

Volunteer Leaders TraininG Guide

Homegrown Eating

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Introduction

Eating your fruits and vegetables isn't just about improving your health. It's about being a good neighbor, supporting local farmers and the local economy.

There are many reasons to support locally-grown produce. It's not just about reducing your risk of chronic disease, though that is and will continue to be an important reason to increase fruit and vegetable consumption. It is also about sustaining a healthy food supply. Where are those fruits and vegetables coming from and at what cost on a global, national and local level?

Target Audience

- EHC leaders
- Adult audiences

Objectives

Participants will:

- be able to define sustainable agriculture.
- learn the importance of buying locally-grown foods and food products.
- learn how to support sustainable agriculture.

Main Teaching Points

- Define sustainable agriculture.
- Six reasons for supporting sustainable agriculture.
- Current ways to buy locally-grown foods and food products.

Handouts

- Handout 1: The Sustainable Six bookmark
- Handout 2: Make Your Produce Arkansas Grown brochure
- Handout(s) 3: Arkansas Fresh fruit and vegetable handouts

- Activity 1: Optional Taste Test – Purchase a fruit or vegetable from a local farmers’ market and the same fruit or vegetable from a grocery store (examples include strawberries, watermelon, tomato, etc.). Ask for volunteers. Present unmarked farmers’ market items and grocery store items to volunteers for tasting. Have each volunteer taste both foods and see if they can identify the source (either farmers’ market or grocery store). Discuss how they were able to tell the difference.

Suggestions for Teaching

- Review the teaching guide.
- Obtain copies of:
 - Handout 1: The Sustainable Six bookmark
 - Handout 2: Make Your Produce Arkansas Grown brochure
 - Handout(s) 3: Arkansas Fresh fruit and vegetable handouts (from county office)
 - Pre-survey
 - Post-survey
- Give each participant the pre-survey and ask them to complete it.

Discuss the following:

What Is Sustainable Agriculture?

In the past few years, people are awakening to the fact that we need to take responsibility for how our actions affect the world we live in. Traditionally, there have been individuals concerned about environmental health and natural resources, but recently this mindset has entered the mainstream population in the form of the “Go Green” initiative. Familiar phrases like “Go Green” are now seen on package labels, home improvement materials and cosmetic ingredients. Additionally, TV programs, businesses, universities and others are all attempting to make a difference toward preserving and protecting the life we enjoy.

When we think “green,” we often think about recycling and alternative fuel sources. Now we are starting to think about what we can do to make our food system sustainable. Phrases like “Think Globally; Eat Locally,” the “100 Mile Diet Challenge” or “locavore” (people who pay attention to where their food comes from and commit to eating local food as much as possible) are becoming more familiar. Now we’re talking about sustainable agriculture or eating locally.

Sustainable agriculture as defined by USDA – An integrated system of plant and animal production practices having a site-specific application that will over the long term:

- Satisfy human food and fiber needs.
- Enhance environmental quality and the natural resource base upon which the agriculture economy depends.

- Make the most efficient use of nonrenewable resources and on-farm resources and integrate, where appropriate, natural biological cycles and controls.
- Sustain the economic viability of farm operations.
- Enhance the quality of life for farmers and society as a whole.

In more common terms, sustainable agriculture integrates three main goals – **environmental health, economic profitability** and **social and economic fairness**. The goals of sustainable agriculture are the responsibility of all participants in the system, including farmers, laborers, policymakers, researchers, retailers and consumers. Each group has its own part to play, its own unique contribution to make to strengthen the sustainable agriculture community.

Current Use of Farmland

According to the WorldWatch Institute, reducing the distance food travels and adopting time-tested agricultural practices that protect soils and reduce or eliminate the need for chemical pesticides and fertilizers can result in agriculture becoming a net asset to the planet and to the people it serves.

On a national level, U.S. farmers in 2007 produced over 10 billion bushels of corn on 70.6 million acres and over 3 billion bushels of soybeans on 74.6 million acres. On a local level, Arkansas ranks number one in the nation for rice production and number 10 for soybean production. Arkansas has over 14 million acres in total farmland and has the capacity to provide locally-grown produce for its citizens.

