Compare and Contrast Essay
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 tremendously with consumers spending a considerably higher amount of money on them as compared to the amount spent on inorganic foods. Besides, the US market registered an increase in sales of more than 10% between 2014 and 2015 (Brown, n.p). The increase is in line with the views on many consumers that organic foods are safer, tastier, and healthier compared to the inorganic foods. Besides, considering the environmental effects of foods, organic foods presents less risks of environmental pollution compared to the inorganic foods. From 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 antibiotics (Brown, n.p).

Additionally, a food product will only be labelled as organic if it is free of any additives 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). Non-organic food products are those that have been treated with artificial additives such as preservatives, sweeteners, and flavoring. Organic and non-organic 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 the consumers and on the environment.

Various studies comparing the nutritional contents in the 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 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 nonorganic foods. According to a study conducted on corns and berries grown organically, the antioxidant levels were found to be at 58% while those of vitamin C 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 the reduction of 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 the organic foods, nonorganic foods have been found to have some toxic pesticides such as cadmium whose accumulation could be harmful to the health of their consumers. According to a research conducted on the two types of foods, the nonorganic foods were found to contain higher pesticides, four times more than in organic foods (Carrington and Arnett, n.p). While the levels of the cadmium may not be as high as the regulatory agencies may find harmful, there is the risk of accumulation of the chemical in the bodies of consumers. Although cadmium may be not harmful in small amounts, accumulation into the body over time could reach harmful levels. Therefore, the consumption of organic foods will help the consumers avoid the risks of accumulation of pesticides residue altogether.

Another varying factor in the organic foods is the levels of nitrates. Nonorganic foods rely heavily on artificial fertilizers, which are basically nitrate compounds. They therefore have higher levels of nitrates compared to the 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 nitrates intake, the higher the associated health risks such as cancer. Additionally, a high nitrate level in infants has been associated with a condition that has a negative effect on their bloods capacity to transport oxygen (Brown, n.p).

Organic animal food products also have some significant differences especially in their nutritional constitution. For instance, while the levels of omega-3 fatty acids are higher in organic daily products such as milk than in nonorganic products, the levels of other minerals with health significance such as iodine and selenium are lower in organic dairy products than in nonorganic ones. Also, the level of omega -3 fatty acids in organic meat is higher than in conventional meat, while that of saturated fats 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 a higher level of omega -3 fatty acids thus translating to the 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 in varying sizes and shapes presenting some form of physical imperfection compared to the nonorganic products.

On the other hand, nonorganic foods will always appear to have a relatively similar appearance in accordance with the various types. The differences arise from the treatments given to the products during growth. Nonorganic 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. On the other hand, the organic foods whose growth is under the influence of substances naturally produced by the plant will not achieve the kind of perfection in nonorganic products due to the variations in supply of these growth substances to different parts of the plants. The same case applies to animal products. Growth enhancing substances used in the production of nonorganic meat ensures they have a larger cut

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

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