

REVIEW OF THE FOOD SAFETY REGULATION

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Annotations: This article discusses the issue of food additives, which plays a major role in food safety. Compliance with the rules should not cause negative effects on human health.

Key words: food additives, food safety, compliance with rules, negative impact health.

Nutrition is one of the foundations of human life, a direction that determines the health of those living now and future generations. The urgency of the food safety issue is reflected in the following facts:

- it has been established that products containing harmful chemicals, parasites, pathogenic bacteria cause about two hundred different diseases in people, ranging from diarrhea to cancer;
- every tenth inhabitant of the planet gets sick after eating poor-quality food;
- every year 125 thousand children under the age of five die in the world due to foodborne diseases;
- eating foods with a high concentration of heavy metals leads to health problems in the future;
- food contamination is possible at all stages of their production, from growing crops and breeding poultry and livestock to storing and transporting finished products.

Food safety primarily depends on the composition and quality of the raw materials used to make food products, their complete harmlessness, as well as on compliance with the technology of their manufacture, storage and consumption rules. Food products must be safe, i.e., not pose a danger to human health and life and future generations.

The safety of food products for human health and life is determined by the presence (or absence) of:

- physical contaminants: foreign bodies or their fragments, accidentally entering the food product;
- microbiological and radiation pollutants: viruses (norovirus), bacteria (salmonella, listeria, yersinia), biotoxins (staphylococcal, botulinum toxin), protozoa, helminths that cause infectious diseases and food poisoning, and radionuclides that even in small doses have a negative effect on all living cells of the body, causing internal irradiation;
- chemical pollutants: pesticides, biphenyls, acrylamide, nitrates or heavy metals (such as mercury) accumulated in food products.

Separately, allergens can be singled out as a factor of individual food intolerance. All factors that pose a threat to human health and life are subject to mandatory hygienic standards. In our country, the Federal Service for Surveillance on Consumer Rights Protection and Human Wellbeing in the field of catering, quality assurance and safety of food products, materials and products in contact with food products, carries out the following functions:

- control of catering organizations, production and circulation of food products;
- standardization of the quality of food products, certification of products, works and services that pose a potential danger to humans, including food production, activities for the storage, transportation and sale of food products;
- state registration of potentially hazardous chemical and biological substances for humans, certain types of products, as well as certain types of products of nutritional value imported into the territory of the Republic of Uzbekistan for the first time - baby, sports nutrition, dietary supplements, etc.

The leading regulatory legal acts in the field of food safety are the Law "On the Quality and Safety of Food Products" and the Technical Regulation of the Customs Union "On the Safety of Food Products" (TR CU 021/2011).

Each participant in the production chain, from the manufacturer to the consumer, must play a role in ensuring the safety of the food we eat, and help ensure that it does not cause illness.

The main problem in ensuring the quality and safety of food products remains the factor of microbiological danger. After all, even if food products are initially safe, do not contain pathogenic viruses, microorganisms and chemicals, but if sanitary and hygienic norms and rules are not observed (improper storage, cross-contamination, etc.), they can cause various diseases and lead to food poisoning.

Microorganisms are found everywhere, but most often - in feces, soil and water, in animal hair and on human skin (100 thousand bacteria constantly live on one square centimeter of human skin). Once in a favorable environment (for example, food products), they begin to divide intensively. In the presence of food, water and heat, microbes begin to multiply, and then in 6 hours one bacterium can produce up to 16 million descendants.

Not all microbes are dangerous. Some of them help digest food, produce medicines or prepare food and drinks. Others do not cause diseases, but spoil the appearance, taste and smell of food. Truly dangerous microorganisms are called pathogenic.

They do not change the appearance and taste of food, but can cause illness and even death. These include, for example, salmonella bacteria, shigella, Escherichia coli (Latin: Escherichia coli), parasites such as trichinella, hepatitis A virus and norovirus.

The manufacturer is certainly responsible for the safety of food products, but the consumer should also remember the basic rules, the observance of which will

reduce potential health risks. It is customary to highlight 5 basic principles ("keys") of food safety:

1. Maintaining cleanliness: hand hygiene and maintaining cleanliness in the kitchen.
2. Separating raw and ready-to-eat food products during their storage, preparation and transportation.
3. Thorough heat treatment of dishes.
4. Proper storage of food.
5. Buying and using safe products, water and raw materials. The first principle of food safety is to keep it clean!

