

## Buying Organic

Should you buy organic? Are some foods typically more laden with pesticides than other foods? Are there any good reasons to spend the extra money on organic products?

If you or a loved one has diabetes, you already go the extra mile to put the healthiest fare you can on your table and in your mouths each day.

How important is it that you choose organic? Here's what you need to know....

**Are pesticides really harmful?** Here's what the U.S. Environmental Protection Agency (EPA) says: "By their very nature, most pesticides create some risk of harm. Pesticides can cause harm to humans, animals, or the environment because they are designed to kill or otherwise adversely affect living organisms."

A scan of the research on the chemicals most commonly used against insects, rodents, fungi, weeds, and disease leaves no question that these substances cause adverse effects, from cancer and neurological problems to nervous system damage and birth defects.

Some research has even indicated a possible association between pesticide use and obesity and insulin resistance.

### SOURCES:

1. U. S. Environmental Protection Agency. What is a Pesticide? <http://www.epa.gov/pesticides/about/index.htm> (accessed 5/09).
2. Pesticide Action Network Pesticide Database. <http://pesticideinfo.org/> (accessed 05/09).
3. Lim, Soo, Sun Young Ahn, In Chan Song, Myung Hee Chung, Hak Chul Jang, Kyong Soo Park, Ki-Up Lee, Youngmi Kim Pak, and Hong Kyu Lee. 2009. Chronic Exposure to the Herbicide, Atrazine, Causes Mitochondrial Dysfunction and Insulin Resistance. PLoS One 4, no.
4. <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=2664469&tool=pmcentrez&rendertype=abstract> (accessed 05/09).

**So, why isn't everyone sick?** The EPA ensures that a pesticide can be used as long as there is a "reasonable certainty of no harm" to human health. Where pesticides are used on food or feed crops, EPA sets "tolerances" for the amount of the pesticide residue that can legally remain in or on foods.

### SOURCE:

1. U.S. Environmental Protection Agency. Setting Tolerances for Pesticide Residues on Foods. <http://www.epa.gov/pesticides/factsheets/stprf.htm> (accessed 05/09).

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## Buying Organic, Continued

**Fact:** Contrary to what you might think, a study from 2002 found that half of all people who reported buying organic food "frequently" had an annual income below 50 thousand dollars, and the people that spend the most on organic produce are those with the lowest income level (under 25 thousand dollars). Also interesting to note: African Americans, Asian Americans, and Hispanics buy more organic products than do Caucasians.

### SOURCE:

1. Stevens-Garmon John, Chung L. Huang, and Biing-Hwan Lin. 2007. Organic Demand: A Profile of Consumers in the Fresh Produce Market. *Choices*. American Agricultural Economics Association. 22 (2): 109-115.

Aside from the absence of pesticide residue, some studies suggest that organic produce has more nutrients than its conventional counterparts, probably because the soil is left in better condition.

One recent study of blueberries shows that, at least sometimes, organic does deliver more.

Researchers took random samples of blueberries from different growers in New Jersey and compared their levels of phytonutrients. Though levels varied from farm to farm, the organic blueberries were significantly higher in those antioxidant and anti-inflammatory plant chemicals that fight off diseases and make blueberries the diabetes superfood they are (but count the carbs! Blueberries have 21 grams of carbs and 4 grams of fiber in a cup).

### SOURCE:

1. Stevens-Garmon John, Chung L. Huang, and Biing-Hwan Lin. 2007. Organic Demand: A Profile of Consumers in the Fresh Produce Market. *Choices*. American Agricultural Economics Association. 22 (2): 109-115.

**What does "certified organic" mean?** Products bearing the seal above must be no less than 95 percent organic. Organic means that crops are grown without the use of prohibited substances, genetic engineering, radiation, or sewage sludge. Instead of conventional fertilizers, organic farmers must use crop rotation, tilling, and natural composting to keep soil fertile and plants fed.

### SOURCES:

1. U.S.D.A. Agricultural Marketing Service. National Organic Program. Organic Labeling and Marketing (PDF). <http://www.ams.usda.gov> (accessed 05/09).
2. U.S.D.A. Agricultural Marketing Service. National Organic Program. Organic Production and Handling Standards. <http://www.ams.usda.gov> (accessed 5/09).

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## Buying Organic, Continued

**Fact:** Did you know there's at least one organic farm in your state? In 2005, for the first time, all 50 states in the U.S. had some certified organic farmland.

SOURCE:

1. USDA National Organic Program, 2007.

Organic standards for livestock cover animals used for meat, milk, eggs, and other animal products. The animals' feed must be 100 percent organic, they cannot be given hormones to promote growth, or antibiotics for any reason. Also, the animals must have access to the outdoors, including pasture for animals who graze.

SOURCE:

1. U.S.D.A. Agricultural Marketing Service. National Organic Program. Organic Production and Handling Standards (PDF). <http://www.ams.usda.gov> (accessed 5/09).

According to the nonprofit Environmental Working Group (EWG), you can significantly reduce your pesticide exposure by avoiding conventional (non-organic) versions of the most contaminated fruits and vegetables. The EWG has come out with a list of 47 common fruits and veggies and ranked them.

If you get your five daily servings of fruits and veggies from the 15 most contaminated, you could consume an average of 10 pesticides a day. If you eat conventional varieties of only the 15 least contaminated you can drop that number to less than two pesticides daily.

Number-one on their list (most pesticide residue): celery.

SOURCE:

1. Environmental Working Group. <http://www.foodnews.org> (accessed 5/10).

**Fact:** Americans buy more organic tomatoes than any other organic produce.

SOURCE:

1. Stevens-Garmon John, Chung L. Huang, and Biing-Hwan Lin. 2007. Organic Demand: A Profile of Consumers in the Fresh Produce Market. Choices. American Agricultural Economics Association. 22 (2): 109-115.

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## Buying Organic, Continued

This one's hard to swallow: Peaches are the second most contaminated on the EWG's list. And yes, the majority of samples of the fruits and veggies they tested had been washed or rinsed!

Next comes: (3) strawberries, (4) apples, (5) blueberries, (6) nectarines, (7) bell peppers, (8) spinach, (9) kale, and (10) cherries. (The complete list follows.)

The bottom line here: If you're going to buy only some things organic, splurge on these.

### SOURCE:

1. Environmental Working Group. <http://www.foodnews.org> (accessed 5/1)

The number-one least contaminated on the list: onions! Not your favorite food? Well, there's other good news.

Avocados -- a true diabetes superfood, low in carbs, and high in fiber and healthy, unsaturated fat -- are just as clean as onions. In ascending order from there: frozen sweet corn, pineapple, mango, asparagus, frozen sweet peas, kiwi, cabbage, and eggplant. These are 10 foods you can safely buy from the conventional bins if you need to shave the grocery bill.

### SOURCE:

1. Environmental Working Group. <http://www.foodnews.org> (accessed 5/10).

If you have diabetes, it makes sense to buy organic when you can. When your health is already compromised, you want to do your best to avoid toxins, even when they're in allowable levels. But when money is tight, make the best choices for yourself and your family. If you eat or drink a lot of a certain food (chicken? milk? eggs?), get the organic version. 