooking techniques than using packaged or frozen foods. Expanding cooking in the school kitchen is an important step in creating a farm to school program. By offering knife skills, culinary lessons and other training, farm to school can be more effective, and the school food system can be improved overall. Classes may be available on line or at the local technical or career center. Updating and expanding kitchen facilities can be equally important. Schools that offer more fresh foods may need to expand or enhance their food preparation space, refrigeration capacity and cooking appliances.

### Fresh fruit and vegetable handling

Develop new standard operating procedures (SOP) for handling local produce, and keep up to date with the newest produce washing codes and techniques. For detailed information on fresh fruit and vegetable handling, see the USDA-FNS publication Fruits and Vegetables Galore at [http://www.fns.usda.gov/tn/resources/fv\\_galore.html](http://www.fns.usda.gov/tn/resources/fv_galore.html). For a summary of best practices, refer to Best Practices: Handling Fresh Produce in Schools, at [http://www.fns.usda.gov/fns/safety/pdf/best\\_practices.pdf](http://www.fns.usda.gov/fns/safety/pdf/best_practices.pdf).

### Local meat, dairy, and eggs

Geographic preference can be applied when procuring meat and poultry, but the meat MUST come from a USDA or State inspected facility. In Missouri, there is a lack of inspected facilities that process poultry, but processors of larger animals are more common. To make this cost effective, consider working with a farmer and processor willing to supply ground beef.

Likewise, local milk may be purchased, but it must be pasteurized and come from a source that is licensed and inspected. Local eggs may be purchased as long as they also come from a licensed and inspected source. In both cases, the Missouri Department of Agriculture (<http://mda.mo.gov>) is responsible for licensing and inspecting farms and processing plants.



Harvesting the bounty.

**Check out Missouri Farm to School's videos and learn from school food service directors who are making it work.**

<http://vimeo.com/mofarmentoschool>



Farmers and distributors help make farm to school happen.

## GETTING STARTED: FARMERS

### Marketing Strategies

- 1) Do some homework. Learn as much as possible about the school district and school food service operation before initiating contact. Farmers can collect information on the size of the district and the types of food included in the school's lunches.
- 2) Prepare information about your farm. Consider creating an appealing brochure. In addition, be prepared to share the following with school food service directors and administrators:
  - i. Product information including varieties and the timing of harvests.
  - ii. Price list, if appropriate.
  - iii. Grading and packing specifications.
  - iv. Food safety and handling practices.
  - v. Options for delivery.
  - vi. Availability for farm tours or field trips.
- 3) Call for an appointment. Professionalism and courtesy are essential when establishing direct market relationships. Buying locally or direct from farmers could be a new concept for food service directors. Try to reach a director either first thing in the morning or in the afternoon to avoid their busy time. Be patient and willing to schedule another appointment for follow-up.
- 4) Offer needed products. Until food service staff is familiar with using fresh and locally grown, offer standard fresh produce like tomatoes, squash, cucumbers, carrots, etc.
- 5) Deliver as promised. Reliability matters. Failing to deliver without good reason may cause the school district to stop using locally grown foods. Commit to prices within your needed profit margin. After an account is established, decide how often to contact each other, and be responsive when needs or issues arise.

### THINGS TO THINK ABOUT:

There are many considerations for farmers thinking about working with a farm to school program. For example, farmers should:

- Evaluate market size
- Identify potential liability issues
- Consider food safety standards and concerns of food service managers
- Devise marketing strategies
- Envision challenges, and
- Develop efficient methods of distribution.

For additional guidance, use the worksheet “Evaluating a School Food Service Customer,” available on the Farmer Resource page at <http://mofarmtoschool.missouri.edu>.

## Selling Together

Instead of marketing alone, some farmers work together in a co-op or with nonprofit groups. Benefits include:

- Providing more choices for schools and better use of resources for farmers. For example, one farmer may have perfect soil for potatoes while another may have an established strawberry patch. There is also value in more than one farmer growing the same item to increase the certainty of providing schools with the product in the quantity needed.
- Allowing growers to share the cost of product liability insurance, which can be expensive for small producers.



Safety is more than good looks!