Microorganisms spread through dirty hands, rags and kitchen utensils, cutting boards, switches, dishes.

Just because something looks clean doesn't mean it really is. It takes more than 2.5 billion bacteria to make 250 ml of water cloudy, but in some cases, 15-20 pathogenic bacteria are enough to make a person ill.

To comply with this principle, it is necessary to:

- wash your hands before contact with food, after working with raw meat, poultry or fish, periodically during the preparation of dishes and before eating;
- thoroughly clean kitchen surfaces and equipment used in food preparation;
- protect the kitchen from insects, parasites and other animals.

Most often, microorganisms are transferred from one place to another through hands, so hand washing plays a very important role in ensuring food safety.

Personal hand hygiene is also mandatory after visiting the toilet, changing diapers (nappies) in children, blowing your nose, contact with garbage, chemicals (including chemicals used for cleaning) and contact with animals.

To wash your hands, you must:

- wet your hands under running water;
- rub your hands together for at least 20 seconds using soap;
- rinse your hands under running water;
- dry your hands thoroughly with a clean dry towel.

Many people wash their hands incorrectly. They do not use soap or wash their hands only partially. When washing your hands, do not forget about your fingertips, nails, thumbs, wrists, and the space between your fingers. Teach your children how to wash their hands properly.

Keep your preparation clean so that microorganisms do not have a chance to multiply. Pay special attention to kitchen utensils used for eating, drinking, and cooking. Clean cutting boards and kitchen utensils well after they have come into contact with raw meat or seafood. Do not forget to wash and dry-cleaning tools (rags, brushes, sponges), as microorganisms multiply quickly in a humid environment. Dry kitchen utensils and cutlery well after washing.

Microorganisms can multiply extremely quickly if products are stored at room temperature. At temperatures below +6°C and above +60°C, their development slows down sharply or stops altogether.

For safe storage of products, the following conditions must be met:

- do not leave prepared products at room temperature for more than 2 hours;
- store all prepared and perishable products (milk and dairy products, sausages, confectionery with cream, etc.) in the refrigerator at a temperature of +2...+6°C (or according to the label);
- keep prepared food hot (at a temperature above 60°C) before serving;
- do not store food for too long, even in the refrigerator. If the expiration date has expired, the manufacturer cannot guarantee the safety of the products.

Do not defrost frozen products at room temperature - use the refrigerator or microwave. When defrosting in a microwave, the products must be heat treated immediately. Refrigeration or freezing does not kill microorganisms, but it does stop their growth.

A few more storage tips:

- cook in small quantities so that less is left;
- do not store leftovers in the refrigerator for more than 3 days and do not reheat them more than once;
- for quick cooling, place leftovers in an open dish or in a cool container;
- cool large pieces of meat by cutting them into small portions;
- mark leftovers so you know how long they can be stored.

These simple storage tips will help prevent the development of microorganisms in food.

Therefore, buy food only in established places of sale. You always have the right to ask the seller to show documents confirming the origin of the products, their quality and safety. Such information should always be in the store selling food products.

When buying food, remember that raw food, like untreated water, can contain dangerous bacteria, toxins and chemicals. It is safest to choose industrially processed products, such as pasteurized (not raw) milk. But even in this case, you need to pay attention to the date of manufacture, so as not to buy an expired product.

It is better to choose only fresh products, without rot or mold, and fruits and vegetables - with undamaged skin. Even completely clean-looking fruits and vegetables should be thoroughly washed, especially if you plan to eat them raw. If the products are touched by mold, they should be thrown away whole, and not cut off the discolored piece; you should not use the rest for cooking.

You should not buy meat and fish that are not sold from refrigerated chambers, or on unrefrigerated or dirty counters. You should also avoid buying dairy products from sellers standing in the sun near the market. When choosing products, you need

to pay attention to the exact label on the label, which indicates the composition of the product. In addition to traditional raw materials, it indicates substances that are added to food products to increase their safety, shelf life, preserve or improve taste, consistency or appearance. They are called food additives. Food additives can be of plant, animal, mineral origin and synthetic.

Conclusion.

Recently, food additives have become very popular, which are deliberately introduced into food products to achieve special technological goals. Today, several thousand food additives are used, each of which performs a specific function. Industrial use of food additives is safe and should not cause concern among consumers. By following these simple rules, everyone can protect themselves from the most common food threats that arise at home.

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