

**UDC 637.1.002.235****THE IMPORTANCE OF FOOD SECURITY AND ITS IMPACT ON HUMANS*****Mirzayeva Shokhista Usmonovna,****Associate Professor, Department**of Biotechnology and Food Safet,**Bukhara State University,*<https://orcid.org/0000-0002-9659-5656>*E-mail: [s.u.mirzayeva@buxdu.uz](mailto:s.u.mirzayeva@buxdu.uz)****Zarmanova Ozoda Otabekovna,****student of the Department of Biotechnology and**Food Safety, Bukhara State University*

**Annotation:** The article presents proposals for introducing the following changes to the Law of the Republic of Uzbekistan "On the Quality and Safety of Food Products" and scientifically substantiates them: "The concept of food safety" - "Changes in the form of safety of food products and raw materials, establishing special requirements for the quality of food raw materials."

**Key words:** Food safety, quality assurance, certification system, artificial and natural pure products, protection of the domestic market. Population health, longevity, products with altered composition.

**Introduction.** Food security means that people have access to safe and nutritious food (in terms of quality, quantity and variety) at all times that is rich in the elements necessary for an active and healthy lifestyle. Therefore, it should be noted that in the process of globalization, providing the population with quality and affordable food products has become an important issue in countries. Food is one of the most important nutrients in human life. Consumers always want to get quality and safe products. When we say safe food, we usually mean products that are high-quality, environmentally friendly, free of genetically modified organisms (GMOs), pesticides, and other harmful elements related to food. Food safety is one of the main problems of humanity, determining the health, development, and well-being of nations. The quality of food consumed by the population is an important component of the level and quality of life of citizens, and has a significant impact on environmental protection, as well as on the socio-economic and demographic situation of the country.

**LITERATURE REVIEW AND METHODOLOGY**

Food security is one of the most pressing challenges facing countries around the world. UN experts also emphasize that today it is time to radically change the approach to food production and distribution. After all, in an ideal situation, agriculture, forestry and fisheries are able to fully provide everyone with food and create a source of income for people, as in the treatise. Moreover, in such a situation, both agriculture will develop in the interests of people and measures to protect the environment will be implemented. Why is such an influential organization serving the well-being and future of humanity putting forward the idea of renewing its views on this issue? The reason is that today, indifferent attitude to nature, increasing anthropogenic

impact on it, wastefulness, a growing difference in the food balance between advanced and developing countries, and climate change are causing a number of negative factors. Our treasures, fresh water, forests, biodiversity are rapidly decreasing, land fertility is decreasing, and soil is being degraded. As a result, according to the UN, the world's population is increasing in geometric progression, while unfortunately their needs are being met in arithmetic progression. Currently, 815 million people in the world are hungry, and by 2050 this number will reach 2 billion. people. 12.9 percent of them live in developing countries.

45 percent of deaths among children under five are caused by malnutrition. Currently, 3.1 million children die from malnutrition every year. Food security has a significant impact on the positive demographic development of a country, which allows it to maintain the health of its population. Safe nutrition extends life expectancy, promotes the healthy growth and development of children, prevents many diseases, and thereby ensures the health of the nation. The production of artificial products around the world is increasing day by day, and today it is absolutely unacceptable to weaken control over food safety. Food security of a country is a socio-economic and legal condition that guarantees the possibility of uninterrupted provision of the population with essential consumer products at the level of physical requirements without endangering the health of the population. In other words, food is considered safe if it does not pose a threat to the current and future generations. Therefore, since the objectivity of product quality control today guarantees its safety for the health of all mankind, it is impossible to look superficially at the problems associated with this area. Our research topic requires a deep analysis of the problems in the field, the disclosure of the necessary proposals, and the analysis of the legislative documents of the Republic of Uzbekistan. Article 17 of the Law of the Republic of Uzbekistan on Sanitary and Epidemiological Well-being of the Population establishes that citizens have the right to receive information from state administration bodies, local government bodies, as well as bodies implementing state sanitary supervision, on the sanitary and epidemiological situation and the state of the human living environment, and from legal entities and individual entrepreneurs on the safety and quality of products, as well as work performed and services provided.

By analyzing the legislation of the Republic of Uzbekistan and studying the opinions of scientists from the world community, we can come to the following conclusions:

Products containing GMOs:

- Harmful to health, cause the development of cancer
  - Lead to obesity;
  - Lead to impaired reproductive health of the population.

