



GOING ORGANIC

Navigating the maze of information

organic

WHAT DOES ORGANIC MEAN?

The term “organic” refers to the way agricultural products are grown and processed. While the regulations vary from country to country, in the U.S., organic crops must be grown without the use of synthetic pesticides, bioengineered genes (GMOs), petroleum-based fertilizers, and sewage sludge-based fertilizers.

Organic livestock raised for meat, eggs, and dairy products must have access to the outdoors and be given organic feed. They may not be given antibiotics, growth hormones, or any animal by-products.¹



ORGANIC

organic produce:

Grown with natural fertilizers (animal manure, compost).

Weeds are controlled naturally (crop rotation, hand weeding, mulching, and tilling).

Pests are controlled using natural methods (birds, insects, traps) and naturally-derived pesticides.

organic meat, dairy, eggs:

Livestock are given all organic, hormone- and GMO-free feed.

Disease is prevented with natural methods such as clean housing, rotational grazing, and healthy diet.

Livestock must have access to the outdoors.

VS

NON-ORGANIC¹

Conventionally-grown produce:

Grown with synthetic or chemical fertilizers.

Weeds are controlled with chemical herbicides.

Pests are controlled with synthetic pesticides.

Conventionally-raised meat, dairy, eggs:

Livestock are given growth hormones for faster growth, as well as non-organic, GMO feed.

Antibiotics and medications are used to prevent livestock disease.

Livestock may or may not have access to the outdoors.

THE BENEFITS OF ORGANIC

- ♥ Organic produce contains fewer pesticides.
- ♥ Organic produce is fresher because they do not contain preservatives.
- ♥ Organic farming is better for the environment.

- ♥ Organically raised animals are NOT given antibiotics, growth hormones, or fed animal byproducts.
- ♥ Organic meat and milk are richer in certain nutrients.
- ♥ Organic food is GMO-free.

¹ This material was taken from <https://www.helpguide.org/articles/healthy-eating/organic-foods.htm> in collaboration with Harvard University.



SYNTHETIC CHEMICALS IN FOOD

Pesticides, GMos, antibiotics & growth hormones

Types of Synthetic Chemicals

Pesticides include: Insecticides - insects. Herbicides - plants. Rodenticides - rodents (rats and mice). Bactericides - bacteria. Fungicides - fungi. Larvicides - larvae.

GMOs: Genetically Modified Organisms (GMOs) or genetically engineered (GE) foods are plants whose DNA has been altered in ways that cannot occur in nature or in traditional crossbreeding, most commonly in order to be resistant to pesticides or produce an insecticide.¹

Antibiotics & Growth Hormones: Veterinary drugs including antibiotics, growth hormones, and antihelminths are used for disease control and growth promotion of livestock animals.⁴

THE TROUBLE WITH PESTICIDES & GMOS

Cancer

Most of us have an accumulated build-up of pesticide exposure in our bodies due to numerous years of exposure. This chemical “body burden” as it is medically known could lead to health issues such as headaches, birth defects, and added strain on weakened immune systems.

Some studies have indicated that the use of pesticides even at low doses can increase the risk of certain cancers, such as leukemia, lymphoma, brain tumors, breast cancer and prostate cancer.

Children, fetuses, and pregnant women are most vulnerable.

Antibiotics & growth hormones

Excessive antibiotics are a concern because they cause the spread of antibiotic-resistant strains of bacteria.

The European Union has banned the use of hormones in beef cattle and has conducted a study that showed that hormone residues remain in the meat. Because of health concerns for both people and animals, Japan, Canada, Australia, and the European Union have all banned the use of rBGH, but the hormone is still given to cows in the US.²

Food allergies

The prevalence of food allergies, an abnormal immune response to a food that is harmful to the body, continues to rise.

A recent study indicates that people exposed to higher levels of certain germ- and weed-killing chemicals may be more likely to develop food allergies.³

The use of toxic herbicides like Roundup (glyphosate) has increased 15 times since GMOs were introduced. World Health Organization announced that glyphosate is “probably carcinogenic to humans” and GMOs have been linked to increased food allergens and gastro-intestinal problems in humans.



² <https://www.thoughtco.com/factory-farmed-animals-antibiotics-and-hormones-127697>.

³ <https://www.medicaldaily.com/pesticide-exposure-linked-rising-rate-food-allergies-among-us-children-246533>

⁴ [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3834504/Risk Assessment of Growth Hormones and Antimicrobial Residues in Meat](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3834504/Risk%20Assessment%20of%20Growth%20Hormones%20and%20Antimicrobial%20Residues%20in%20Meat)

GOING ORGANIC ON A BUDGET

Suggestions for organic shopping

Organic food is often more expensive than conventionally-grown food. But if you set some priorities, it may be possible to purchase organic food and stay within your food budget.

Some types of conventionally-grown produce are much higher in pesticides than others, and should be avoided. Others are low enough that buying non-organic is relatively safe. The following fruits and vegetables have the highest and lowest pesticide levels:

High levels of pesticides

- | | |
|--------------------|-----------------------|
| Apples | Kale/Collard Greens |
| Sweet Bell Peppers | Summer Squash |
| Cucumbers | Nectarines (imported) |
| Celery | Peaches |
| Potatoes | Spinach |
| Grapes | Strawberries |
| Cherry Tomatoes | Hot Peppers |

Low levels of pesticides

- | | |
|------------|---------------------|
| Asparagus | Onion |
| Avocado | Papaya |
| Mushrooms | Sweet Peas (frozen) |
| Cabbage | Sweet Potatoes |
| Sweet Corn | Grapefruit |
| Eggplant | Cantaloupe |
| Kiwi | Mango |
| | Pineapple |



Rinsing reduces but does not eliminate pesticides. Peeling sometimes helps, but valuable nutrients often go down the drain with the skin. The best approach: eat a varied diet, wash and scrub all produce thoroughly (plain water is best), and buy organic when possible.

GO ORGANIC WITH MEAT, DAIRY AND EGGS

While prominent organizations such as the American Heart Association maintain that eating saturated fat from any source increases the risk of heart disease, other nutrition experts maintain that eating organic grass-fed meat and organic dairy products doesn't carry the same risks. It's not the saturated fat that's the problem, they say, but the unnatural diet of an industrially-raised animal that includes corn, hormones, and medication.

OTHER COST SAVING TIPS

Shop at Farmer's Markets, join a Food Co-op, join a Community Supported Agriculture (CSA) farm, shop in season, and shop around even in the freezer aisle.

REMEMBER...

Organic doesn't always equal healthy — Making junk food sound healthy is a common marketing ploy in the food industry but organic baked goods, desserts, and snacks are usually still very high in sugar, salt, fat, or calories. It pays to read food labels carefully.

Natural is not the same as Organic — "Natural" labeling means that a food does not contain preservatives, additives, and/or artificial colors, but is not organic.