# Local Food Production and Sustainability

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## Sustainability

"To demonstrate sustainability is to demonstrate the ability to meet our current needs without compromising the ability of future generations to meet their needs." This definition of sustainability formed the basis for our discussions in class on the topic. Sustainability is a topic with which we should all be concerned as it affects not only us but our children and future generations. Maureen Hart of Sustainable Measures says, "Sustainability is related to the quality of life in a community -- whether the economic, social and environmental systems that make up the community are providing a healthy, productive, meaningful life for all community residents, present and future." Local food contributes to all of these systems that make up a community.

## Benefits of Local Food Production

- Reduces packaging and processing of convenience foods, which use up fossil fuel and create unnecessary waste
- Reduces amount of pollution and energy use from food transportation
- Increases agricultural diversity through crop rotation methods and diverse species grown on small farms
- Improves communication between community and local farmers
- Supports local farmers
- Promotes the development of community pride
- Keeps money within the local economy
- Increases the amount of money that goes directly to the producer
- Improves access to fresh, affordable, healthy, great tasting food

Chad Heeter of the San Francisco Chronicle writes, "My cup of coffee gives me only a few calories of energy, but to process just one pound of coffee requires over 8,000 calories of fossil-fuel energy – the equivalent energy found in nearly a quart of crude oil, 30 cubic feet of natural gas, or around two and a half pounds of coal."

## Why Do We Want to Save Fossil Fuel?

In short, to decrease our dependence on foreign sources of fossil fuel. In 2004, almost 60% of petroleum products used in the United States were imported, a figure only expected to grow in the coming century.

Harmful byproducts are created when fossil fuel is burned for energy.

- Carbon dioxide and nitrous oxide are greenhouse gases that contribute to global warming
- Sulfur oxides and nitrogen oxides contribute to acid rain
- Hydrocarbons react with nitrogen oxides to create smog
- Nitrogen oxides and particulate matter in the air irritate the lungs and can cause heart problems

## From Farm to You

In the U.S., most food travels about 1300 miles before it reaches the consumer, and only 10 percent of the money paid goes to the farmer who raised the product.

**TABLE 1. Energy Required to Produce Various Food Packages**

| Package | kcal |
|---|---|
| Wooden berry basket | 69 |
| Styrofoam tray (size 6) | 215 |
| Moulded paper tray (size 6) | 384 |
| Polyethylene pouch (16 oz, or 455 g) | 559* |
| Steel can, aluminium top (12 oz) | 568 |
| Small paper set-up box | 722 |
| Steel can, steel top (16 oz) | 1,006 |
| Glass jar (16 oz) | 1,023 |
| Coca-Cola bottle, non-returnable (16 oz) | 1,471 |
| Aluminium TV-dinner container | 1,496 |
| Aluminium can, pop-top (12 oz) | 1,643 |
| Plastic milk container, disposable (1/2gal) | 2,159 |
| Coca-Cola bottle, returnable (16 oz) | 2,451 |
| Polyethylene bottle (1 qt) | 2,494 |
| Polypropylene bottle (1 qt) | 2,752 |
| Glass milk container, returnable (1/2 gal) | 4,455 |

http://www.unu.edu/unupress/food/8F072e/8F072E06.htm

## Buying Locally

Farmers can sell their crops through **farmer's markets** or **farm stands**. Since 1994, the number of farmers' markets across the nation have increased by over 40%.

Another local food sales technique is **Community Supported Agriculture**. Members of the community pay farmers in advance for a season's worth of their products and receive a variety of fresh farm products each month. This system ensures very fresh, flavorful and healthy food, decreases the level of waste pollution, and helps build relationships between community members and local farmers.

"Pick your own" farms let consumers pick their own berries, fruit, or other produce. This concept is a great bonding activity for families. In addition, it is a useful for individuals who like to can or freeze their own food.

## Buying Sustainably

If you shop at a chain supermarket ask your grocer where the produce in his or her store comes from or even ask him to start labeling where the produce comes from. He may not know or might not want to do this, but it never hurts to ask! Visit www.sustainabletable.org/shop/questions/ to find questions you can ask your local farmer or grocer.

## Buying Seasonally

Part of buying locally is buying what's in season in your area. Buying fruits, vegetables, and other foods that are not in season means those foods had to travel much farther than necessary to reach their destination (which is not a sustainable practice).

