



HYGIENIC REQUIREMENTS FOR DRINKING WATER

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Abstract. *The development of lower norms of mineralization due to the development of brine irrigation technology has become a period requirement, since the constant consumption of distilled or less mineralized water leads to a violation of the water-salt equality in the body, on the basis of which the osmoreceptive field reactions of the liver lie, as a result of which how much sodium is.*

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When providing the population with clean drinking water, it should be considered to protect it from various infectious diseases spread through the water and prevent non-infectious poisoning caused by changes in the chemical composition of water, since the impact of water on the human body can be direct, this includes infectious diseases, invasions, poisoning, endemic non-toxic diseases. And the indirect effect is caused by unpleasant sensations when water is consumed, at some point the condition expands so much that even the population refuses to consume water. In other words, the negative effects of water come to the surface under certain conditions, and these conditions include: when there are lambs of infectious diseases in the water, when they differ in the degree of their chemical composition, etc.

Violation of the quality and natural condition of the waters can damage human health due to the fact that the water contains a large amount of infectious



diseases-mosquito microorganisms, or due to an increase in worm eggs or an increase in the content of various chemicals in the water, but rather a decrease in it. The provision of centralized water supply to settlements reduces the incidence rate while improving the sanitary lifestyle of the population.

Microbial count is said to be the number of microbial colonies that are detected after 24 hours in a 37 °C thermostat of 1 ml of water planted for examination of meat peptone Agar. The number of germs indicates that the water is contaminated with common germs. Depending on the number of colonies, the quality of the water is determined. In well-equipped artesian wells that are not contaminated, the colony's amount reaches 300-400 in 10-30 uncontaminated mine well water and 100 in vodoprovod water. An important condition for bacteriological assessment of water is the determination of intestinal stick *Soin* in water. The absence of an intestinal wand in water is expressed by the size of the colititr or coli-index.

Colititr it is the minimum amount that a single intestinal wand has in the water. The lower the colititr, the more polluted the water with the litter. Coli index 1 1 the number of intestinal sticks in water. Research studies show that if the coli index is reduced to 3 after water neutralization tif, pathogenic microbes that belong to the paratyphosis group, leptospirosis and tularemia can be said to have disappeared from the causative agents of morbidity. The colitis or coli-index indicators are related to the 1880 discovery of the human organism of the intestinal wand and were introduced into the exercise for insufficient total bacterial contamination of water.

Natural water contains biological microelements necessary for the life of humans, animals, various plants. They are involved in important biochemical processes, which are combined with some substances in the activity of living organism. The following trace elements are essential for human health: copper, zinc, iodine, manganese, molybdenum, cobalt, iron and Macroelements: calcium,



potassium, sodium, phosphorus. These substances fall into the human body with a certain amount of water, food products, satisfying the body's need for these elements. If a person does not meet his needs with the above-mentioned micro and Macroelements, then various diseases can arise in the body. Because the problems of influencing the chemical composition of water on the human body have long been thinking of scientists. It was only at the beginning of the 20th century that for the first time scientifically substantiated opinions on this yainalish appeared.

In nature, water never occurs in the form of a pure chemical compound. Since it is considered a Universal solvent, it always stores different amounts of chemical elements in its composition. The amount of chemicals in the aquatic environment depends on the conditions of water formation, while the natural chemical composition of the surface and groundwater is currently also affected by man-made impurities. From the above, it is known that the chemical composition of water: natural, man-made, that is, chemical preservative industry will depend on the wastewater and the human being, as a result of adding reagents to the water in the process of improving the quality of raw water.

The overall mineralization of water or the effect of the total amount of salts on the human body is the most widely studied indicator. Dry residue from organoleptic indicators is installed at 1000 mg/l. Too many days in its composition salt-retaining waters give a salty or spicy flavor. The main mass of dry residue is chlorides and sulfates. They also give the water a salty and spicy flavor. Norm: 350 mg/l for chlorides and 500 mg/l for sulfates.

