



All About... Organic Foods

Organic food sales account for about 4% of all food sales in the United States. Fruits and vegetables have the largest share of organic sales according to data from the United States Department of Agriculture's Economic Research Service.

What exactly does it mean for a food to be "organic?" Organic means the product is grown, produced and processed using methods that: encourage soil and water conservation, are intended to reduce pollution and to improve the environment in some way. To be able to be labeled "organic", crops must be produced without using synthetic, man-made pesticides; synthetic, man-made chemical fertilizers or bioengineered genes.

The standards that regulate organic food production are administered by the USDA National Organic Program (NOP). This program regulates how foods destined for the organic market are grown, handled and processed. The product must be certified to be "organic" in order to bear the label. This means that organic certification requires verification by a third party audit – or an audit done by an outside company or organization – not by the producer. There are some exemptions to the certification rule. Farmers who sell less than \$5,000 of organic products per year do not have to be certified – meaning they do not have to pay for and go through the third party audit. However, to sell their products legally as "organic", they DO have to follow the NOP standards and they DO have to document that they follow the standards. They have to keep records to show where seeds and/or animals come from, how their products are produced, what chemicals are used and how, and how the products are handled. The NOP reviews all synthetic substances for use in organic crop and livestock production and determines what can and cannot be used. The program even identifies some naturally occurring substances that are prohibited or not allowed to be used. It is important to remember that even "natural" chemicals can be toxic if they are ingested and ingested in high enough amounts. Just because a chemical occurs naturally in nature does not mean that it is non-toxic or 100% safe at any level used.

How can you tell if a product is "organic?" Look at the label. On foods that are "single ingredient foods," look for the word "organic." Fresh fruits or vegetables can be labeled with a small sticker version of the USDA organic seal OR with a sign above the organic display. For meat, milk, eggs, cheese or any other single ingredient foods, the food may be labeled with the word "organic" or it may have the USDA organic seal on the label.



What about foods that have more than one ingredient? How do you know if they are organic? If the label says "100% organic," all the ingredients used must be "organic." With that label, the product can only contain organic ingredients. If the label has the USDA seal, then the product is "certified organic." If the green and white USDA Organic seal is present, then 95% or more of the product's ingredients have to be organic.

If the product has a mix of organic ingredients and those produced conventionally, then labeling requirements are different. If you have a product labeled “made with organic ingredients,” then 70 to 95% of the ingredients in the product have to be organic. In this case, the label can also list up to three specific organic ingredients. These products cannot, however, have the USDA Organic seal. For foods that are made with less than 70% organic ingredients, then the ingredients can only be listed in the ingredient list – nowhere else on the label – and the label cannot contain any **claim** about being “organic” or having “organic ingredients” anywhere on the label. Retailers can be fined up to \$10,000 per violation if they knowingly sell products labeled as “organic” that fail to meet these standards.

What about the nutritional value of organic foods? From time to time, individual studies describe organic foods in the study as more nutritious than foods produced by conventional methods. There have been many studies looking at organic versus conventional. Reviews of many studies together show a lack of scientific proof that organic is more nutritious than conventional foods. It is difficult to compare results of individual studies. Each study is a “snapshot” in time with different conditions. It is important to remember that nutritional value can be affected by many things. Nutrient content is affected by soil, growing conditions, maturity at the time of harvest, and also how the product is stored and handled.

Are organic foods safer than conventionally produced foods? Organic production may reduce exposure to some synthetic, man-made chemicals, but some are allowed, and many natural chemicals are allowed which can also be safety issues in certain concentrations and if misused. It is also an important fact for consumers to realize that any product used in conventional crop, livestock or food production must be reviewed and approved for safety prior to use. This applies even to conventionally produced products. It is a fact that food itself, all food, is made of...chemical compounds.

What about organic milk? The two topics most often questioned with milk are antibiotics in milk and hormones in milk. All milk, organic or conventional, is tested for antibiotics to ensure standards are met, and the Grade A pasteurized milk ordinance requires that milk contain NO detectable antibiotics when analyzed using approved methods. If a cow becomes ill, the cow, whether in an organic herd or a conventional herd, will be treated with the same antibiotics. Organic cows will then be removed from the organic herd permanently and just placed in the conventional herd. Conventional cows that have to be treated with antibiotics will be removed from the herd until the milk tests free of antibiotics. Every truck load of milk is tested. If antibiotic residues are found in milk, then the milk is disposed of and not allowed to go to market. Farms can lose their permits to ship milk, especially if they have repeated violations. It is in the best interest of the dairy farmer to comply with regulations. Hormones from the milk-producing animal are naturally present in both organically produced milk and conventionally produced milk. Hormones have sometimes been administered to animals in conventional herds to increase milk production. The safety of this practice has been questioned and examined repeatedly over 15 to 20 years, and the use has been reaffirmed to be safe. However, the frequency of use for this purpose has diminished in the last few years due to consumer demands, not safety. The reason is that when milk is tested, there is no significant difference in hormone levels in any milk. Also, our bodies do not have the receptors necessary to absorb bovine growth hormone.



What if I can't afford organic milk? Do I have to buy it in order to be safe? Organic milk tends to be more expensive than other milk. Examine cartons of milk in the stores. On the labels, many non-organic, store brands state that their farmers pledge not to use growth hormones. Companies can require this as a part of their contract specifications with producers. That is one way food companies, including dairies, can manage safety and quality of their products. **ALWAYS READ THE LABEL!**

What about organic poultry and meat? Are there hormones in it? All living animals have hormones naturally produced in their bodies. All meat and poultry will contain hormones. The addition of synthetic hormones is restricted or not allowed in organic livestock production and even in conventional poultry and pork production. In conventional production of beef, safety of the compound is evaluated prior to approval for use and residues are monitored in beef.

Do I have to buy organic food to have a safe and nutritious diet? There is no scientific proof to say that the only way to have a safe and nutritious food supply is to buy organic foods. Even in conventional production where chemicals are used, less chemicals and newer, safer products are in use than in previous decades. The real benefit of organically produced foods may have more to do with reducing pollution and better management of soils than in the nutritional value or safety of the food. Regardless of how food is produced, whether organically or conventionally, it must be handled properly in a manner to prevent contamination from harmful chemicals or microorganisms that could cause foodborne illness.

Consumer Choice: The organic market is yet another choice for consumers. Buying organic is a personal choice. Each consumer must weigh the pros and cons and decide if organic fits into their budget.

Judy A. Harrison, Ph. D., Professor and Extension Foods Specialist
Dept. of Foods and Nutrition
College of Family and Consumer Sciences
University of Georgia.

2015

The University of Georgia and Ft. Valley State University, the U.S. Department of Agriculture and counties of the state cooperating. Cooperative Extension, the University of Georgia Colleges of Agricultural and Environmental Sciences and Family and Consumer Sciences, offers educational programs, assistance and materials to all people without regard to race, color, national origin, age, gender or disability.

**An Equal Opportunity Employer/Affirmative Action Organization
Committed to a Diverse Work Force**

