

## Compare and Contrast Essay: Full Writing Guide

Organic and Non-organic Food

Over the last two decades, the demand from consumers for organic foods has increased tremendously. In fact, the popularity of organic foods has exploded significantly with consumers, spending a considerably higher amount of money on them as compared to the amount spent on inorganic foods. The US market noted an increase in sales of more than 10% between 2014 and 2015 (Brown, n.p). The increase is in line with the views of many consumers that organic foods are safer, tastier, and healthier compared to the inorganic foods. Furthermore, considering the environmental effects of foods, organic foods present less risk of environmental pollution — compared to inorganic foods. By definition, organic foods are those that are grown without any artificial chemical treatment, or treatment by use of other substances that have been modified genetically, such as hormones and/or antibiotics (Brown, n.p).

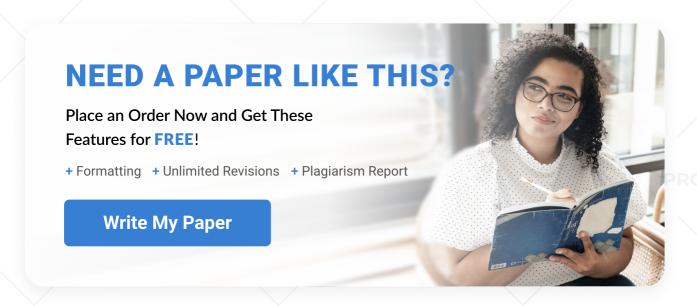
A food product will only be labelled as organic if it is free of any additives that were made artificially, such as preservatives, flavoring, sweeteners, as well as colorings. On the other hand, inorganic foods are those that are grown using artificial chemicals (Brown, n.p). Inorganic food products are those that have been treated with artificial additives, such as preservatives, sweeteners, and flavoring. Organic and inorganic foods possess a number of significant differences. This paper is a comparison between the organic and non-organic foods in terms of their properties, including their nutrient contents and effects on the health of consumers and the environment.

Various studies that have compared the nutritional contents of organic and non-organic foods have produced mixed results. Whereas some claim that the nutritional contents are comparable, others have found organic foods to be more nutritious due to the high content of antioxidants present. A number of studies have indicated that the levels of antioxidants are higher in organic foods, as compared to

inorganic foods, and so are the levels of certain types of micronutrients such as iron, zinc and vitamin C (Brown, n.p). Antioxidant levels in organic foods are as high as 69%, while the levels are lower in non-organic foods. According to a study conducted on corns and berries grown organically, the antioxidant levels were found to be at 58%, while those of that were not organic were found to be 52% (Brown, n.p). The higher levels of antioxidants are attributed to the fact that organic foods have no dependence on chemical pesticide sprays for protection against the pesticides, but instead produce antioxidants, which act as the protection. Therefore, a shift from conventionally grown cereals, vegetables, and fruits to organic ones has the benefit of providing extra amounts of antioxidants into the diets.

Antioxidants are beneficial to the body due to their role in reducing the risk of developing chronic illnesses, such as some types of cancers, diseases that degenerate the neural system, as well as cardiovascular diseases (Carrington and Arnett, n.p).

Also, while pesticide use is absent in organic foods, non-organic foods have been found to have some toxic pesticides, such as cadmium—whose accumulation can be harmful to the health of their consumers. According to a research study conducted on the two types of foods, non-organic foods were found to contain higher amounts of pesticides, four times more than in organic foods (Carrington and Arnett, n.p). While the levels of cadmium may not be as high as regulatory agencies may find harmful, there is a risk of progressive accumulation of the chemical in the bodies of consumers. Although cadmium may be not harmful in small amounts, accumulation into the body over time can reach harmful levels. Therefore, the consumption of organic foods will help consumers avoid the risks of the accumulation of pesticide residue altogether.



