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Take Control of Your Health

Benefits of Going Organic

Analysis by Dr. Joseph Mercola Fact Checked | June 13, 2023

STORY AT-A-GLANCE

- Choosing organic foods lowers your exposure to pesticides linked to cancer, damage to children's IQ and neurobehavioral development and other health problems
- Organic foods are produced without genetically modified organisms (GMOs), and the use of antibiotics for preventive purposes is prohibited — both major benefits to human health and the environment
- Organically grown foods contain significantly higher levels of antioxidants and healthy fats than conventionally grown varieties
- Organic products are now available in close to 20,000 natural food stores and 3 out of 4 conventional grocery stores in the U.S.

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Many people want to lead a healthier lifestyle but aren't sure where to start. In the realm of diet, in fact, most Americans (52%) believe it's easier to calculate their income taxes than figure out what to eat to stay healthy.[1] It shouldn't feel this hard, which is why I want to give you one tangible step you can take to overhaul your diet, and lifestyle, for the better: Go organic.

A survey by the Organic Trade Association revealed that, in 2017, Americans bought more organic foods and household products than ever, with sales reaching $47 billion in 2016 — an 8% increase from 2015.[2] Katherine Paul, associate director of the Organic Consumers Association (OCA), said in a news release, "… I think you are looking at a

better-educated population that is connecting the dots between what they eat and their health."[3]

This is true, indeed, and organic products are now available in close to 20,000 natural food stores and 3 out of 4 conventional grocery stores in the U.S.

Even the U.S. Department of Agriculture acknowledges their staying power in the marketplace, noting "Organic products have shifted from being a lifestyle choice for a small share of consumers to being consumed at least occasionally by a majority of Americans."[4] But despite the gains in popularity, organic sales account for only about 6% of total U.S. food sales in 2023.[5]

Avoiding Pesticides Is the No. 1 Reason People Buy Organic

"Polling shows the No. 1 reason people go organic is to avoid pesticides, chemicals and all of those things that are not allowed in organics," Paul said,[6] and this is a primary reason why going organic is so important — for your health and the environment. Not only do these chemicals threaten the Earth as we know it, but they pose a direct risk to human health, including to developing babies.

In research presented at a 2017 Children's Environmental Health Network (CEHN) conference in Washington, D.C., it was demonstrated that women exposed to higher glyphosate levels during pregnancy had babies born earlier and with lower adjusted birth weights.[7] What's more, the chemical was detected in more than 90% of the mothers in the study.

Glyphosate, the active ingredient in Monsanto's Roundup herbicide, has made headlines because it's the most used agricultural chemical in history and also because the International Agency for Research on Cancer (IARC) determined it a probable carcinogen. The Canadian Food Inspection Agency has revealed that nearly 30% of the more than 3,000 foods they tested contain glyphosate.[8]

This included nearly 37% of grain products, 47% of bean/pea/lentil products and more than 30% of infant food and cereal. Even 7% of fresh fruits and vegetables contained the

residues. Eating nonorganic genetically engineered (GE) foods (the prime candidates for Roundup spraying) is associated with higher glyphosate levels in your body.[9]

Pesticides Are Harmful to Children's Brains, Farmworkers

The European Parliament commissioned a report on the human health implications of organic food and organic agriculture, which was co-written by Harvard Chan School's Philippe Grandjean, adjunct professor of environmental health.[10] A primary message of the report again centered on pesticides and the potential benefits of reducing their usage via organic agriculture.

In a Harvard School of Public Health news release, Grandjean said, "In conventional food, there are pesticide residues that remain in the food even after it's washed. Organic foods are produced virtually without pesticides."[11] While U.S. regulators insist that set limits on pesticide residues in conventional produce are enough to protect the public's health, the report found negative health effects may occur in children even at current levels of exposure. According to Grandjean:[12]

> *"[T]hose limits are based on animal studies, looking at the effect of one pesticide at a time. The human brain is so much more complex than the rat brain, and our brain development is much more vulnerable because there are so many processes that have to happen at the right time and in the right sequence — you can't go back and do them over … Three long-term birth cohort studies in the U.S. suggest that pesticides are harming children's brains.*
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> *In these studies, researchers found that women's exposure to pesticides during pregnancy, measured through urine samples, was associated with negative impacts on their children's IQ and neurobehavioral development, as well as with ADHD [attention deficit hyperactivity disorder] diagnoses.*
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> *Also, one of the studies looked at structural brain growth using magnetic resonance imaging and found that the gray matter was thinner in children the*

higher their mothers' exposure to organophosphates, which are used widely in pesticides. I think that's quite scary."