Taking into account the above, the following measures should be taken in our country: - Take into account the scientifically based risks of genetically modified organisms; - Reduce scientific research related to genetic modification, their use and the use of the results of genetic engineering research. Support the study and development of environmentally friendly agricultural practices that will contribute to the development of agriculture in our country; - Introduce amendments to regulatory documents related to the protection of consumer rights aimed at restricting the import and consumption of food products containing modified organisms, as well as introducing a ban on the use of genetically modified organisms in baby food.

Veterinary-sanitary examination of contaminated fish meat. Veterinary-sanitary examination of fish consists of a complex set of studies, observations and activities, starting with monitoring of fish caught in fishing grounds and ending with the production of finished products that must meet safety and quality requirements.

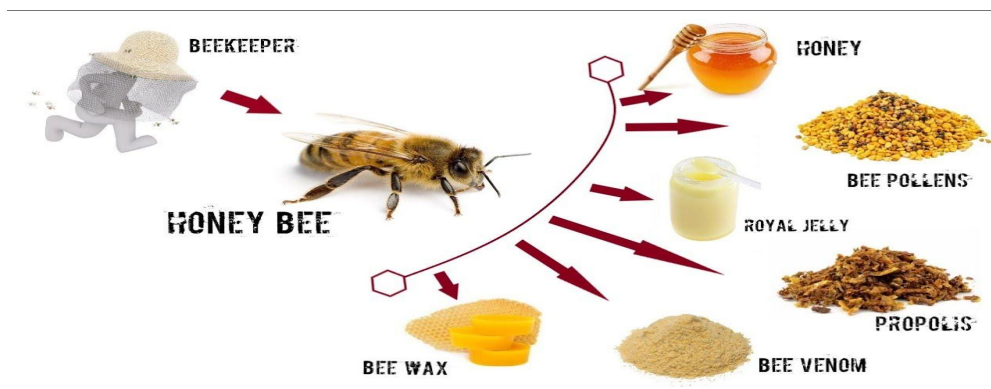
Changes in the organoleptic and chemical composition of crucian carp meat infected with *Ligula intestinalis* were found. When fish were heavily infected with parasites, the organoleptic properties of the meat (muscles tightly adhere to the bones, body color, smell, muscle elasticity, consistency, muscle fiber patterns, broth transparency, pleasant natural smell and taste) were found to change. When fish are severely affected (up to 13 parasites), the meat easily separates from the bones, the consistency of the muscles becomes soft, the broth becomes cloudy, and a pungent odor appears. Therefore, veterinary and sanitary experts should evaluate the veterinary

A vibrant collage of various healthy foods including salmon, chicken, avocado, nuts, seeds, fruits, and vegetables, representing a balanced diet.

## THE IMPACT OF HONEY PRODUCTS ON FOOD SAFETY.

Chemical poisoning has many negative effects on the bees' organism. Their negative effects depend on the chemicals they contain: fluorine destroys the walls of the bees' trachea, disrupts glycolysis and mineral metabolism. Manganese inhibits the fermentation process. Barium chloride disrupts water metabolism. Organochlorine compounds disrupt the ratio of potassium and sodium in the bees' bodies, while organophosphorus compounds bind the cholinesterase enzyme, which negatively affects the transmission of excitation in the ganglia of the nervous system.





2 - honey products

## VETERINARY SANITARY ASSESSMENT OF THE SUITABILITY OF RABBIT MEAT

Due to the biological value, tenderness, and low fat and cholesterol content of rabbit meat, it is recommended for consumption by patients with allergies, hypertension, gastrointestinal, stomach, gallbladder, and liver diseases. Rabbit meat is considered very tender, tasty, and is rich in complete proteins compared to poultry meat, and has a higher water content and dry matter than pork. Rabbit meat is beneficial for health and is fundamentally different from other meats in taste and dietary properties. Rabbit meat is especially useful for young children, adolescents, lactating women, and the elderly, who need complete protein. The sodium content in rabbit meat is 2.7 times lower than in poultry meat. This makes the meat more nutritious. If the muscle fiber content of rabbit meat is 70%, and the bones and tendons are 13-36%, compared to 42-50% and 18-30% in cattle meat, respectively. The protein content in rabbit meat can be up to 21.5-22.6%, the fat content is up to 3.3-9.8%, and the water content is up to 66.7-72.5%, the energy content (per 100 g of product) is 128-182 kcal.



