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## IS THERE ANY EFFECTS OF ORGANIC FOOD ON HUMAN HEALTH?

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### **Abstract**

In the last decade, the production and consumption of organic food have increased steadily worldwide. While there is increasing scientific evidence for biodiversity and environmental sustainability-related benefits of organic farming, there is still considerable scientific controversy about whether or not, and to what extent organic production methods result in food quality and safety, and human health gains. This review provides an update of the present knowledge of the impact of an organic versus a conventional food diet on health. Considering the nutritional value of organic products, the content of dry matter, minerals, vitamins and substances that give a better smell and taste of food, advantage is on the organic food side. In terms of the content of secondary metabolites of plants, products from organic production show significant advantages over products from conventional production. The content of polyphenols, carotenoids and vitamin C is 10-50% higher in products from organic production. The risk of food contamination by residues of pesticides and antibiotics is lower in organic than in conventional foods. Also, there is no evidence that there is a higher risk of microbiological and other natural toxins found in organically produced foods. Analyses of products from animal production, including milk, dairy products and meat, showed that products from organic production had significantly better characteristics compared to products from conventional production. This refers to the total content of useful fatty acids, especially the content of conjugated linoleic acid (CLA), the content of which can be higher up to 60% in milk from organic production, then a better ratio of omega-3 and omega-6 fatty acids, higher antioxidant content and lower concentrations of drug and hormone residues in organic products.

**Keywords:** Organic food, Human health, Nutritional value, food quality and safety