

Is organic better?

We know that eating lots of fruits and vegetables helps reduce our risk for many life-threatening diseases. But does it matter whether the produce we eat is organic?

In the past, it seemed that just eating our fruits and vegetables was a step in the right nutritional direction. But now that supermarket produce aisles offer both “organic” and conventional fare, many of us are wondering exactly what the distinction means. U.S. Department of Agriculture (USDA) labeling regulations will undoubtedly help.

What does “organic” mean?

By the USDA’s definition, food is organic only if it’s grown without the use of most conventional pesticides, petroleum- or sewage-based fertilizers, genetic engineering, or radiation. Organic farmers can use manure-based fertilizers if they comply with specific regulations. USDA agents certify produce as organic and can impose penalties of up to \$10,000 for labeling violations.

Organic farming leaves fewer pesticide residues than conventional farming. However, even organic produce may have some pesticide in it, because these chemicals can persist in the soil for decades and can travel in the air or on equipment.

Seal of approval



How can you tell if “organic” is what you’re getting? As of October 2002, the USDA began to permit the use of a special organic “seal of approval” (see above) on foods that are at least 95% organic. To earn this seal, the producer must meet higher standards than those the agency sets for just using the word “organic” on the label. For example, a multi-ingredient product (such as cereal or soup) that is 70%–94% organic can use the word “organic” on the front of the package to describe up to three ingredients, but it may not display the seal. Foods that have less than 70% organic ingredients cannot be labeled organic but can identify in their ingredient lists those items that are organic.

What about animal products?

Meats, eggs, and dairy products may be labeled organic only if the animals have been allowed outdoors and have not been given antibiotics or growth hormones. Their feed must be organic and must not contain parts of other slaughtered animals. Nutrition experts suggest that organically raised meat may prevent the spread of diseases such as *bovine spongiform encephalopathy*, better known as mad cow disease.

To use organic labeling, a food manufacturer must submit an application to the USDA that provides information about the substances and practices used in the food's production, including how non-organic and organic foods are kept separate. A USDA representative also inspects the site yearly.

Better than before

Applying for organic labeling is strictly voluntary, so some foods that are truly organic may not have the USDA seal or even include the word "organic" on the label.

Although the system isn't perfect, it relieves some of the confusion created by past practices. With no national guidelines, it had been impossible to tell what, if anything, the word "organic" guaranteed. Although individual states had the power to control what could be called organic, regulations varied considerably from state to state — with some providing no regulation at all. Organic farmers also had the option of being certified by private organizations, each of which had its own individual requirements.

Use of the organic label at least requires that certain minimum standards be met. The same cannot be said for the use of terms such as "natural," "100% natural," and "all-natural." Legally, these words can still mean anything the manufacturer wants them to mean.

Is organic healthier?

According to its Web site, the USDA "makes no claims that organic food is safer or more nutritious than conventionally produced foods." Harvard nutrition experts say there is no solid evidence that organic foods, in general, are healthier.

A 2002 study published in *Environmental Health Perspectives* found that children who ate organic fruits and vegetables had less pesticide in their urine than those who ate conventionally raised produce. Neither this study nor any others to date prove that organic foods are healthier, because these levels of pesticide in urine haven't been definitively linked to any health problems. The study did not address the potential risks of long-term exposure to the levels of pesticide now considered acceptable in non-organic foods.

According to a review published in the February 2002 *Proceedings of the Nutrition Society*, there are no good long-term studies comparing the health effects of organically grown and conventionally grown foods. In nutritional composition, they appear similar. So until more evidence-based studies are available, the decision to eat organic food comes down to this: If you want to eat foods produced without chemicals or pesticides, buy organic. But as far as researchers have been able to determine, conventionally grown produce is also a healthy choice — and the benefits of eating lots of fruits and vegetables outweigh any possible risk of ingesting traces of pesticides.

What to do about pesticides

To reduce your exposure to pesticides on produce:

Wash — and, when practical — peel fruits and vegetables. Washing produce under running water, peeling the skins, and removing the outer leaves of vegetables such as lettuce and cabbage will help get rid of pesticides on most fruits and vegetables. Scrub vegetables such as carrots and potatoes with a brush if you plan to eat the skins.

Buy locally grown produce in season. Produce grown on small local farms is less likely to be treated with pesticide waxes used to inhibit fungus growth on produce shipped long distances. Try smaller health-food stores or farmers' markets. To find a farmers' market near you, call the USDA at 800-384-8704 toll free, or go to www.ams.usda.gov/farmersmarkets.

Be aware that some fruits and vegetables have more pesticide contamination than others. The Environmental Working Group (EWG), a nonprofit research group, has used government data to compile a list of 13 conventionally grown fruits and vegetables that carry the greatest pesticide burden (see the chart, below). Washing these foods or peeling them will reduce pesticide levels.

Pesticide levels in conventionally grown produce		
Rank	Fruits	Vegetables
Highest pesticide levels †	Peaches, apples, strawberries, nectarines, pears, cherries, red raspberries, imported grapes	Spinach, bell peppers, celery, potatoes, hot peppers
Lowest pesticide levels	Pineapples, plantains, mangoes, bananas, watermelons, plums, kiwi fruit, blueberries, papaya, grapefruit	Avocados, cauliflower, Brussels sprouts, asparagus, radishes, broccoli, onions, okra, cabbages, eggplant
† The Environmental Working Group urges consumers to consider buying organic versions of these fruits and vegetables.		
Source: Harvard Healthwatch June 2003		
Environmental Working Group based on data from the FDA and the U.S. Department of Agriculture		