



THE LINKAGE BETWEEN HEALTH AND FOOD SECURITY

Abdurahmonova Mastona Ravshan qizi

Student of the Food Technology Department, Faculty of Exact and Natural Sciences, Denau Institute of Entrepreneurship and Pedagogy

Email address: abdurahmonovamastona649@gmail.com

Abstract:

The basis of a healthy lifestyle depends on the use of high-quality and safe food products. Food safety ensures not only the sufficiency of products, but also their safety for human health. This article analyzes the relationship between food safety and human health. It also reviews the negative impact of poor-quality and contaminated food products on the human body, global statistics and ways to solve these problems.

Keywords: Food safety, health, poisoning, food infections, microbiological risk, quality control.

Introduction

Food safety is directly related to human health, and consuming substandard or contaminated products can cause various diseases. According to the World Health Organization (WHO), about 600 million people worldwide suffer from food-borne diseases every year, and 420,000 of them die from these diseases. This article analyzes the health problems associated with food safety and strategies for their prevention.

Food safety and major health risks

Food safety includes the following main risks:

1. Microbiological risk

Bacteria, viruses and parasites contaminate food products and cause various diseases when they enter the human body.

Salmonella - found in meat, eggs and dairy products, causes intestinal infections.

E. coli - can cause intestinal infections if hygiene rules are not followed.

Listeria - poses a great danger to pregnant women and can lead to fetal death.



2. Chemical pollution

Pesticides, heavy metals (mercury, lead) and industrial waste can get into food products and cause poisoning and chronic diseases in the body.

According to the World Health Organization (WHO), more than 200,000 deaths associated with pesticide poisoning are recorded worldwide annually.

3. Biological contamination

Improper storage of food products leads to the growth of fungi and molds. In particular, aflatoxins (toxins produced by molds) increase the risk of liver cancer.

4. Genetic modification (GMO)

There are mixed opinions about genetically modified foods (such as GM corn and soy). While some studies confirm the safety of GMO products, others argue that the long-term effects have not been fully studied.

Global food safety statistics

600 million people fall ill with foodborne illnesses each year.

420,000 people die from foodborne illnesses.

Children under 5 years of age account for 30 percent of these deaths.

Africa and Southeast Asia are the regions with the highest incidence of foodborne illnesses.

The World Bank estimates that the economic cost of food insecurity is \$95 billion per year.

Strategies for ensuring food safety and protecting health

To address these issues, the following measures should be taken:

1. Quality control and certification

Each country should develop strict standards for ensuring food safety and comply with international standards. For example:

HACCP (Hazard Analysis and Critical Control Points) – risk analysis and control system

ISO 22000 – food safety management system

FAO and WHO recommendations – international harmonization of food safety



2. Strict adherence to hygiene rules

Observe cleanliness in food storage and preparation

Observe temperature regime (for example, meat and dairy products should be stored in the refrigerator)

Control the quality of drinking water

3. Introduction of innovative technologies

Biotechnology and agrotechnology – increase product safety

Blockchain technology – monitoring the food supply chain and preventing counterfeiting

Smart packaging systems – real-time monitoring of product shelf life and storage conditions

4. Informing and educating the population

People need to be provided with sufficient knowledge so that they are careful when choosing and consuming food products. For example:

Conducting food hygiene classes in kindergartens and schools

Promoting healthy eating and safe products through the media

Conclusion

Health and food safety are closely linked, and neglecting this issue can have serious consequences for society. Compliance with international standards for the prevention and control of foodborne diseases serves to ensure human health and, in general, the sustainability of the global food supply. States and international organizations should work together to implement quality control systems, support innovation, and increase public awareness.

References

1. World Health Organization (WHO). (2023). Foodborne diseases: Global burden and prevention strategies. Geneva: WHO.
2. Food and Agriculture Organization (FAO). (2022). Ensuring Food Safety in a Globalized World. Rome: FAO.
3. Codex Alimentarius Commission. (2021). International Food Standards. Rome: FAO & WHO.



EduVision: Journal of Innovations in Pedagogy and Educational Advancements

Volume 01, Issue 02, February, 2025

brightmindpublishing.com

ISSN (E): 3061-6972

Licensed under CC BY 4.0 a Creative Commons Attribution 4.0 International License.

4. Smith, J., & Brown, L. (2020). Food Safety and Public Health: Risks and Solutions. Cambridge University Press.
5. United Nations. (2019). Sustainable Development Goals Report: Zero Hunger and Good Health. New York: UN.