



Eating Organic

Is it worth the cost? Is it really healthier?

Generally pesticides are approved by the government, and most assume they are deemed safe for our consumption in low levels. However, it is important to keep in mind the history of pesticide approval in the U.S. Many pesticides that were considered safe at one time were later banned in light of new information of their danger. The most famous example of such an occurrence is the banning of DDT (an insecticide) in 1972 after three decades of widespread application on domestic agriculture.

The Environmental Working Group, a non-profit environmental research organization out of Washington D.C., regularly conducts investigations on a variety of issues to expose threats to the environment and human health. On the topic of pesticides in our food, EWG had this to say:

"There is growing concern in the scientific community regarding the subtle ways in which small doses of pesticides affect people, especially during critical periods of fetal development and childhood when they can have long lasting adverse effects. **Because the toxic effects of pesticides are worrisome, not well understood or in some cases completely unstudied, shoppers would be wise to minimize exposure to pesticides whenever possible.**"

Proponents of organic food stress the following benefits:

► ***It's safe and healthy***— Organic farmers don't use conventional methods to fertilize or control weeds or pests. Instead, they may use natural fertilizers, such as manure or compost, to feed the soil and plants, and

beneficial insects, birds, or traps to rid pests and weeds. This ensures that organic food is free of dangerous chemicals and pesticides that can cause serious illness. Beyond being safe to eat, organic foods oftentimes contain more nutrients than conventional foods. In a recent study commissioned by the Food Standards Agency, results from 162 cases showed that organic food had 50% more beta carotenes and 30% more flavanoids than conventional.

► ***It tastes better*** - Many advocates of organic food argue that it actually tastes better.

► ***It protects our natural resources*** – Organic farming protects the soil's vitality, promotes biodiversity, creates less pollution from sprays, and uses nature rather than fossil fuel-based fertilizers to produce food, requiring far less energy.

Are children more vulnerable to toxins in their diets?

Pound for pound, children get higher concentrations of pesticides than adults do during critical periods of growth. An EPA study of children whose diets were changed from regular to organic found that their pesticide levels plunged almost immediately. Those levels remained nearly undetectable until the children switched back to eating conventional food. 'We didn't expect that to drop in such dramatic fashion' said Emory University's Chensheng Lu, who led the EPA-funded research. Scientists are still trying to figure out how pesticides affect children, Lu said, but he notes that it took years to prove the health hazards of lead.



Is it worth the cost?

For those of us with a very limited budget, what are our options? The most affordable way to integrate organic foods into your diet may be through fresh produce. For starters, buy fruits and vegetables known to have lower pesticide residues. The EWG used results from the US Department of Agriculture and the US Food and Drug Administration to determine what is usually most contaminated with pesticides. *Their results:*

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• **Most Contaminated (substitute with organic when possible):** Apples, Bell Peppers, Celery, Cherries, Grapes (imported), Nectarines, Peaches, Pears, Potatoes, Red Raspberries, Spinach and Strawberries.

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• **Least Contaminated:** Asparagus, Avocados, Bananas, Broccoli, Cauliflower, Corn (sweet), Kiwi, Mangos, Onions, Papaya, Pineapple and Peas (sweet).
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Some tips for organic food and saving money:

- Purchase organic versions of produce typically contaminated the most.
- Buy in bulk whenever possible and share. Getting large quantities with another family will always be less expensive than buying one or two servings worth.
- Eat *seasonal* produce as frequently as possible to reduce your exposure to anti-fungal and antibacterial chemicals commonly used to extend the shelf life of fruits and vegetables.
- Consider purchasing organic meat, eggs, and dairy products. By doing so, you are

supporting a larger system of sustainability, as the animals are raised without antibiotics or growth hormones and the feed grown without unnatural chemicals.

- Some pesticides are taken up internally into the plant and cannot be washed off. Others are formulated to bind to the surface of the crop and do not easily wash off. Peeling reduces exposures, but valuable nutrients are often lost with the peel. Wash all produce in a water-white vinegar solution to remove residues and dirt.

What do I look for?

Unless food is marked with a “Certified Organic” seal by the U.S. Department of Agriculture, there is no way to ensure that the food you are eating is genuinely organic, even though it may be described as such on its packaging. You can trust that organic standards set by the USDA are strict and reliable.



Final Thoughts

Although research regarding the implications of exposure to chemicals, growth hormones, and antibiotics in our food remains somewhat controversial, we do know enough to make intelligent decisions about what we eat. And the benefits of supporting sustainable agricultural practices. If your budget allows, buy organic food, especially those foods that are typically higher in pesticides. Also, support local farms undergoing the transition to organic, as the process can be very time consuming and expensive.

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