



The Physiological Role of Water in Human Life

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Annotation: This article provides information about the importance of water in human life, its healing properties, and its physiological role in the body.

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Water is the nutrient for all cells of the human body. It is water that occupies a large part of each organ. For example, the amount of water in the blood is 90 percent, the brain is 85 percent, muscles are 75 percent, the liver is 65 percent, bones are 28 percent, and adipose tissue is 25 percent. All chemical reactions in the body occur with the participation of water.

It is worth noting that by limiting the negative impact of humanity on water resources, which are of incomparable importance in the ecosystem of our planet, it is possible to solve not only climate change-related, but also many other global problems. However, as a result of the expansion of industry and production, this negative impact is increasing year by year. According to the UN, currently almost 80 percent of wastewater is discharged untreated into rivers and seas, and even freshwater bodies. This leads to a further reduction in the already limited supply of fresh water. When we consider that today 29 percent of the world's population suffers from a lack of clean drinking water, and that about a thousand children die every day due to lack of clean drinking water and poor sanitary and hygienic conditions, we understand the scale of the problem we face even more deeply. The fact that the entire ecological system is disrupted as a result of the negative impact on water bodies can also be seen in the example of the Aral Sea tragedy. In the first half of the 20th century, the vast sea area, with an area of almost 68 thousand km² and a water volume of more than 1,000 km³, shrank by almost 80 percent due to the development of new lands for agriculture and inefficient hydraulic engineering, and in its place appeared the sandy-salty Aral Sea desert. As a result, marine flora and fauna were destroyed, infertile saline soils led to the extinction of terrestrial flora and fauna, and dust-salt storms polluted the atmosphere. The economic sectors of the Aral Sea region, such as industry, agriculture and livestock, suffered great losses. The health of the region's population was seriously threatened. According to data, 15-75 million tons of dust consisting of salt, chemical fertilizers and toxic substances are released into the atmosphere every year. As a result, atmospheric pollution in the region increased by 3 times, and the average amount of dust in the air increased by 6-7 times. The incidence of tuberculosis among the population is very high.

Gives energy

When you're tired and sore, your body is dehydrated. A glass of cold water can help you feel refreshed and fall asleep. In one Swiss study, volunteers who didn't drink water felt twice as tired and irritable as their counterparts, and they also performed twice as poorly on cognitive tests.

Cleans the skin

Drinking water regularly is essential for healthy skin. The more water you drink, the less blemishes, acne, and wrinkles you will have.

Exercises are effective.

Drinking water during both easy and hard exercise provides energy. In addition, when exercising on a hot day, a person loses twice as much fluid as usual. To maintain the water balance in the body, it is necessary to engage in sports and drink water afterwards.

Reduces

Those who want to lose weight are advised to drink water instead of sweet and carbonated drinks. Drinking water before meals suppresses appetite and helps you eat less. This has also been confirmed in studies. In it, overweight people drank two glasses of water before each meal. As a result, they lost 2.26 kilograms and were able to maintain their weight at a normal level compared to others. Contributes to the loss of pain

Drinking water regularly can reduce pain in muscles and bones. Water not only softens the joints, but also protects the cells of the spinal cord and brain.

Healing

Doctors recommend drinking water with a high body temperature, diarrhea, and nausea. It is not without reason that water helps a person feel better. It helps get rid of all kinds of headaches. When a migraine bothers you, it is recommended to drink a glass of water, fruit, or milk. Reduces the risk of serious diseases

Scientists have found a link between drinking water and bladder and colon cancer. Drinking water is also good for heart function. For vital functions of the body

Water is important for salivation, digestion, controls hormones, body temperature, supplies the body with oxygen, and supports the health of cells. In addition, it helps to remove excess substances from the body.

Benefits of water for the human body

When we feel bad, we usually attribute it to fatigue or stress, vitamin deficiency, and other reasons. However, the body simply needs water, because the body cannot function properly without it.

**Liver**



The liver protects the body from the negative effects of microbes and viruses, food dyes and preservatives. The liver's task is to convert toxins into water-soluble substances and successfully remove them from the body. Due to normal water balance, the liver spends less time processing waste and does this work efficiently, which means it prevents the development of various diseases.

The kidneys filter all the fluids in the body. If a person drinks enough water, the kidneys remove excess fluid through urine, along with all the harmful substances that are excreted from the body. If the person drinks less water, the kidneys have to conserve it and retain it in the body. In such cases, less urine is produced, which negatively affects the functioning of the kidneys.

All harmful substances that enter the blood are "recycled" by the lymph. The lymph collects dead cells and other waste products, carries them to the lymph tissues, where they are filtered, and then sent to the liver and kidneys for processing. A normal water balance helps the lymph cope with such a responsible task.

Joints

Arthritis is a common affliction for many people, but not everyone knows that in many cases, this disease is caused by chronic dehydration. Chronic dehydration can cause serious damage to the joints, leading to arthritis.

Physical education

It is not good to not drink enough water while exercising. This can lead to fatigue, loss of coordination, and even muscle cramps. Why does this happen? When a person is actively moving, they sweat more - their blood volume decreases. If the fluid deficit is not replenished, heart function is impaired. Therefore, to prevent dehydration, it is necessary to drink water before, during, and after physical activity.

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