Experiments in experimental animals and volunteers show that highly mineralized water affects the secretory function of the stomach, disrupting water salt equality, as a result of which most metabolite and biochemical processes in the body are disrupted. The amount of water consumed to quench thirst in volunteers was determined by the degree of mineralization of the water. For example, the



consumption of 500 mg/l mineralized water 11 was 2%, 1000 mg/l 49%, 2000 mg/l 13%.

Due to the development of brine purification technology, the development of lower standards of mineralization has become a period requirement, since the constant consumption of distilled or less mineralized water leads to a violation of water-salt equality in the body, on the basis of which the osmoreceptive field reactions of the liver lie, as a result of which how much sodium is. The results of the obtained experiment show that the lower indicator of mineralization is 100 mg/l, in this amount the body does not have pathological changes in the process of homeostasis. The optimal mineralized level of water comes exactly to the range of 200-400 mg/L. In this case, it is imperative that the minimum calcium content of 25 mg/l magnesium is not less than -10 mg/L. When studying the composition of water, the determination of its hardness has Kata achamite. Because the discharge of a large amount of salt water into water bodies is caused by the discharge of poisonous waters in collectors, waste water from industrial enterprises disrupts the chemical composition of river waters, increasing its rigidity. The hardness of the water is determined by the amount of calcium and magnesium salts in 1 liter of water.

In hard water, the soap does not foam well, layers of salt appear in the container in which the water is boiled, the meat does not cook well. From the beginning, the hardness of water is known to cause various stone diseases in the body. Among urologists, even named areas with a rocky region are distinguished. In the regions, urolithiasis is an endemic disease. Drinking water in these areas is characterized by high hardness.

In later times, water hardness has been found to be the cause of some heart disease. Sometimes changes in the hardness of the water content cause vascular diseases and its hardness is low, but the role of social and economic factors is also greater in this.



The widespread use of pesticides, mineral fire dogs, and plant protectors in the following years is causing many problems. One of these is the high level of contamination of drinking water with nitrates. The amount of nitrates and nitrites in the composition of the water of agricultural drinking water sources, the ratio of which was considered a sanitary indicator of the water of water bodies until a close period, since they were considered an indicator of the period of contamination of water bodies with organic matter.

It has been recorded that 2 children were killed by consuming water containing nitrogen nitrate salt. Children developed bruises after drinking water. When their blood was tested, it was found that the blood contained high levels of metgemoglobin, which was caused by the high content of nitrogen nitrate salt in the well water they consumed. Later diseases from this became the so-called water nitrate metgemoglobinemia.

This was later confirmed that the appearance of a symptom of toxic-level bruising in children, especially children of breast age, is often common among children who are given artificial food. In a mild type of disease, symptoms of powerlessness, rapid fatigue, discoloration are observed. Normally, nitrates themselves do not cause metgemoglobin in the blood, in dyspepsia, dysbacteriosis, which occurs in children, the transfer of nitrogen nitrites to nitrogen nitrates is the cause.

In doing so, nitrates are pushed into the intestine, increasing the amount of metgemoglobin in the blood. In later years, nitrosamines became the focus of hygienists. They are substances that arise from the combination of aliphatic and aromatic amines with nitrates. These substances are a widely used compound in industry, which can be found in water bodies and, naturally, in the human body. Nitrosamines are a very active substance and are carcinogens that cause cancer.

Good water solubility, high stagnation of nitrosamine ensures its entry into the human body through water. Under normal conditions with drinking water, the



daily physiological demand of calcium for the body drops by 10-25%. The accumulation rate of calcium in the bones was 50-67% when the amount of calcium from the diet was reduced 2-3 times in experiments, which led to a violation of calcium metabolism in the body. The water has been found to contain about 65 microelements. Such elements can occur in the human body, plant tissues, animal organs, but they are present in very small quantities.

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