What are F2S programs?
Some schools participating in Farm to School (F2S) programs purchase food from local farmers. Mostly, the items purchased are fresh fruits and vegetables. A common characteristic of F2S programs is the inclusion of source, production and/or nutrition information to students when items are served. No F2S program is exactly the same and many programs also include other activities. Students become interested and excited about healthy foods when there is some level of engagements, such as:

- Ag-in-the-Classroom curriculum
- Growing in the Garden
- School gardens as part of class teachings
- Farm visit field trips

While F2S programs may vary, their basic goals remain the same:

- To help students better understand where and how food is produced.
- To support regional and local farmers and thereby strengthen local food systems
- To provide support for health and nutrition education.

How did Farm to School (F2S) programs begin?
The incorporation of several public policies has laid the foundation for F2S programs. A component of the 2004 Child Nutrition and WIC Reauthorization Act encouraged improved access to local foods in schools “through farm-to-cafeteria activities, including school gardens”. In 2007, Farm to School legislation was passed in Iowa to help schools connect with Iowa farmers. Local farmers were encouraged to provide schools with Iowa grown foods which could be included in school meals and snacks. F2S programs encourage children to develop healthy eating habits and may provide them with hands-on learning opportunities such as:

- farm visits
- school gardening
- composting programs

The Farm to School Program in Iowa is coordinated by the Iowa Department of Agriculture and Land Stewardship in partnership with the Iowa Department of Education Bureau of Nutrition, Health and Transportation Services and a Farm to School Council. The F2S Council is comprised of representatives from the Iowa School Nutrition Association; Iowa Association for Health, Physical Education, Recreation & Dance; an Iowa fruit or vegetable producer; an Iowa organic meat producer; and the Leopold Center for Sustainable Agriculture at Iowa State University.

USDA’s Food and Nutrition Service (FNS) is also focusing on Farm to School efforts that incorporate regional and local farm products into school meals programs. In response to the growing demand for F2S activities, the USDA “Farm to School Team” was established in September 2009. The team is composed of FNS and Agriculture
Marketing Service staff, and is working with local and state authorities, school districts, farmers, and community partners to develop ways to:

1) Assist schools in accessing local markets

2) Enable food producers to effectively service their local schools

3) Facilitate communication between interested stakeholders

**Why should our school become F2S?**
Schools can positively influence students’ behaviors through F2S programs and improve the school health environment. Exposing children to where and how foods are produced with farm visits and/or school gardens has been shown to improve children’s attitudes about healthy eating and lead to healthful dietary behaviors. Proper diet can decrease the risk of obesity, diabetes, hypertension, and heart disease.

Students can learn how their food is grown through farm visits and infusion of production practices into various curricula. School gardens provide hands-on learning to teach students about the connections between growing plants and eating healthy food. Students can also learn how to recycle their food waste by turning it into composting for their school gardens, using approved methods.

F2S programs can teach students about the path of food from farm to fork. Use of local produce in school meals also provides a new direct market for farmers in the area. The F2S approach helps children understand where their food comes from and how their food choices impact their bodies, the environment and their communities at large.

**What rules apply to schools purchasing foods from local farmers?**
Schools must assure that all foods they serve to children are purchased from a safe and approved source using fair and open competition for all potential qualified vendors. Free and open competition between potential buyers is necessary and means that all suppliers are “playing on a level field” and have the same opportunity to compete. Procurement procedures may never unduly restrict or eliminate competition.

The National School Lunch Act allows institutions receiving funds through the Child Nutrition Programs to apply a geographic preference when procuring unprocessed locally grown or locally raised agricultural products. While a geographic preference may only be applied to the procurement of unprocessed agricultural products which are locally grown and locally raised, the amendment does not require the school district to purchase from a particular entity. Local food purchases do not necessarily have to occur directly with a farmer, but may be purchased through a distributor or wholesaler as well.

To learn more about procurement for school meals, visit the Iowa Department of Education website at [http://tinyurl.com/Iowa-procurement](http://tinyurl.com/Iowa-procurement).
What are some best practice guidelines to ensure safety of food for F2S?

Food safety is an important component of successful F2S programs to protect students and staff from potential foodborne illnesses. When handling fresh produce, the entire product needs to be washed because the presence of pathogens (disease causing microorganisms) is possible as products are exposed to environmental and human contaminants such as Norovirus, E. Coli 0157:H7 and Hepatitis A. Because fresh produce does not get cooked, there is no ‘kill-step’ to reduce the levels of pathogens. While fresh produce generally presents a low risk of pathogens due to acidity and lack of protein, there is potential for contamination between farm to foodservice.

When purchasing and receiving fresh produce, be sure to consider the conditions in which the item was grown. This can be done by:

1. Being aware of Good Agricultural Practices (GAPs) and discussing with producer
2. Ensuring the farmer’s water supply was tested and safe
3. Knowing what the farmer’s irrigation practices are
4. Communicating expectations regarding:
   a. Product specifications
   b. Proper packing procedures and materials
   c. Proper health and hygiene of farm employees
   d. Communicating transportation practices
   e. Insurance requirements

As a buyer of local produce, you must demonstrate due diligence in purchasing safe foods as there are no inspections required for locally purchased items. A checklist for retail purchasing of local produce (PM2046A) is available on the ISU Extension Local Foods website at www.iastatelocalfoods.org. The checklist will guide your conversation with the producer.

