17. Global Issues in Food Technology

Prosianko Yuliia, Olesia Starkova
National University of Food Technologies, Kyiv, Ukraine

Introduction. The reason why I chose this theme is that, I want to find and discuss reasons, which have caused this problem and methods of solving it.

Material and methods. Ecological purity of food products implies their safety for human health. This concept includes the constituent elements of microbiological, chemical, and radiation safety. At first glance, the problem of food safety may seem simple enough. It concerns the quality control of food products for the content of heavy metals, radio nuclides, pesticides, other chemical pollutants, pathogens, helminthes and biological toxins that pose a risk to human health.

All of these questions are related to food hygiene and food toxicology. With the advent of new food technologies, new risks and new problems arise. Because, Manufacturers are trying to reduce the cost of production of the product all the time: replacing expensive raw materials with cheaper ones, adding various flavors and preservatives. All these food frauds have a negative impact on people's health.

The problem of food additives. Currently, in the food industry is widely used "food additives and auxiliary substances", such as preservatives, antioxidants, emulsifiers, leavening agents, dyes. They are included in the composition of many food products with purely technological purposes of production (baking powder dough, defoamers, emulsifiers, stabilizers), to improve consumer properties of the product (dyes, perfumes), in order to increase shelf life (preservatives, antioxidants). The most important in the problem of food additives is that the level of adequate and safe human consumption has not been developed. Only the content of food additives in the composition of individual foods is normalized, but at the same time, no one considers how many food additives can be consumed.

Solution Methods. The central element of the food safety system is the organization of control and monitoring of their contamination. Improving the forms of state quality control and safety of raw materials and food, their certification will improve the quality of food, bringing them closer to the requirements of world standards. One of the activities to create safe food is the development of new technologies for the production of healthy products. However, in the age of continuous "chemicalization" of food production, it should be more closely related to the chemical safety of food products and production.

Advances in technology have enabled world food supply to keep pace with population growth. However, each technology has its own risks. The world population is forecast to double over the next 50 years, and food production must increase to meet demands. The availability of water is a major constraint on food production in many parts of the world, and efforts will be needed to conserve water for food production. Biotechnology could help achieve the goal of sustainable development, which recognises the need for technology without environmental damage. An efficient food industry and distribution system can also decrease waste.

Internationally agreed food standards are essential to facilitate trade between countries. All of these challenges require a sophisticated infrastructure, which in some parts of the world, particularly Africa, is being destroyed by war.

Conclusion

I think that these problems in food technology are very dangerous and require quick elimination, otherwise people will have health problems due to poor-quality of food.