

## For Better or for Worse: Organic Versus Conventional Foods

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Health and wellbeing are two important aspects in every individual's life. Everybody in the world is concerned about their health and strives to live a healthy life free of disease. Healthy eating is an important factor for a healthy wholesome life. Over the last three decades, the concept of organic food has grown immensely. Organic foods are endorsed by health practitioners for its positive health benefits. Even media is propagating the idea of organic foods among public for health and environmental concerns.

Organic agriculture is rapidly emerging worldwide. According to the Research Institute of Organic Agriculture FiBL survey 2017, 181 countries around the globe are involved in organic food production with 1.4 percent of farmland being used for organic farming [1]. In United States and Europe, the organic food market is developing massively. Even in other regions of the world, organic food industry is growing [2,3]. Despite the increase trend of organic plant food consumption worldwide, the interrogations related to it still prevail.

Organic foods are chemical free and refer to foods grown without the use of fertilizers, preservatives, pesticides and any type of additives. It isn't grown with genetically modified seeds (that cannot reproduce). According to United States Department of Agriculture (USDA), the term "organic" refers to "the methods and techniques used by farmers for growing and processing agricultural products". Farmers involved in organic agriculture do not use any synthetic products to control insects or pesticides. Furthermore, no sewage sludge, irradiation, and genetic engineering are incorporated in organic agriculture processing. A major advantage of organic agriculture and farming is soil and water conservation and a reduction in environmental pollution. Conventional foods on the other hand use synthetic fertilizers, preservatives, pesticides and other chemicals for their production [4]. Organic food is chemical free.

Despite being expensive, organic food is being largely consumed by people throughout the world. For Pakistanis, opting for organic food means that we are simply being fashionable or it means that we're going back to the basics. Increased consciousness about impurities in the food we consumed on a daily basis means that people are becoming cognizant to healthier options in spite of financial burden. Organic food is not a new concept for many Asians. It simply means using natural fertilizers and natural methods of pest control. In modern times, organic farming entails the use of organically approved pesticides and fertilizers to maintain soil productivity and to control pests. Organic farmers employ methods like crop rotation, green manuring, and use compost made by the farmers. There have been multiple studies conducted on the factors leading to increased consumption of organic food. According to a study, health concerns, product quality and environmental concerns are three main factors for increased consumption of organic foods. Other factors leading to increased organic food consumption were awareness and health consciousness. Interestingly, a study conducted in Pakistan Turkey and Iran identified attitude and health consciousness as two major elements that have made organic food popular and has increased their purchase and consumption among consumers [5-7].

A systematic review revealed that limited scientific data prevails to support the nutritional benefits of organic and conventional foods. There is not enough data providing the evidence that organic foods have higher nutritive value as compared to conventional foods [8,9]. Results from few studies have shown that organic plant foods have only slightly higher vitamin C content as compared to conventional plant foods [10,11]. Another study revealed that in comparison to conventional foods, organic foods have increased levels of vitamin C, iron, magnesium, phosphorus and low levels of nitrates. Organic foods also have higher polyphenol content that have strong health benefits [12,13].

Though organic food may be a buzz word for lay public but for health professionals uncertainty lies about the nutritional quality and health benefits of organic food. Although the organic food industry is fast developing but requires a lot of scientific evidence is required to show that organic food is actually a healthier choice as compared to conventional food before we start advocating its use.

### Bibliography

1. "The World of Organic Agriculture 2019". IFOAM.
2. "Organic Market Analysis". OTA.
3. Lernoud Julia and Helga Willer. Organic Agriculture Worldwide: Key Results from the FiBL.
4. "Organic Production/Organic Food 2007". United States Department of Agriculture.
5. Basha Mohamed Bilal, *et al.* "Consumers Attitude Towards Organic Food". *Procedia Economics and Finance* 31 (2015): 444-452.
6. Kapuge Kdlr. "Determinants of Organic Food Buying Behavior: Special Reference to Organic Food Purchase Intention of Sri Lankan Customers". *Procedia Food Science* 6 (2016): 303-308.
7. Asif Muhammad, *et al.* "Determinant Factors Influencing Organic Food Purchase Intention and the Moderating Role of Awareness: A Comparative Analysis". *Food Quality and Preference* 63 (2018): 144-150.
8. Dangour Alan D., *et al.* "Nutritional Quality of Organic Foods: a Systematic Review". *The American Journal of Clinical Nutrition* 90.3 (2009): 680-685.
9. Popa Mona E., *et al.* "Organic foods contribution to nutritional quality and value". *Trends in Food Science and Technology* 84 (2019): 15-18.
10. Spangler Crystal Smith, *et al.* "Correction: Are Organic Foods Safer or Healthier Than Conventional Alternatives?" *Annals of Internal Medicine* 157.5 (2012): 348-366.
11. Williams Christine M. "Nutritional quality of organic food: shades of grey or shades of green?" *Proceedings of the Nutrition Society* 61.1 (2002): 19-24.
12. Worthington Virginia. "Nutritional Quality of Organic Versus Conventional Fruits, Vegetables, and Grains". *The Journal of Alternative and Complementary Medicine* 7.2 (2001): 161-173.
13. Lairon Denis. "Nutritional quality and safety of organic food. A review". *Agronomy for Sustainable Development* 30.1 (2010): 33-41.

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