One of the studies Grandjean refers to is the CHAMACOS Study, which followed hundreds of pregnant women living in Salinas Valley, California, an agricultural mecca that has had up to a half-million pounds of organophosphates sprayed in the region per year.

The children were followed through age 12 to assess what impact the pesticides had on their development.[13] It turns out the impact was quite dramatic, and mothers' exposure to organophosphates during pregnancy was associated with:[14]

- Shorter duration of pregnancy
- Poorer neonatal reflexes
- Lower IQ and poorer cognitive functioning in children
- Increased risk of attention problems in children

Farmworkers who are exposed to agricultural pesticides on a near-daily basis also suffer, as do their families. Up to 20,000 farmworkers are poisoned by pesticides each year, although the actual number is likely far higher, as many of the workers may not seek medical care or may be misdiagnosed if they do seek treatment.

There is also no coordinated national incident reporting system to track such exposures. Despite this, pesticide exposures cause farmworkers more chemical-related injuries and illnesses than any other workforce nationwide.[15] So when you choose organic, you're helping to protect farmworkers as well as your own family.

Preventive Use of Antibiotics Is Restricted on Organic Farms

According to U.S. Centers for Disease Control and Prevention (CDC) data, every year at least 2 million Americans acquire drug-resistant infections and 23,000 die as a result. Many others die from conditions that were complicated by antibiotic-resistant infections.[16] What does this have to do with eating organic? The preventive use of

antibiotics is restricted on organic farms, while the animals are typically given more living space, helping to reduce infection risk naturally.

"These techniques have been found to improve animal health, prevent disease and minimize antibiotic resistance," Grandjean says.[17] On the other hand, 80% of the antibiotics used in the U.S. are used by industrial agriculture for purposes of growth promotion[18] and preventing diseases that would otherwise make their **CAFOs** unviable.

Low doses of antibiotics are added to feed as a matter of course, not only to stave off inevitable infectious diseases, but also because they cause the animals to grow faster on less food. The U.S. Food and Drug Administration (FDA) issued guidance on agricultural antibiotics in 2013, but it didn't go anywhere near far enough.

They asked drug companies to remove indications for "feed efficiency" and "weight gain" from the labels of their antibiotic products and required veterinarians to oversee any addition of these drugs to animal feed and water. Most companies have agreed to comply with these voluntary guidelines and state they no longer use antibiotics for growth promotion purposes.

Instead, they simply state they use the antibiotics for disease prevention and control, a use that is still allowed on nonorganic farms under the FDA's guidance. In the U.S., when the FDA tests raw conventional supermarket chicken, they routinely find antibiotic-resistant bacteria to be present.[19] So, reducing the spread of antibiotic-resistant bacteria is another significant reason for making sure you're eating only grass fed, organically raised meats and animal products.

Eating Organic Means You're Eating GMO-Free

The use of genetic engineering, or genetically modified organisms (GMOs), is prohibited in organic products — another significant benefit. Importantly, not only are GE seeds prohibited but animals raised on organic farms may not be fed GE alfalfa or GE corn. Over the past two decades, the majority of the anti-GMO movement was focused on

GMOs found in processed foods and a small number of whole GE foods. Yet that's only 20% of the GMOs in the human food chain.

Twice as much (40%) goes into the making of animal feed for CAFOs. The only way to change that trend is by not buying CAFO animal products, be it poultry (including eggs), pork or beef. While fruits and vegetables are the top selling category of organically grown food,[20] it's important to choose organic and grass fed meat and dairy products as well. As noted by OCA founder Ronnie Cummins:

> *"[W]e need to stop talking about GMOs as if it's some abstract technology that poses this kind of really-hard-to-understand danger, gene splicing, disruption of the genome and all that … There is no GMO crop that isn't sprayed with large amounts of poisonous chemicals …*
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> *Or else it's impregnated with a poison, like the Bacillus thuringiensis (Bt) toxin in the plant that expresses itself in every cell of the plant. When we're talking about pesticides, herbicides, fungicides, we're talking about GMO plants. There's no way to fight against GMOs unless we fight at the same time against chemical-intensive, energy-intensive agriculture and factory farms."*

In 2016 we saw, for the first time in nearly 20 years, a decrease in the amount of GE crops grown around the world, in terms of acreage. The market has started rejecting GMOs, and at current rates of growth, we could expect it to increase by about 50% over the next four years.

