

Why Eat Organic Foods?

Adopting an organic lifestyle helps to enhance the health of ecosystems and organisms. It is generally agreed upon by its supporters that growing and eating organic food is better for the environment. Growing foods organically excludes, when possible, the use of synthetic fertilizers, pesticides, growth regulators, and additives to livestock feed. Organic farmers usually rely on crop rotation and animal manures to maintain soil productivity, to supply plant nutrients, and to control weeds, insects, and other pests.

As a result, in addition to reducing your exposure to harmful pesticides, eating organically may also reduce your exposure to hormones, antibiotics, and potentially harmful irradiated food. Less antibiotic use may help to avoid the development of antibiotic resistance.

The Organic Seal of Approval guarantees the consumer that there has been no usage of genetically modified crops or sewage sludge as fertilizer, helping to reduce toxic runoff into rivers and lakes and the subsequent contamination of watersheds and drinking water.

When you eat organically grown food, you may also be supporting small, local farmers, who are able to use less energy in transporting food from the field to the table.

Organic beef, chicken, and poultry are raised on 100% organic feed and never given antibiotics or hormones; in addition, their meat is never irradiated. Organic milk and eggs come from animals not given antibiotics or hormones and fed 100% organic feed for the previous 12 months. (Free-range eggs come from hens that are allowed to roam, but they are not guaranteed to be organic.)

Several studies at the University of Washington support the claim that organic diets can dramatically reduce pesticide exposure. One such study in 2001 compared pesticide metabolite levels in 18 children who got at least 75% of their juice and produce servings from organic sources with those in 21 children who got at least 75% of their juice and produce from conventionally grown food. Levels of organophosphorus pesticide metabolites in the urine collected were six to nine times higher in the children who ate conventionally grown foods than in those who ate organic diets.¹

There has been much controversy regarding the enhanced nutritional benefits of organic foods. Another study showed that it may be more nutritious to eat organically. In 2001, the *Journal of Alternative and Complementary Medicine* reported a study showing that, on average, organic crops contain 86% more chromium, 29% more magnesium, 27% more vitamin C, 21% more iron, 26% more calcium, 42% more manganese, 498% more iodine, and 372% more selenium. Significantly less nitrates were also found in the organic foods.² Resulting from nitrogen-based fertilizers, high nitrates in food and drinking water can be converted to potentially carcinogenic nitrosamines.

The *Journal of Agriculture and Food Chemistry* published a peer-reviewed article in 2003, reporting that organically grown corn, strawberries, and marionberries have significantly higher levels of anticancer antioxidants than nonorganically grown foods. Protective compounds, such as flavonoids, are produced by plants to act as their natural defense in response to stresses, such as insects or other competitive plants. The report suggested that good soil nutrition seems to increase the amount of these protective compounds, while pesticides and herbicides disturb their production.³

What foods are most important to eat organically? Meat, eggs, dairy products, and many fruits and vegetables are on the top of the list. The following are among the most important fruits and vegetables to consider eating organically due to high pesticide residues:

- Peaches
- Strawberries
- Bell peppers (green and red)
- Spinach
- Cherries grown in the United States
- Cantaloupe grown in Mexico
- Celery
- Apples
- Apricots
- Green beans
- Grapes grown in Chile
- Cucumbers

The following are some of the fruits and vegetables with the least pesticide residues and therefore not a top priority from a health standpoint to eat organically:

- Avocado
- Corn
- Onions
- Sweet potatoes
- Cauliflower
- Brussels sprouts
- Grapes grown in the United States
- Bananas
- Plums
- Green onions
- Watermelon
- Broccoli

References

1. Curl CL, Fenske RA, Elgethun K. Organophosphorus pesticide exposure of urban and suburban preschool children with organic and conventional diets. *Environ Health Perspect.* 2003;111(3):377-382.
2. Worthington V. Nutritional quality of organic versus conventional fruits, vegetables, and grains. *J Altern Complement Med.* 2001;7(2):161-173.
3. Asami DK, Hong YJ, Barrett DM, Mitchell AE. Comparison of the total phenolic and ascorbic acid content of freeze-dried and air-dried marionberry, strawberry, and corn grown using conventional, organic, and sustainable agricultural practices. *J Agric Food Chem.* 2003;51(5):1237-1241.