Once the product is received, it is yours. Be sure to protect against foodborne illnesses by implementing standard operating procedures related to proper hand hygiene practices, contamination, cross-contamination, and time and temperature abuse. This can be done by:

1. Washing hands and using new gloves when preparing fresh produce, as bare-hand contact is prohibited with ready-to-eat foods
2. Washing the product under cool running water and using some abrasion if product-appropriate.
3. Letting the product drain well, as excess moisture may provide a water source for bacterial growth
4. Keeping the product cool, but not too cool, and being mindful of its location in the refrigerator.
What are some food crops that can be used in school meals?
Iowa does not have the climate to grow some of the fruits and vegetables that some schools may wish to purchase and serve, such as oranges and bananas. Long winter months in Iowa limit local farmers’ ability to provide fresh fruits and vegetables all year round. However, there are many crops that can be grown and harvested in the spring, summer, and fall. Examples of these items include apples, watermelon, tomatoes, sweet corn, several varieties of squash, potatoes, cucumbers, broccoli, berries, peppers, cabbage, and carrots. Summer food programs can take advantage of the wide variety of Iowa grown fruits and vegetables. Produce can be served as part of breakfast, hot lunch, snacks, and on the salad bar.

Are there F2S curriculum resources available?
Yes! The Food and Nutrition Service (FNS) makes a variety of nutrition education lessons and curricula available through the USDA Team Nutrition website.

One of these lessons is composed of a garden-based nutrition education kit for preschoolers entitled, Grow It, Try It, Like It! This program is intended for children participating in Child Nutrition Programs and promotes preschool fun with fruits and vegetables. The kit includes seven booklets containing hands-on activities, planting activities, stories, songs, MyPyramid for Preschoolers nutrition education activities, home activities with parent/child activity sheets, family-sized recipes, and tips for cooking with children. Other tools include a Teaching Guide, Art and Crafts, a MyPyramid for Preschoolers Poster, the Cool Puppy Pup video series, and other resources.

The USDA’s SNAP-Ed Connection provides many online resources including, Nutrition Through the Seasons which identifies which foods are most naturally available during different times of the year. At USDA’s Farm Services Agency (FSA) kids can find fun farm facts, stories about youth farmers, word searches and mazes, and more through the FSA Kids website. Additionally, kids and teens can find information about animals, foods, food production, food safety, Science Fair projects, Ag Fun and virtual field trips through USDA Rural Development’s Agriculture in the Classroom Kid's Zone.

ISUE has a program called Growing in the Garden (for grades 1 - 3) as well as a program called Where We Live (for grades 4 - 8). Iowa Commodity Organizations have also developed curriculum resources entitled Ag in the Classroom, which are available free for use by educators.

Are there funding or grant opportunities for my school to start a F2S program?
YES! USDA has several available grant opportunities that can assist the school-to-farmer connection, teach students about fresh local products, and help both farmers and schools purchase equipment to augment F2S efforts. Visit USDA Farm to School site to read about funding opportunities.
What are school gardens?
School gardens are usually located on school property and cared for by students, staff, and/or community members. A variety of produce can be grown in these gardens. Harvested produce can be served in school meals and snacks or be used as part of a fund raising project. See information on the Bureau’s web site about use of garden produce. Herbs can also be grown in school gardens such as parsley, cilantro, basil, chives, fennel, and rosemary. Gardens can be incorporated into the educational curriculum to teach children science, history, environment, economics, nutrition, food safety, geography, and math.

Things to consider before planting your own school garden include:

1.) Composting practices, if organic
2.) Good Agriculture Practices
3.) Worker health and hygiene during harvest and post- harvest
4.) Organization of workers
5.) Garden design
6.) Safe use/storage of fertilizers and pesticides
7.) Garden care
8.) Theft and vandalism
9.) Student safety
10.) Liability
11.) Resources

Who should we contact?
For information on F2S projects in Iowa, or to find local producers interested in F2S in your area, contact the Iowa Department of Agriculture and Land Stewardship.
http://www.iowaagriculture.gov/AgDiversification/farmToSchoolProgram.asp

For questions about purchasing for school nutrition programs, contact the Iowa Department of Education, Bureau of Nutrition, Health & Transportation Services
For more information about fresh produce food safety best practices and standard operating procedures, see the Iowa State University Extension resources at
www.iowafoodsafety.org www.iowahaccp.iastate.edu or the Farm to Foodservice site at www.iastatelocalfoods.org

Additional Resources:

Department of Education, Bureau of Nutrition, Health and Transportation Services
(515) 281-5356
Bureau Consultant

**National Farm to School Network:**
http://www.farmtoschool.org

**USDA F2S**
http://www.fns.usda.gov/cnd/f2s/

**USDA Team Nutrition**
http://www.fns.usda.gov/tn/

**USDA Farm to School Team:**
www.fns.usda.gov/cnd/F2S/ or email farmtoschool@fns.usda.gov

To receive the latest information on USDA’s Farm to School activities, sign up for Email Updates and choose “Farm to School” under the main categories of “Current Initiatives” and “School Meals” at www.fns.usda.gov/cnd/F2S/