0/ДІ <u>П/Ю</u> Kordzaia Natela, legorov Bogdan, Trajkovska Biljana, R Naveen Kumar, Osmanaj Besjan, Ilyasoglu Alona



## **Food safety** and security: an international aspect







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# FOOD SAFETY AND SECURITY: AN INTERNATIONAL ASPECT

Monography



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#### **Reviewers:**

**Tkachenko O. B.** – Doctor of Technical Sciences, Professor of the Department of Wine Technology and Sensory Analysis of the Odessa National Academy of Food Technologies, Odessa, Ukraine;

**Pavle Sekulovski** – DVM, MSc, PhD, Professor of the Department of Food Safety and Veterinary Public Health Faculty of Veterinary medicine The "Ss Cyril and Methodius" University Skopje, Republic or Northern Macedonia;

**Dr. R. Ananthan** – Scientist-D, Food Chemistry Division, Department of health Research, Ministry of Health and Family Welfare, ICMR-National Institute of Nutrition, India

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Monography examines the current development level of food safety and security system in countries such as Ukraine, India, Northern Macedonia, Albania and Turkey. An analysis of the peculiarities of the functioning of state and non-state institutions in the field of food security and safety of food and food raw materials was done. Procedures for ensuring microbial hygiene of food and raw materials are also analyzed. In addition, the availability of a regulatory framework and relevant legislation to regulate the quality of food consumed by the population, as well as the compliance of this framework with international requirements and documents were considered.

Monography can be useful for researchers in the field of quality management, food safety and food security management, legislative and executive authorities, heads of industry, and graduate students of Master of merchandizing, marketing, financial and economic security, food technology and a wide range of readers.

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#### INTRODUCTION

Food safety and security are two complementing elements of our sustainable future. Improving these elements leads to access of sufficient and healthy food for the population.

Therefore, all the Governmental representatives, at the World Food Summit held in 1996 in Rome, reaffirmed the right of everyone to have access to safe and nutritious food, consistent with the right to adequate food and the fundamental right of everyone to be free from hunger. Also, another key aspect of the food system is a healthy nutrition which is concerned with the nutritional quality of the diets and it is related to all form of malnutrition and overweight.

According to the Food and Agriculture Organization of the United Nations, ready access to safe and nutritious food is a basic human right, because over 420,000 people die and some 600 million people fall ill every year as a result of eating contaminated food. In fact, foodborne hazards are known to cause over 200 acute and chronic diseases from digestive tract infections to cancer.

Consequently, global challenges all over the world are to create a better future and to transform the way we produce, market, consume and think about food. The tools and strategies used to achieve food security must align with food safety, and public health as well as sustainability. Therefore, in promoting World Food Safety Day, the Food and Agriculture Organization of the United Nations has said, "if it isn't safe, it isn't food.

So, the United Nations sustainable development goals include eradication of hunger. To feed 10 billion persons 2050, we need to get the trade-offs right between sustainability, food security, food safety, and make better use of food already produced. FAO defined food loss as lost supplies along the food chain between the producer and the market while food waste is discarding safe and nutritious foods. Around one third of the food produced is lost. The foodstuffs lost and wasted represent around 28% of the world agricultural area and 8% of global greenhouse emissions. The hierarchy of strategies for reducing food losses and waste are in descending order source reduction, reusing or reprocessing surplus foods, recycle food as feed for animals, recover the energy as biofuels, nutrients as compost, or raw materials for industry, while as last resorts one may consider recovering the energy by incineration or dumping as garbage in landfills.

Food safety addresses food-borne illness and covers all process of food production (handling, preparation and storage of food). Consuming unsafe food increased the risk of poisoning or chronic diseases, because this food contains a lot of hazard agents. On the other hand, food contamination can occur in any phase of production process and it can be a natural process or as the result of poor or inadequate production practices and these food safety risks are greater in developing countries than in developed countries. Food security has been described by the Food and Agriculture Organization of the United Nations (FAO), as "a situation that exists when all people at all times have physical, social and economic access to sufficient, safe and nutritious food to meet dietary needs and food preferences for an active and healthy life". The four 'pillars' of food security identified by the FAO are availability,

access, utilization and stability which encompasses both food safety and healthy nutrition.

Today, there is no state that does not care about food security. However, each country has its own tasks in improving the food security of its population, depending on the level achieved in solving this problem. Country's food security Ensuring is impossible without state regulation. After all, one of the main functions of each country should be stable food production, availability of this production, distribution and consumption through its own production, imports and efficient logistics. These functions are implemented under the control of state authorities.

In the CIS countries, the food security system is only in its infancy. However, despite this, most countries already have a fairly strong base of legislation governing its operation.

Leading countries consider food security as an essential condition of the internal political and socio-economic stability of the country and its external independence. The countries of the European Union and the United States, as well as the largest countries in Asia, have a fairly strong and proven legal system that regulates relations in the field of food security. In these countries, the food security state regulation instruments are aimed mainly at supporting the incomes of farmers, promoting the export of domestic food and providing the population with affordable and quality food.

First Name: Natela

Last name: Kordzaia

Degree: Candidate of Technical Sciences (PhD)

Position: Associate Professor

E-mail: natela\_k@ukr.net

<u>Place of Work:</u> Odessa National Academy of Food Technologies, Marketing, Entrepreneurship and Trade Department

First Name: Bogdan
Last name: Iegorov
Degree: Doctor of Technical Sciences
Position: Professor, Rector
E-mail: bogdanegoroff58@gmail.com
Place of Work: Odessa National Academy of Food Technologies
Organization Address: 112, Kanatna Str., Odessa, Ukraine
Zip Code: 65000

### FOOD SAFETY AND SECURITY SYSTEM IN UKRAINE

The problem of food security becomes especially acute for Ukraine due to the events of the twentieth century, during which the Ukrainian people experienced several revolutions, wars, famine of the 30's and 40's, queues for food in the 80's, radioactive contamination as a result of the Chernobyl accident, lack of adequate nutrition for most of the population due to poverty in the 90's of the last century.

Rapid changes in the economic and political situation in the world, trends in world agriculture and the complexity of solving the