## INTERNATIONAL MULTI DISCIPLINARY JOURNAL FOR RESEARCH & DEVELOPMENT

#### CONSEQUENCES OF FOOD POISONING AND FIRST AID

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Annotation: Food poisoning is a condition of poisoning that occurs as a result of consuming contaminated or unsuitable food, which causes various health problems in the body. The causes of food poisoning can include the presence of bacteria (Salmonella, Escherichia coli), viruses, fungi, toxins and chemicals. Symptoms of the disease are manifested in the form of abdominal pain, nausea, vomiting, diarrhea and fever. To prevent food poisoning, it is important to store food properly, strictly observe hygiene rules and thoroughly prepare products before consumption. If damage is detected, urgent medical care is necessary.

**Keywords:** Food poisoning, Food toxicosis, Bacterial poisoning, Salmonella, Escherichia coli, Food hygiene, Vomiting, Diarrhea, Abdominal pain, Toxins, Food safety, Hygiene rules

### OVQATDAN ZAHARLANISH OQIBATLARI VA BIRINCHI YORDAM KOʻRSATISH

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Annotatsiya: Ovqatdan zaharlanish — bu ifloslangan yoki yaroqsiz oziq-ovqat iste'mol qilish natijasida yuzaga keladigan zaharlanish holati boʻlib, u organizmda turli darajada salomatlik muammolarini keltirib chiqaradi. Ovqatdan zaharlanishning sabablari orasida bakteriyalar (Salmonella, Escherichia coli), viruslar, zamburugʻlar, toksinlar va kimyoviy moddalarning mavjudligi boʻlishi mumkin. Kasallik belgilari qorin ogʻrigʻi, koʻngil aynishi, qusish, diareya va isitma shaklida namoyon boʻladi. Ovqatdan zaharlanishning oldini olish uchun oziq-ovqatni toʻgʻri saqlash, gigiyenik qoidalarni qat'iy rioya qilish va iste'mol qilishdan oldin mahsulotlarni yaxshilab tayyorlash muhimdir. Zararlanish aniqlanganda esa tezkor tibbiy yordam koʻrsatish zarur.

Kalit soʻzlar: Ovqatdan zaharlanish, Oziq-ovqat toksikoz,Bakterial zaharlanish, Salmonella, Escherichia coli, Oziq-ovqat gigiyenasi, Qusish, Diareya, Qorin ogʻrigʻi, Toksinlar, Oziq-ovqat xavfsizligi, Gigiyena qoidalari

### ПОСЛЕДСТВИЯ ПИЩЕВОГО ОТРАВЛЕНИЯ И ПЕРВАЯ ПОМОЩЬ

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**Аннотация:** Пищевое отравление — это состояние отравления, возникающее в результате употребления зараженной или неподходящей пищи, которое вызывает различные нарушения здоровья организма. Причинами пищевого отравления могут быть бактерии (сальмонеллы, кишечная палочка), вирусы, грибы, токсины и химические вещества. Симптомы заболевания проявляются в виде боли в животе, тошноты, рвоты, диареи и лихорадки. Для профилактики пищевых отравлений важно правильно хранить продукты, строго соблюдать правила гигиены и тщательно готовить их перед употреблением. При обнаружении порчи необходимо срочно обратиться за медицинской помощью.

**Ключевые слова:** Пищевое отравление, Пищевой токсикоз, Бактериальное отравление, Сальмонеллы, кишечная палочка, Гигиена питания, Рвота, Диарея, Боль в животе, Токсины, Безопасность пищевых продуктов, Правила гигиены