3 - rabbit meat

## CLASSIFICATION, COMPOSITION, AND BENEFITS OF TURKEY MEAT FOR THE HUMAN BODY

Scientists say that eating high-protein foods, including turkey, is important for human life. In addition, protein provides normal muscle mass and stabilizes insulin levels after a meal. This meat is called both red and white. It all comes down to myoglobin. It is found in muscles. The more active they are, the more myoglobin they have. In other words, if there is too much of it, the meat will be redder. Turkey meat is unusual in this regard. The thighs are classified as red meat. Turkeys rarely sit. The wings and breast are considered white meat. Turkeys are raised for no more than 4 months, which is enough time for the turkey to grow to 10 kg. Turkey meat tastes best at this age. According to several studies, turkey meat contains the mineral selenium, which, when consumed in sufficient amounts, helps reduce the risk of developing colorectal cancer, as well as prostate, lung, bladder, esophageal, and stomach cancers. Turkey meat contains very little fat. Due to its low fat content, turkey contains very little cholesterol, not more than 100 mg per 75 grams of meat. This is a very small number. Thus, turkey meat is a good choice for people with atherosclerosis and obesity. di. The popularity of turkey meat is not only due to its taste. Compared to other types of poultry, it contains a lot of nutrients and vitamins. First of all, it is worth noting its unique mineral composition. Turkey meat is a real champion in terms of iron content, compared to beef, turkey has twice as much of this micro and macro element. It contains minerals such as calcium, potassium, phosphorus. Selenium is an element that allows you to maintain youth, has a rejuvenating effect and antioxidant activity, which also brings turkey meat to the first place in its composition. Another substance that this product is rich in is magnesium. It has a positive effect on the nervous system, and due to its high content, turkey meat is recommended for people who have long suffered from depression, insomnia, and mental disorders. Macro and microelements, as well as the complex of vitamins that make up the composition, create a number of unique properties: accelerates intracellular processes and metabolism in the body; prevents the risk of anemia; has a positive effect on the functioning of the myocardium and circulatory system; normalizes pressure; replenishes the body's calcium content and forms the bone system; protein, as a natural source of protein, helps to develop muscle mass. Turkey meat is recommended for dieters and those undergoing treatment, as it helps the patient recover quickly. It has a positive effect on the functioning of the stomach.



4 - turkey meat

## EVALUATION OF EGG QUALITY BASED ON STRUCTURAL INDICATORS



The demand for egg products is increasing day by day. Our people have been engaged in poultry farming for a long time and have been using them to meet their needs. As we know, in order to meet the food needs of the growing world population, farms, poultry factories and workshops are sharply increasing the number of meat and meat products, milk and products made from it, poultry and egg products. In particular, ducks and geese are raised for their feathers and meat, and chickens for their meat and eggs, and they are widely used for their own benefit. In particular, egg products have been consumed since ancient times. Veterinary and sanitary assessment of eggs. Chicken eggs released for sale from egg production bases and refrigerators are divided into the following types:

- a) Dietetic (dietary) eggs;
- b) Fresh eggs;
- c) Frozen eggs;
- d) With a shell

**Dietary (dietary) eggs.** These eggs include fresh eggs up to 7 days after laying.

When undergoing veterinary sanitary examination of eggs, those with the following defects are not allowed to be used for food purposes and are sent for technical disposal or destroyed:

- eggs with a blood ring, in which the chick has begun to develop;
- eggs that are black, spoiled (on the eggshell), have a hydrogen sulfide odor and black spots belonging to fungi or microbes;

### **HARM OF SAUSAGES AND MEAT PRODUCTS**

Red meat — all animal meat from mammals: beef, lamb, goat, horse, etc.

According to the World Health Organization, the consumption of processed meat products and red meat increases the risk of cancer. The WHO published this information back in 2015, based on a study conducted by the International Agency for Research on Cancer. The study involved 22 experts from 10 countries. The study found that red meat and processed meat products increase the risk of cancer. Red meat mainly causes colon cancer, but it can also cause pancreatic and prostate cancer. But the study did not have enough evidence to say "that's exactly it." Therefore, it is concluded that red meat probably causes cancer. Processed meat products, on the other hand, have a higher risk of causing colon cancer, and the study was able to gather enough evidence to prove this.



5 - harm of sausages and meat

### **Conclusion**

In conclusion, I have witnessed a lot of poor-quality products being produced today. For example, I have witnessed a number of food products that are not at all up to standard. For example, products produced under the Jesko and Else brands, people buy them not as quality products, but

as a lottery. The goal is not to buy a good product, but to win some expensive prize. Another incident that I have witnessed is that when I bought a juice product from a store, there was a sign on the package that said "shake", but when I opened it without shaking it, the top part was moldy. I thought it must have formed sediment, but in fact, no sediment forms in apple juice.

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