Instead, we need to quadruple sales of organic and grass fed. As noted by Cummins, by speeding up the rate at which we reach the tipping point where 15% of our food supply is organic or grass fed, the acceleration will multiply exponentially thereafter, with corresponding gains to human health and the environment.

Increased Nutrition and Other Benefits of Eating Organic

Many people choose organic because of what they don't get — the pesticides, GMOs and antibiotic-resistant bacteria, for instance — but there are also important measures to be

gained, like better nutrition. When cows are allowed plenty of access to forage, organic milk contains about 25% less omega-6 fats and 62% more omega-3 fats than conventional milk, along with more vitamin E, beta-carotene and beneficial conjugated linoleic acid (CLA).[21]

A British study also found that organically grown foods contain "significantly" higher levels of antioxidants than the conventionally grown variety, including beneficial compounds linked to a reduced risk of chronic diseases, including heart and neurodegenerative diseases and certain cancers.[22]

A Hungarian study reached a similar conclusion when they compared the chemical composition and nutritional value of organically and conventionally grown plant foods, with the organic variety again coming out on top:[23]

> *"Organic crops contain a significantly higher amount of certain antioxidants (vitamin C, polyphenols and flavonoids) and minerals, as well as have higher dry matter content than conventional ones. Moreover, there is a lower level of pesticide residues, nitrate and some heavy metal contaminations in organic crops compared to conventional ones.*
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> *There is a relationship between the different fertilization and plant protection methods of these two plant production systems and the nutritional composition of crops.*
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> *Consequently, it can be concluded that organically produced plant derived food products have a higher nutritional value, including antioxidants than conventional ones. Furthermore, due to the fact that there is a lower level of contamination in organic crops, the risk of diseases caused by contaminated food is significantly reduced."*

Beware of 'Fake' Organics, Including Hydroponics

When you see "organic" on a label, it's still necessary to do your due diligence to ensure the product is truly produced with the highest organic standards. The Organic Trade

Association and the hydroponic lobby, led by the Coalition for Sustainable Organics, are seeking to rewrite organic rules to include hydroponics, which are plants grown in a liquid medium without soil.

However, USDA organic regulations require that your crop rotation plan maintains or improves soil organic matter. Since hydroponics do not involve the use of soil, they do not qualify for organic certification, yet hydroponic operators have been certified organic by USDA-accredited certification agencies, which is deceitful to the public. Hydroponics also use chemicals, which organic producers are barred from using.

Worse, commercial hydroponic growers will rarely reveal the fertilizers they use. Further, keep in mind that while growing food indoors does reduce the need for pesticides, it does not automatically mean hydroponic vegetables are pesticide-free.

In addition, at least one study found hydroponically grown vegetables had lower levels of carotenoids such as beta-carotene and lutein than conventional vegetables.[24] Further, if you buy organic dairy you should know that not all organic brands are created equal.

While some are offering truly superior milk that comes from grass fed cows raised on pasture, others are passing off industrially produced milk as organic — and pocketing the increased profits while small family farms struggle to survive. In short, cows produce more milk, faster, when they're fed grain in the barn, as opposed to grazing on grass on pasture.

Industrialized organic dairies are capitalizing on this by skimping on grazing time, raising thousands of cows in veritable CAFOs, yet still gaining the USDA organic label that suggests a superior product.

Fortunately, the American Grassfed Association (AGA) recently introduced much-needed grass fed standards and certification for American-grown grass fed dairy,[25] which will allow for greater transparency and conformity.[26] I would strongly advise you to ensure your dairy is AGA-certified as grass fed.

Getting your raw milk from a local organic grass fed farm or co-op is best, but if you're considering milk from another source, check out Cornucopia's Organic Dairy Scorecard, which can help you make informed purchasing decisions.[27]

Ultimately, choosing organic products for yourself and your family is one more method you can use to take control of your health. If you must choose between which products to purchase organic, I recommend prioritizing organic animal foods and then using the Environmental Working Group's (EWG) "Dirty Dozen" list for produce, which are among the most heavily contaminated with pesticides and therefore the most important plant foods to buy organic. As of 2023, these include:[28]

Strawberries	**Spinach**	Kale, collard and mustard greens
Peaches	**Pears**	Nectarines
Apples	Grapes	Bell and hot peppers
Cherries	Blueberries	Green beans

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