Another important factor in organic foods are the nitrates levels. Nonorganic foods rely heavily on artificial fertilizers, which are basically nitrate compounds. They, therefore, have higher levels of nitrates compared to organic foods. The levels of nitrates in organic foods are lower than in nonorganic foods by about 30% (Brown, n.p). The higher the levels of nitrate intake, the higher the chance of associated health risks, such as cancer. Additionally, high nitrate levels in infants have been associated with a condition that has a negative effect on their blood capacity to transport oxygen (Brown, n.p).

Organic animal food products also have some significant differences in their nutritional constitution. For instance, while the levels of omega-3 fatty acids in organic dairy products, such as milk, are higher than in non-organic products, the levels of other minerals with health significance, such as iodine and selenium, are lower in organic dairy products than in non-organic ones. Also, the level of omega-3 fatty acids in organic meat is higher than in conventional meat, while the level of saturated fats in organic meat is lower (Brown, n.p). Many health benefits are associated with omega-3 fatty acids, such as a lower risk of suffering from heart disease. Therefore, it is expected that a higher intake of organic animal food products will contribute to higher levels of omega-3 fatty acids—and therefore translating into associated health benefits.

Physically, there also exists a considerable contrast between organic and nonorganic foods in appearance. For instance, when a person goes shopping for fruits, he or she almost instantaneously notices the differences in appearance between the two types of food products (Solomon, n.p). Organic products such as fruits will always be variable sizes and shapes, presenting some form of physical imperfection compared to their non-organic counterparts

On the other hand, nonorganic foods will always appear to have a relatively similar appearance in accordance with their various types. The differences arise from the treatments given to the products during growth. Non-organic products, some of which have undergone minimal processing or are generally unprocessed, are usually subjected to treatment by use of artificially processed substances for growth enhancement, which is not the case for organically produced products (Solomon, n.p). These substances are responsible for giving the products an almost perfect shape. That way, they will always appear similar. Contrarily, the organic foods, whose growth is under the influence of substances naturally produced by the plant, will not achieve the same kind of perfection in non-organic products due to the variations in supply of these growth substances to different parts of the plants. The same situation applies to animal products. Growth enhancing substances used in the production of non-organic meat ensures they have larger cuts.

In summary, some studies have revealed some similarities in the nutritional contents between organic and non-organic food substances. However, others have revealed a number of considerable differences in the amount of antioxidants, as well as other minerals, present in organic and nonorganic foods. Generally, organic fords have higher levels of antioxidants than non-organic foods and are therefore more important in the prevention of chronic illnesses. Additionally, the levels of nitrates are lower in organic foods than in non-organic foods, and so are the levels of pesticide residues, such as cadmium, that are harmful to people's health in high levels. Moreover, the levels of omega-3 fatty acids are higher in organic foods than non-organic foods—resulting in more health benefits. Finally, the two types of foods vary in physical appearance, such as shape and size. Whereas the variation is much more substantial in organic food products such as fruits, the levels of uniformity are higher in non-organic foods.













Brown, Mary Jane. "What Is Organic Food, And Is It Better Than Non- Organic?". Authority Nutrition, <a href="https://authoritynutrition.com/what-is-organic-food/">https://authoritynutrition.com/what-is-organic-food/</a>.

Solomon, Zak. "Organic Vs. Non-Organic: What's The Difference? | Food Safety News". Food Safety News, 2013, <a href="http://www.foodsafetynews.com/2013/08/organicvs-non-organic-whats-the-difference/#.WNLoSsb-vIU.">http://www.foodsafetynews.com/2013/08/organicvs-non-organic-whats-the-difference/#.WNLoSsb-vIU.</a>

Carrington, Damian, and George Arnett. "Clear Differences Between Organic And Non-Organic Food, Study Finds". The Guardian, 2014, <a href="https://www.theguardian.com/environment/2014/jul/11/organic-food-moreantioxidantsstudy.">https://www.theguardian.com/environment/2014/jul/11/organic-food-moreantioxidantsstudy.</a>

