Food poisoning is a disease that occurs when food products contaminated with microbes are consumed. Most often, many people get sick at once, but they are not transmitted from sick people to healthy people. Most often, staphylococci, enterococci, some Escherichia coli, Proteus, Citrobacter, Yersinia, Clostridia and other microbes can cause it. The following 2 conditions are common for food poisoning: 1) the result of eating food products that have been contaminated with microbes; 2) the effect of the microbe itself and its toxin on the patient's body. Food poisoning is more common in the summer months. Children, especially children aged 3 months to 2 years, are more likely to get sick than adults. A person can get poisoned when eating undercooked meat and its products, dairy products (especially cakes and pastries), fish, and chicken. In cases caused by staphylococci, the source of infection is a person. Angina or various purulent diseases: microbes from people with abscesses, boils, boils and other purulent wounds pass into the finished product and multiply rapidly. A person who unknowingly consumes it is immediately poisoned. The latent period of the disease is from 2-3 hours to 3 days. The disease begins suddenly with nausea and vomiting, diarrhea, and abdominal pain. In a short time, the patient's body becomes dehydrated, he becomes weak. The cardiovascular system is disrupted. Especially severe is the poisoning caused by clostridia. To diagnose the disease, the patient's vomit and gastric lavage fluid are collected in a sterilized jar and sent to the lab. Food products suspected of causing poisoning are also examined in the lab. Cultures are taken from feces in Muller's medium and saline solution. The discovery of the same microbe in different cultures taken for examination indicates that it is the cause of the disease. Starting from the 5th-6th day of the disease, the microbial culture isolated from the patient's blood serum is mixed and an agglutination reaction is performed. A positive result of the reaction at a dilution of 1:40 and above indicates that this microbe is the cause of the disease. It is necessary to be able to distinguish foodborne toxicoinfections and intoxications from food poisoning. Treatment consists of first aid when the first symptoms of the disease appear, gastric lavage with a 2% solution of soda or light pink potassium permanganate, and intestinal cleansing. Drinking a solution of Regidron, Bektite prevents the disease from worsening. In more severe cases, fluids such as Disol, Acesol, Trisol are administered intravenously. If necessary, drugs that improve the functioning of the cardiovascular system are administered. Employees of food preparation establishments must strictly observe personal hygiene during work, and nursing mothers must wash their hands and breasts with soap before breastfeeding. In summer, food for babies should be prepared in quantities sufficient for one meal only.

First aid for food poisoning

At the first signs of food poisoning, the patient should be washed to empty the stomach. A weak (light pink) solution of potassium permanganate (manganese) filtered through a paper filter or



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four layers of gauze can be used for washing. In addition, a solution of baking soda (1 teaspoon per 1 liter of boiled water) or table salt (2 tablespoons without a "rock" per 5 liters of water) is also suitable. The solution for washing should be prepared in advance in an amount of 8-10 liters. It must be warm (at a temperature of 35-37 ° C) so as not to cause hypothermia of the body, and also not to slow down intestinal peristalsis. At the first reception, you should drink 2-3 to 5-6 glasses of liquid, then, by stimulating the root of the tongue with two fingers, induce vomiting. The washing process is repeated until only clean water remains in the vomit.

After washing the stomach, it is recommended to take enterosorbents with boiled water every 15 minutes four times. The patient should be left alone, and if vomiting occurs, it is necessary to wrap him in a warm place. On the first day, it is better to refrain from eating, and on the second day, broths, vegetable soups with rice can be introduced and the diet can be gradually expanded. Until complete recovery, it is necessary to avoid eating pickled, spicy, salty and smoked products that irritate the gastric mucosa. The patient is recommended to drink boiled water, sweet tea that has not been brewed, fruit juices, jelly. Carbonated drinks are prohibited.

### Drugs taken in case of poisoning

Enterosorbents are taken in case of poisoning. These drugs bind toxins, poisons, microbes and bacteria and remove them from the body, preventing the entry of toxic substances into the blood. They help to eliminate the symptoms of poisoning and normalize the person's condition. To prevent dehydration caused by vomiting and diarrhea, special saline solutions are used, which replenish lost fluid and restore the acid-base balance disturbed by electrolyte loss. They are usually in the form of a powder that must be dissolved in boiled water. The resulting solution should be drunk in small sips after each defecation at the rate of 10 ml per kilogram of body weight. If diarrhea is accompanied by vomiting, then after each vomiting, an additional 10 ml of solution per kilogram of body weight should be drunk.

