What Does Organic Really Mean?

Consumers have a mind-boggling array of foods to choose from at the grocery store. Some foods appeal to families on a tight budget, others are marketed to shoppers with high-end tastes, and others are designed to provide calories in as little time as possible. A large portion of shelf-space targets people who want food that is healthy, nutritious, and wholesome. Such foods are generally easy to spot, because their claims are boldly declared on the front of the package: “Low Fat”, “Low Carb”, “Whole Grain”, “100 Calories”, “Only 90 Calories”, “Enriched”, “Locally Grown”, “All Natural”, “Organic”, and the list goes on. However, only one of those claims is legally defined and verified through independent, third-party certification: organic.

The term “organic” has several meanings that depend on context and how savvy consumers are about organic food production. Chemists use “organic” to refer to compounds that contain carbon. In the agricultural industry, it refers to “the quality of resembling an organism—that is, a living system in which a number of parts cooperate to the benefit of all” (“Organic and Locally Grown Foods”). Many consumers have a much narrower view and associate organic food only with improved nutrition, less pesticide residue, or better taste. Others focus less on the qualities of the food and take it up as a moral or environmental cause.

Each of those perceived meanings are valid; however, they are only part of the whole
story. The USDA National Organic Program (NOP) clearly defined the standards by which U.S. food may be certified as organic. A consumer brochure from the USDA summarizes:

Organic food is produced by farmers who emphasize the use of renewable resources and the conservation of soil and water to enhance environmental quality for future generations. Organic meat, poultry, eggs, and dairy products come from animals that are given no antibiotics or growth hormones. Organic food is produced without using most conventional pesticides; fertilizers made with synthetic ingredients or sewage sludge; bioengineering; or ionizing radiation. (Gold)

Marketers of nonorganic products exploit uncertainty and confusion in the minds of consumers about what \textit{organic} means, as well as \textit{natural}. With the exception of meat, which only has modest requirements, “natural” food has no legal definition. “Whole foods”, in theory, should contain more nutrients and fiber than more processed foods. Similarly, “natural” foods should not include synthetic ingredients (McDilda 83). However, since “natural” foods are not regulated, there are no guarantees. It can be irradiated and may include chemical pesticides, genetically modified (GM) crops, fumigants, solvents, toxic processing aids—none of which must be disclosed on a product label (Chen).

Despite the obvious shortcomings of the term “natural” compared to “organic”, many consumers do not understand or even accept the differences. In a 2009 report by market research company Mintel, 31% of surveyed respondents said that “\textit{100\% natural} is the most desirable eco-friendly product label claim, compared to 14% who chose \textit{100\% organic}.” (Vallaeys 10) The report also indicated that roughly 30% of respondents did not know if they could trust either term, “natural” or “organic” (Vallaeys 10).

Using such consumer confusion to their advantage, several companies that used to
produce a large numbers of organic products have replaced them with “natural” products. Despite the manufacturers’ lower cost of nonorganic goods, retail prices may be higher for “natural” foods than for “organic”. This indicates that these companies are intentionally exploiting customer confusion (Vallaeys 13–20).

The media and nonorganic producers were quick to report the results of studies that concluded that “there was simply no notable difference between reportedly healthier organic food and conventionally processed food products”¹ and “little evidence of health benefit from eating organic food.”² Yet, mainstream media largely ignored or downplayed reports that found higher levels of beneficial nutrients in organic compared to nonorganic foods³. At least 11 nutrients⁴ were found to be higher in organic food, including several important vitamins, minerals, and fatty-acids⁵. Furthermore, organic sources may contain micronutrients or other components⁶ for which researchers did not test. Such untested differences also may explain differences in taste between organic and conventional foods that many people perceive.