Why Eat Locally

Today, we're talking about eating locally-grown fruits and vegetables, but eating locally-raised meat, poultry, fish, eggs and dairy foods are also options in many places. Most of us are familiar with the recommendations to consume fruits and vegetables daily. The 2005 Dietary Guidelines for Americans recommend up to 9½ cups of fruits and vegetables daily. What used to be the "5 A Day" campaign has become the "Fruits and Veggies More Matters" campaign, because five servings of fruits and vegetables a day aren't enough to meet current recommendations. According to the World Health Organization, eating too few fruits and vegetables contributes to chronic diseases worldwide. But there are more reasons than our health for eating locally.

The Big 6

The Big 6 list provides reasons why we should eat locally: **quality, health, safety, environmental, local economy** and **trust**.

Quality

- **Fresher:** Most produce at farmers' markets and produce roadside stands is picked at its peak. What you purchase has on average been picked within the past 48 hours.
- **Tastier:** Just try it. Local foods can be fresher and more flavorful than those shipped from greater distances.

- **Nutritionally better:** A review of nutritional comparisons of fresh, frozen and canned fruits and vegetables looked at the percent loss of vitamin C when processed from fresh to frozen and fresh to canned. The studies showed a range of loss of vitamin C from 13 percent loss up to 90 percent loss. The studies used “fresh” fruits and vegetables purchased from grocery stores, where there was no way to know how long before peak they were picked and how long they sat in storage before purchase. Because vitamin C begins to degrade immediately following harvest, it would stand to reason that the fresher the food, the more nutrients it would retain.

Health

- **Healthy People 2010 primary concern:** Americans eat too few fruits and vegetables and whole grain products that are high in vitamins and minerals, carbohydrates (including fiber) and other substances that are important to good health.
- Greater than 90 percent of adults and children do not consume the recommended amounts of fruits and vegetables, according Dr. William Dietz, director of CDC’s division of nutrition and physical activity.
- Regular consumption of fruits and vegetables is associated with a lower risk for cancer, heart disease, stroke, Alzheimer’s disease, cataracts and other functional declines associated with aging.
- Having access to fresher, more flavorful produce can inspire us to eat more fruits and vegetables.

Safety

- From illegal pesticide use to food-borne pathogens, imported foods as well as foods grown in the U.S. can pose a risk to those who consume them. No food is completely without risk, but the U.S. and Arkansas have guidelines for producing foods that are stricter than other countries. While China has been implicated in contamination of food imports that are unsafe for human consumption, there have also been major problems in this country. Not too long ago bagged spinach contaminated with *E. coli* 0157:H7 resulted in illness and death. At that time, the FDA issued a warning: “Avoid eating spinach.” Unfortunately, what didn’t make the headlines was the rest of that statement: “Knowing the farmer and the farm can reduce your risk.” As in the spinach incident, food that spends large amounts of time in transit, changes hands multiple times and is processed in huge batches provides greater opportunities for contamination than a more decentralized food chain. Smaller, more localized production and processing systems are not immune to contamination. But problems would be localized, be easier to trace and have less widespread consequences.
- In 2007 we had much-publicized problems with contaminated food imported from China. But according to an FDA database, more unsafe food was stopped from entering the U.S. from Mexico, Dominican Republic and India than from China. Salmonella was the top reason that food was rejected from India, and it was found in products like black pepper, coriander powder and shrimp. “Filthy” was the primary reason food was stopped from Mexico, and the rejections included lollipops, crabmeat and dried chili. Products from the Dominican Republic were mostly stopped because of pesticides.

- As long as American consumers continue to demand “cheap” food, there is a risk for contamination. Countries that produce the cheapest products often have little regulation and poor enforcement.
- Not only do we have to be concerned about imported and domestic foods being contaminated with pesticides and/or food-borne pathogens but also whether or not the contamination was intentional. Food terrorism, the purposeful intent to harm by contaminating the food supply, has also been a concern in recent years.

Environmental

- **Global warming:** Studies estimate that produce travels an average of 1,500 miles and processed foods travel an estimated 1,300 miles before they are consumed. The use of fossil fuels to transport food is contributing to global warming.
- **Nitrogen pollution:** Nitrogen is needed for bigger and better crops. It’s found in commercial fertilizer and manure and seeps into groundwater. Nitrogen pollution of the Mississippi River and finally the Gulf of Mexico feeds a huge algae bloom. The respiration of the bacteria that feed on the algae depletes the water of oxygen, killing marine life and creating a dead zone. In 2002 it was about the size of Massachusetts.
- **Ecosystem:** Over-exploitation of land, such as destruction of rain forests to plant crops, and overuse of pesticides can pollute or destroy otherwise healthy ecosystems around the world.