In case of poisoning (including food poisoning, especially from drugs and alcohol), the liver is damaged, since it is this organ that is responsible for neutralizing toxins and removing them from the body. To restore normal liver function, hepatoprotective agents - preparations containing plant or essential phospholipids - help. Also, to improve liver function, biologically active additives containing lecithin, amino acids, antioxidant vitamins A, C, E, selenium and chromium, omega-3 polyunsaturated fatty acids are used.

#### When to see a doctor

Most often, symptoms of poisoning pass independently within a week, in which case symptomatic treatment is sufficient. However, in some cases, poisoning is dangerous. It is necessary to seek medical help in the following cases:

If, against the background of intestinal and stomach diseases, there is a severe headache, pain in the area of the kidneys, liver and other internal organs;

- If the patient has high fever, severe sweating, thirst;
- If a young child or elderly person is poisoned;
- If mushroom poisoning is suspected;
- If severe vomiting, diarrhea persist for two days;



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• If symptoms of poisoning last longer than a week.

Increasing muscle weakness, frequent shallow breathing, dilated pupils, muscle paresis or paralysis, dry mouth, vomiting, diarrhea, visual impairment, speech impairment, lack of facial expressions, blanching of the skin. First of all, the eye muscles, larynx, then the respiratory muscles are damaged. Botulism can be fatal, so if it is suspected, you should immediately call an ambulance.

The best way to prevent food poisoning is to follow the rules of food hygiene, proper food storage, and elementary awareness. Pay attention to the color, smell, and taste of food. An unpleasant putrid smell, sour taste, and bitterness of the tongue should alert you. A change in the quality of the product can also serve as a sign of deterioration in its consistency, the formation of mucus on its surface. Moldy, spoiled fruits and vegetables, swollen cans of canned food, and packages of milk and dairy products should be thrown away without regret. A can "closed" with an iron lid should open with a characteristic sound, which indicates that it is hermetically sealed. If there is no sound, canned food should not be consumed. When buying, it is necessary to check the date of manufacture and expiration of the product, the integrity of the packaging. It is also necessary to regularly inspect the refrigerator.

#### **REFERENCES:**

- 1. World Health Organization (WHO). Food Safety. [Internet]. Available from: <a href="https://www.who.int/health-topics/food-safety#tab=tab\_1">https://www.who.int/health-topics/food-safety#tab=tab\_1</a> (Accessed: 2025).
- 2. Centers for Disease Control and Prevention (CDC). Foodborne Illnesses and Germs. [Internet]. Available from: https://www.cdc.gov/foodsafety/foodborne-germs.html (Accessed: 2025).
- 3. Food and Agriculture Organization of the United Nations (FAO). Food Safety and Quality. [Internet]. Available from: http://www.fao.org/food-safety/en/ (Accessed: 2025).
- 4. Bhunia, A.K. (2018). Foodborne Microbial Pathogens: Mechanisms and Pathogenesis. 1st ed. Springer, New York. ISBN: 978-3-319-74375-4.
- 5. Edelman, M.G. (2014). *Foodborne Infections and Intoxications*. 4th ed. Elsevier, Amsterdam. ISBN: 978-0-12-397156-6.
- 6. Scallan, E., Hoekstra, R.M., Angulo, F.J., et al. (2011). Foodborne illness acquired in the United States—major pathogens. *Emerging Infectious Diseases*, 17(1), pp.7-15. DOI: 10.3201/eid1701.P11101.
- 7. Toxin and Toxin-Target Database (T3DB). [Internet]. Available from: http://www.t3db.ca/(Accessed: 2025).

