

Organic Food at Princeton

Why the big fuss?

Organic foods are generally a healthier alternative for you, farm animals, and the environment. This is due to the strict guidelines regulating organic food, which limit the use of harmful chemicals and require that animals be treated humanely.

Public Health:

Chemical fertilizers and pesticides: Organic foods are grown without the use of synthetic fertilizers, pesticides, or other chemicals, and they are grown on land that has been free of these chemicals for at least three years. This greatly reduces the amount of such chemicals that ends up in your food. Even though the chemicals used in traditional farming are government-approved, this does not necessarily mean they are safe. The Environmental Protection Agency estimates that 60% of herbicides, 90% of fungicides, and 30% of insecticides are potentially carcinogenic. Although the government has determined acceptable levels for such chemicals, many studies have found much higher residues occurring in food samples than is legal.

Genetically modified organisms: Organic foods do not contain any genetically engineered ingredients. The long-term effects of eating genetically engineered foods are uncertain. For example, one controversial class of genetically modified foods contains the pesticide “Bt”; ingesting this pesticide in food could have negative long-term consequences.

Hormones and antibiotics: Animals on organic farms are not given growth hormones or antibiotics. The practice of giving antibiotics to largely healthy farm animals is extremely widespread, accounting for about 80% of antibiotic use in this country. This practice leads to the evolution of antibiotic-resistant strains of bacteria, a serious threat to public health.

The Environment:

Chemical fertilizers and pesticides: Rain washes many of the chemicals used in conventional farming into rivers, contaminating the water and killing wildlife. In fact, it is estimated that two-thirds of fertilizers used on farmland eventually end up in our waterways. Fertilizer run-off from farms in the Midwest has contributed to an 8,000 square mile “dead zone” in the Gulf of Mexico that has killed thousands of fish.

Genetically modified organisms: The environmental effects of genetically modified crops are uncertain. However, studies have shown that crops with “Bt” can inadvertently kill beneficial insects, including endangered monarch butterflies.

Genetically engineered foods often do not significantly reduce pesticide or herbicide use, as they were intended to do.

Soil health: Organic farming methods also improve soil fertility and reduce erosion. Crop rotation and using compost as fertilizer helps preserve topsoil, while conventional farming methods have led to the erosion of three billion tons of topsoil annually.

Energy and climate change: Finally, organic farming is less energy-intensive than traditional agriculture, which accounts for 12% of US energy use. Producing fertilizers requires more energy than is used to till and harvest all the crops grown in this country. Organic farming does not use fertilizers and is based more on labor-intensive methods like weeding by hand.

Animal Health:

Animals on organic farms are generally treated better than their counterparts on conventional farms. They are required to have access to the outdoors, and they are subjected to less trauma before slaughter (cattle from conventional farms routinely lose 9% of their body weight during pre-slaughter transport due to dehydration and stress).

Farm Workers and Small Farmers:

Worker health: Unlike workers on conventional farms, workers on organic farms are not exposed to high levels of potentially harmful chemicals. Farm workers exposed to herbicides are six times more likely of getting cancer than non-farmers, according to the National Cancer Institute.

Economic and social considerations: Most organic farms are small and independently owned, in contrast to the huge factory farms that dominate modern agriculture. Small farmers often go out of business because they cannot compete with these large, polluting companies. Organic farming is one of the few ways in which small farmers can remain competitive.

Take Home Message:

The guidelines regulating organic food have widespread effects on everything from public health to the environment and the economy. Eating organic food promotes healthier waterways, reduces energy consumption, helps small farmers, and is better for your health. Thanks to numerous recent additions, Dining Services currently offers organic granola and oat "O"s, and sometimes organic salad greens apples, strawberries, and bread. They would like to introduce more organic food, but they need your support!

Resources:

- "Potential Negatives of GE Foods" and "FAQs about Organic", Keep Nature Natural, <http://www.keepnatural.org>
- "Top 10 Reasons to Buy Organic", <http://www.veganrecipes.com/organic-foods.shtml>
- "Organic Food Benefits", Nutiva corporation, <http://www.nutiva.com/nutrition/organic.php>
- "Benefits of Organic Farming", Soil Association, <http://www.soilassociation.org/sa/saweb.nsf/Farming/benefits.html>
- "Consumer Information", USDA's National Organic Program, <http://www.ams.usda.gov/nop/Consumers/Consumerhome.html>
- "The Benefits of Organic Food", Positive Health magazine, <http://www.positivehealth.com/permit/Articles/Organic%20and%20Vegetarian/frost47.htm>
- B. P. Baker; C. M. Benbrook; E. Groth; K. Lutz Benbrook. 2002. Pesticide residues in conventional, integrated pest management (IPM)-grown and organic foods: insights from three US data sets.
- Peter Singer, "Animal Liberation", pp.147-150.
- "Antibiotic Resistance: Playing Chicken With Essential Drugs", Environmental Defense Fund, http://www.environmentaldefense.org/documents/619_abr_general_factsheet_rev2.pdf