## National University of Food Technologies

**Introduction.** Organic food has become very popular. But navigating the maze of organic food labels, benefits, and claims can be confusing. Is organic food really healthier? Do GMOs and pesticides cause cancer and other diseases? What do all the labels mean? Making a commitment to healthy eating is a great start towards a healthier life. Beyond eating more fruits, vegetables, whole grains, and good fats, however, there is the question of food safety, nutrition, and sustainability. How foods are grown or raised can impact both your health and the environment. This brings up the questions: What is the difference between organic foods and conventionally grown foods? Is "organic" always best? Are GMOs safe? What about locally grown foods? Organic foods provide a variety of benefits. Some studies show that organic foods have more beneficial nutrients, such as antioxidants, than their conventionally grown counterparts. In addition, people with allergies to foods, chemicals, or preservatives often find their symptoms lessen or go away when they eat only organic foods. In addition:

Organic produce contains fewer pesticides. Pesticides are chemicals such as fungicides, herbicides, and insecticides. These chemicals are widely used in conventional agriculture and residues remain on (and in) the food we eat.

Organic food is often fresher. Fresh food tastes better. Organic food is usually fresher because it doesn't contain preservatives that make it last longer. Organic produce is often (but not always, so watch where it is from) produced on smaller farms near where it is sold.

Organic farming is better for the environment. Organic farming practices reduce pollution (air, water, soil), conserve water, reduce soil erosion, increase soil fertility, and use less energy. Farming without pesticides is also better for nearby birds and small animals as well as people who live close to or work on farms.

Organically raised animals are not given antibiotics, growth hormones, or fed animal byproducts. The use of antibiotics in conventional meat production helps create antibiotic-resistant strains of bacteria. This means that when someone gets sick from these strains they will be less responsive to antibiotic treatment. Not feeding animal byproducts to other animals reduces the risk of mad cow disease (BSE). In addition, the animals are given more space to move around and access to the outdoors, both of which help to keep the animals healthy.

Organic meat and milk are richer in certain nutrients. Results of a 2016 European study show that levels of certain nutrients, including omega-3 fatty acids, were up to 50 percent higher in organic meat and milk than in conventionally raised versions. This may be because organic milk and beef come from cattle that graze on a natural diet of grass, while conventional meat and milk usually comes from animals fed with grain.

**Conclusion.** The organic food market segment has been growing rapidly for years. It is expected to continue its double digit growth, with some estimates indicating the segment should grow 14% between 2013 and 2018. The organic food movement should continue growing in popularity as consumers become increasingly aware of pesticides and genetically modified foods. The biggest obstacle to further growth is cost of producing, supplying and purchasing organic products, so those that can balance cost with an organic approach are likely to find favor with consumers.