Beyond the disputed claims about nutrition, organically raised food, especially locally sourced organic food, is a sensible alternative to conventionally produced agriculture. Organic food production is an integrative approach that reaches far beyond nutritional benefits, taste, and wholesomeness. Jack Hunter, spokesman for the U.K.-based Soil Association, is quoted as saying, “Organic is all about producing food in a way that doesn't harm people or the environment.” (Chen).

Many consumers familiar with organic production methods purchase organic food to avoid residue from dangerous pesticides, reduce dependency on fertilizers derived from fossil fuels, prevent animal cruelty, and support sustainable farming practices.

Presently, conventional farming is able to produce more food than people eat, even
though ineffective distribution, politics, and greed keep many people hungry worldwide (Gustafson 202). Instead of being seen primarily as a distribution problem, big agriculture claims that they can fix the problem by increasing crop yields with GM plants and vast technologically advanced farms that rely on heavy fertilization and strong pesticides, herbicides, and fungicides (Gustafson 201–2). So far, the promise of GM has been an empty one.

Claims are made that organic farming cannot produce the yields necessary to scale up to feed the world. However, comparing the yield for a particular monoculture crop to the yield of a similar crop from an organic farm is a logical fallacy. The total caloric yield of an organic farm greatly outperforms a conventional farm. Organic crops are rotated seasonally and annually to enrich the soil and manage pests and weeds. As a result, the organic farm produces less of a given crop in a year, but it should produce more food overall from a variety of crops (Barber).

When it comes to animals, organic farming ensures that animals eat food that has more diverse nutrients and, unlike grain-based chow, is designed for their digestive system. It keeps dangerous antibiotics and hormones out of the animals, and thereby out of humans. By avoiding needless antibiotics, bacteria do not become resistant, which means that resistant strains do not enter the watersheds, ending up on produce, and then into the guts of people (Aidara-Kane).

Organic has different meanings for different people, but it is the only term that describes food production that is independently certified to meet strict government standards. The standards ensure that the food is truly as natural and wholesome as any related term might imply. It also ensures that the process of getting food from the farm to the plate is as gentle on the planet as possible, especially when the food is locally sourced also.
Notes

1. Results from research conducted by the London School of Hygiene & Tropical Medicine based on a review of 162 scientific papers published in the last 50 years. (Chen)

2. In September [2013?], Stanford University's Center for Health Policy released a controversial report called Are Organic Foods Safer or Healthier Than Conventional Alternatives? The study—a meta-analysis of more than two hundred studies—concludes that there is “little evidence of health benefit from eating organic food.” The researchers found that, according to vitamin and mineral content, organic products were no more nutritious than conventionally grown meats and vegetables. (Schiffman)

3. In response to the July 2009 report on the lack of additional health benefits in organic food, the Soil Association's Policy Director Peter Melchett stated in a press release, "Although the researchers say that the differences between organic and non-organic food are not 'important', due to the relatively few studies, they report in their analysis that there are higher levels of beneficial nutrients in organic compared to non-organic foods." (Chen)

4. A 2008 survey of scientific papers since 2003 found that in the majority of studies, organic foods contained higher levels of 11 nutrients than identical quantities of conventionally grown foods. (“Organic and Locally Grown Foods”)

5. Organic food contains higher levels of several important vitamins and minerals, including vitamin C, calcium, magnesium, iron, and chromium, in addition to cancer-fighting antioxidants and omega-3 fatty acids. According to Hunter, a good example is organic milk, which has on average 68 percent more omega-3 essential fatty acids than conventionally produced milk. (Chen)

6. In a study analyzing the effects of organic and nonorganic feed and different extraction
methods for oils from hen and duck eggs, the scientists noted that “[o]rganic sources may contain some special components which are not existed in machine made eggs. We can also claim environmental and dietary condition is very important in yolk contents. In order to improve life quality of human beings and better efficiency for egg yolk components we suggest considering the way of feeding for poultry.” (Mahmoudi)
Works Cited


Schiffman, Richard. “In defense of organic farming: less than a cure-all more than a fad.”