Local Economy

- The average American farmer receives 20 cents of each dollar spent on food. The rest goes to middlemen for packing, shipping, handling and marketing.
- Farmers who sell direct to consumers receive full retail value of the food – a dollar for a dollar spent.
- The local food economy gains \$3 for each dollar spent when shoppers choose to buy locally. Farmers put their money back into the local economy.

Trust

- All the reasons we’ve discussed lead us to the sixth and final reason – **trust**. A new food culture described by John Ikerd in *Eating Locally* describes a food system where consumers who care about the social and ecological consequences of how their food is produced form relationships with farmers who care about their land, their neighbors and their customers. Such relationships are based on trust and integrity, honesty and fairness, responsibility and respect.

Ways to Support Sustainable Agriculture

Whenever possible, buy directly from local producers:

- Farmers’ markets are growing rapidly. Currently, over 4,000 farmers’ markets are operating in the U.S. Usually located in the heart of town, farmers’ markets not only meet the demands of the consumer for fresh produce but also foster relationships and a sense of community.

- CSAs or Community Supported Agriculture programs are another way to reap the harvest of homegrown fruits and vegetables, flowers, dairy products and sometimes meat (beef, chicken and fish). Shares are sold in advance to cover farm operation and farmer's salary. Prices range from a little over \$200 up to \$500 or more per season. There are designated drop-off and pick-up points once or twice a week usually starting in early spring and ending in October.
- U-pick farms offered across the country allow consumers to pay to pick their own produce.
- More and more restaurants buy from local food vendors (within 100 miles). There are several in the central Arkansas area.
- Farm-to-school programs provide nutritious fruits and vegetables as well as educational opportunities about the food we eat.
- 100-mile diet challenge – This concept began when Alisa Smith and James MacKinnon decided to eat food grown within 100 miles of their home in Vancouver, British Columbia, for one year. Their writings about their year of eating locally have inspired many to try to do the same. For more information on how you to can take the 100-mile diet challenge, go to <http://www.100milediet.org>.

Arkansas Supports Eating Locally

What's going on in Arkansas?

- **Farmers' markets:** See listing at <http://www.naturallyarkansas.org/>.
- **CSAs:** Wildfire operated by Marcie Brewster and Diane Schumacher at Huntsville; Charlotte's Ranch operated by Mark and Linda Scarano in Fayetteville; Hardin Farms in Grady; and Heifer Ranch near Perryville.
- **U-pick:** There are many farms and orchards throughout the state where you can pick your own fruits and vegetables. For a list of U-pick farms, go to <http://www.naturallyarkansas.org/>.
- **Restaurants:** Several restaurants are using local vendors to supply at least some of their ingredients. In the Little Rock area, Ashley's, Boulevard Bread Company, Brave New Restaurant, Freneau, Lilly's Dim Sum, Then Sum and Laughing Moon Café use locally produced food.
- **Farm to School and School Gardens:** Fayetteville schools started a farm-to-school project as part of their student wellness policy. Local farmers provide fruits and vegetables to local school cafeterias. This provides a market for the farmers and a positive impact on children's health. The Dunbar Garden project in Little Rock serves as an outdoor classroom for Gibbs International Magnet Elementary School and Dunbar Magnet Middle School.

Conclusion

What can you do to support a sustainable food system? Buy foods that are grown locally as much as possible. When you buy foods from a chain grocery store, ask where they came from and encourage the store manager to carry locally-grown products. If you eat commercially processed foods, choose those that have been processed as little as possible and with the least amount of packaging. Cook at home from scratch as much as possible. When you eat out, try to choose

restaurants that use locally-grown foods. Teach your family, friends and community about how their choices impact the environment, their health and society. Take pride in the fact that you are making an effort to support a sustainable food system.

Evaluation

Give each participant the post-survey and ask them to complete and return it. Provide evaluations to your county Extension agent – family and consumer sciences.

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