## What's in Season in Ohio in the Fall?

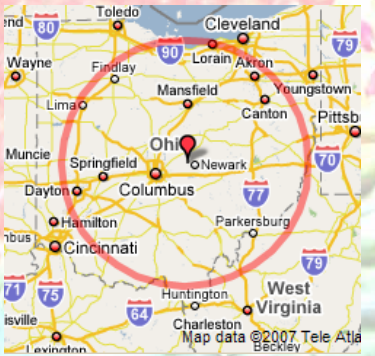
**August**
Apples, beans, beets, blueberries, cabbage, cantaloupe, carrots, cauliflower, celery, cucumbers, eggplant, grapes, green onions, greens, lettuce, onions, parsley, peas, peaches, pears, bell peppers, potatoes, radishes, squash, sweet corn, tomatoes, turnips, watermelons
**September**
All August foods plus plums, pumpkins, fall red raspberries
**October**
Apples, beets, broccoli, cabbage, carrots, cauliflower, celery, green onions, greens, lettuce, parsley, peas, pears, potatoes, pumpkins, radishes, fall red raspberries, squash, turnips
**November**
Broccoli, cabbage, carrots, parsley, pears, peas

## Ideas For How to Change Your Diet: The 100 mile Diet

Alisa Smith and James MacKinnon decided, for one year, to buy all of their food from within 100 miles of their hometown, Vancouver, British Columbia. As others began to read their blog, the experiment turned into a movement across Canada and the United States. The map to the rights indicates cities within a 100 mile radius of Granville, Ohio.

The website www.localharvest.org provides information about local food venues for any zip code in the United States. The following are just a few of many local food venues or farms that are located near or in Granville:

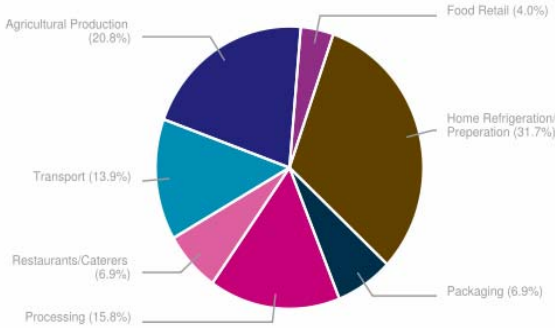
1. Granville Farmers Market (Granville, OH)
2. Garden Patch Produce (Alexandria, OH): CSA enterprise that sells vegetables, herbs, flowers, fruit
3. Bird's Haven Farms (Granville, OH): family farm that sells plants, flowers, strawberries, and a variety of vegetables
4. Charlie's Apples (Newark, OH): commercial and pick-your-own orchard that sells apples and cider




http://www.100miediet.org/map/

This poster was developed as an assignment for Honors 295, Fall 2007, **Population, Environment, and Sustainability—Ethics for Living into the Future.** References can be obtained by contacting the author.

## Differing Viewpoints




http://www.swivel.com/graphs/show/21368509

According to some sources, refrigeration and food preparation account for an even higher amount of energy use than transportation or packaging of food. Buying locally is beneficial but individuals can even do more once they bring food home to reduce energy expenditure, like cutting down on cooking time. Some argue that saving local farmlands from development and supporting the local economy are more important than reducing packaging and transportation costs of food.

Another point of controversy rests in the fact that the terms local and sustainable are not synonymous. However, buying local food guarantees access to the farmer who raised the food and thus makes it easier to find out how the food was grown and if environmentally sustainable practices were used. A Sustainable Farm will do the following: recycle the materials they use, use renewable energy sources, reduce the use of synthetic chemicals and fertilizers, manage pests instead of controlling them, conserve resources such as water, soil and energy, and value the health of their entire farm rather than just one crop.

## The Role of College Campuses

### Yale

Universities like Yale have developed sustainable food programs to help them achieve their goal of becoming a sustainable university. They buy local food, building a strong local economy by creating jobs and preserving farmland. Buying locally also includes buying seasonally, so the dining halls serve seasonal produce, providing the freshest food in each season. Most of the local food they buy comes from farmers' markets, where every dollar spent goes straight to the farmer. (Whereas at conventional supermarkets, only 19 cents of every dollar spent goes to the farmer who raised the product.)

### Oberlin

Oberlin College has a program called Oberlin Student Cooperative Association Dining Halls. As part of Oberlin's goal to decrease reliance on unsustainable practices, such as the long distance shipping of food, as of 2006, 35% of food in the dining halls is locally grown (within 150 miles of campus) and bought from local farmers and suppliers.

## Conclusion

Consuming or buying food produced and sold locally is an activity in which we can all partake that contributes to sustainability, both globally and locally. This easy act supports local community members, keeps money within the local economy, allows for personal consumption of fresher, healthier food. decreases the amount of unnecessary fossil fuel used to process, package, and transport fuel long distances.

## Websites and Articles:

http://www.foodroutes.org/
**Food routes helps consumers find out where their food comes from and provides information about buying local food.**
http://www.sustainabletable.org/issues/buylocal/
**Sustainable table encourages healthy, sustainable food choices and features blogs, recipes, current news, and a wide variety of information about eating, shopping, cooking, and living sustainably.**
http://www.worldwatch.org
**Features research and writing analyzing environmental and social issues from a global, interdisciplinary perspective and focuses on how to create an environmentally sustainable world.**
http://www.echo.net.au/archives/19_07/pdf/p16.pdf
**"Environmental Benefits of local food production"**
http://www.100miediet.org/
**This website was created by two residents of Vancouver, British Columbia to help others try their experiment of eating food from within 100 miles of their hometown. Among the useful features on this site are links that allow consumers to find local farmer's markets and food venues within 100 miles of their hometown.**