## FOOD SAFETY AND PRODUCT LIABILITY

Providing safe food to students and managing risk are essential when selling to schools. Farmers can ensure that food is safely grown and handled by following Good Agricultural Practices (GAPs). They can manage their risk and protect the farm's assets by carrying product liability insurance. (The following information is adapted from the pamphlet Food Safety and Liability Insurance for Small-Scale and Limited Resource Farmers by the Community Food Security Coalition.)

## Food Safety

Growing and handling food using safe methods is a concern all farmers share. Increasingly, farmers are being asked to also document their food safety practices. GAPs are a set of guidelines designed to minimize the risk of food borne illness and give farmers tools to develop a whole-farm food safety plan. Basic GAPs include the following:

- Minimize human pathogens in the soil.
- Monitor water quality.
- Practice good personal hygiene in the field and packinghouse.
- Wash and sanitize work surfaces, including packing bins and transportation vehicles.

For more details about GAPs, please go to the National GAPs program website at <http://www.gaps.cornell.edu>. You can also visit your local MU Extension office or MU Extension online at <http://extension.missouri.edu>. Additional detailed information, including an Audit Verification Checklist and Scoresheet can be found on the USDA Agricultural Marketing Service website <http://www.ams.usda.gov>.



Missouri children learn from farmers.

## Liability insurance

Farms that sell fresh fruits, vegetables, meat, cheese, or value-added goods can obtain protection for personal assets by purchasing product liability insurance. If someone becomes ill after consuming a purchased farm product, liability insurance could cover the potential medical expenses or legal costs for the farmer or vendor. Product liability insurance is not the same as crop insurance. Crop insurance can be purchased to offset crop losses that could happen due to hail, drought, flooding or other damages. Grocery stores, retailers and institutions often require product liability insurance. Coverage requirements will typically range between \$1 and \$5 million, which might cost between \$500 and \$1,500 a year.

## Produce grading and packaging

Ultimately, when it comes to produce grades and packaging, food service, distributors and farmers need to communicate clearly and come to an agreement so that all parties know what to expect. USDA grade standards may be consulted (see <http://www.ams.usda.gov/AMSV1.0/Grading> for more details), but keep in mind that locally grown fruits and vegetables do not necessarily need to conform to those standards. It is more important for buyers and sellers to agree on the size, shape, color, maturity and cleanliness of the produce to be delivered, whether it meets a particular USDA grade standard or not. Likewise, all parties should determine ahead of time whether produce will be sold by weight or count.

For packaging, the choice to use a particular container or material is up to the buyers and sellers. However, it is prudent to consider what is commonplace in the industry and what type of packaging is best to preserve quality and keep the produce safe. Produce items that are subject to rapid drying (such as leafy greens, broccoli, and asparagus) will benefit from being packed in plastic lined boxes or plastic containers. Items tolerant of drying (like tomatoes, peppers and onions) may be packed in cardboard boxes. Plastic pint or quart clamshells can be used for berries or other small items. For soft or easily damaged produce like peaches, consider using containers that only have a single or double layer.

## Handling produce

For proper handling of produce, stick to the following two rules:

1) handle with care; and 2) keep it cool (though not too cool!). Careless damage and heat speed up spoilage.

To keep produce cool, pick during the cool of day (dawn is usually best) and keep harvested produce out of the sun. For certain types of produce, use techniques to rapidly remove field heat. Growers will likely need to make use of or invest in some type of refrigeration to keep produce cool. Keep in mind that produce subject to rapid drying or items that are susceptible to chilling injury, will need to be handled differently. One of the best resources for growers is the Knott's Handbook for Vegetable Growers. Another resource is the publication Wholesale Success by [FamilyFarmed.org](http://FamilyFarmed.org).



Farm to school programs can also feature fresh herbs in addition to fruit and vegetables.

## Conclusion

The resources in this guide are meant to serve as a toolkit for starting, sustaining, and enhancing farm to school programs. The information was gleaned from working programs, both small and large, from Missouri and beyond, to show that farm to school can be easy, fun, and rewarding. Remember to learn from other food service professionals and farmers. And don't forget to start small and make use of local resources to get a program off the ground.

### Want to learn more about Missouri Farm to School?

More resources, tips, and tools for parents, college students and others are available at:

<http://mofarmtoschool.missouri.edu>



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