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The role of water supply in ensuring human life safety

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ABSTRACT: This article examines the drinking water importance for humans, water supply in ensuring human life safety and water effect on every human organism. In addition, a device diagram for wastewater purification and supply to the consumer and the process of sequential water purification, the final results description, conclusions and recommendations are given.

KEYWORDS*: Water supply, water treatment facilities, sump, filter, fresh water tank, water impact on the human body, cellular concrete, grate.*

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I. INTRODUCTION.

Water supply plays the most important role in ensuring the human life safety. In the Resolution of the Republic of Uzbekistan "On water and water use" on 06.05.1993 №837-XII ensuring the rational use of water for the population and economy needs, water protection from pollution, contamination and depletion, prevention and elimination of harmful effects of water, water bodies improvement, as well as enterprises, institutions, organizations, farms in the water relations field and the need to protect the citizens rights and legitimate interests [1].

Research method.

Four factors play the most important role in ensuring human health. They are:

1. The chemical composition of the time a person consumes daily.
2. Quality and purity of consumed water.
3. Ecological purity of the air during respiration.
4. Adherence to personal hygiene in daily life.

In the eating process, the stomach should be equal to three parts. The first part is food, the second is water, and the third is fresh air. If humanity follows this eating process and is constantly on the move, the disease is rare. And we can see this in the picture below. As shown in the picture, if 1st is food, 2nd is water and 3rd is air are evenly distributed in the stomach, the human digestion process will be good and the stomach will not get sick.

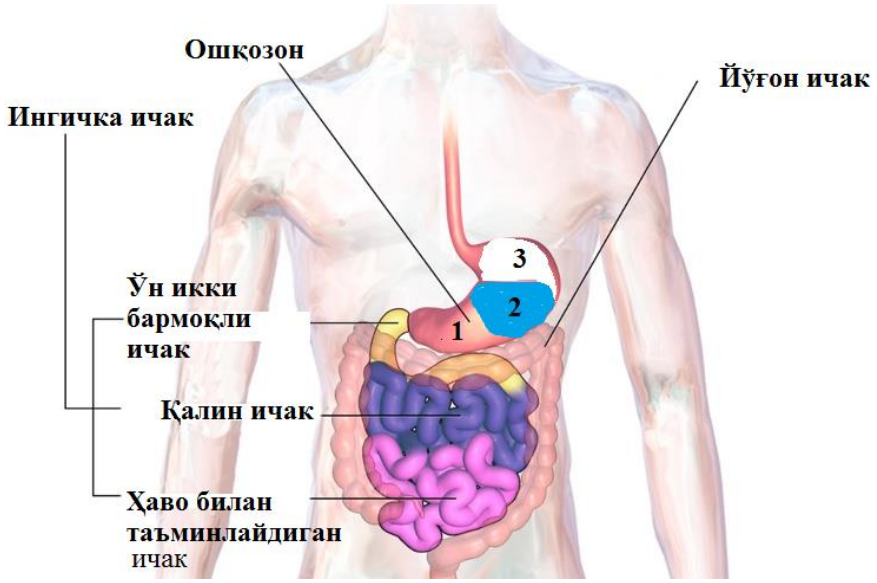

Fig-1. Appearance of the digestion process in the human body.

1- The place where food is placed in a person's stomach. 2. The place where water is placed in a person's stomach 3. The location of air in a person's stomach.

If a person has only water in his stomach, then the human body will digest the residual food and excrete various cholesterol substances accumulated in the human intestines. Without air in the stomach as food and water, food cannot be digested. Air plays the most important role in the food breakdown in the human body. The food distribution, water and air in equal proportions in the human stomach prolongs human life.

Water is food for all human body cells. It is water that occupies a large part of every organ. For example, the amount of water in the blood is 90 %, the brain - 85 %, muscles - 75 %, liver - 65 %, bones - 28 %, and adipose tissue - 25 %. All chemical reactions in the body take place in the water presence.

The thirst feeling indicates that the body needs help. Therefore, a person should provide water not only when the body needs it, but always - whether he wants to drink water or not. Many diseases also develop because most people consume only 1/3 part of the daily norm.

When we feel bad, we usually explain it by fatigue or stress, vitamin deficiencies, and other causes. However, the body thus needs ordinary water, because the body cannot function fully without water.

The liver protects the body from the negative effects of germs and viruses, food dyes and preservatives. The liver function is to make toxins water-soluble and successfully remove them from the body. Due to the normal water balance, the liver spends less time processing waste and does this work qualitatively, which means that it prevents tvarious diseases development.

The kidneys filter all the fluids in the body. When a person drinks enough water, the kidneys excrete excess fluid in the urine, and with it all the harmful substances are excreted from the body. If you drink less water, then the kidneys have to save it and keep it in the body. In such cases, less urine is formed, which adversely affects kidney function.

All the harmful substances in the blood lymph "dispose". The lymph collects dead cells and other waste, transports them to the lymph tissue, where they are filtered and then sent to the liver and kidneys for processing. Normal water balance helps the lymph to cope with such a responsible task [2].

Drinking water supply protection of drinking water sources from pollution, waste clogging and drying, damage to drinking water supply systems is a necessary condition for ensuring the required drinking water quality, taking necessary measures to prevent sanitary, environmental and other requirements and pollution, clogging with waste, surface water bodies drying, as well as the sanitary protection zones creation for springs and drinking water supply systems, in compliance with the regime provided for in these zones provided [6].

Results.The wastewater treatment process plays the most important role. Of course this needs to be done in sequence. Drinking water for Samarkand is obtained from Zarafshan river. We will discuss the drinking water purifying process below. (Fig 2).

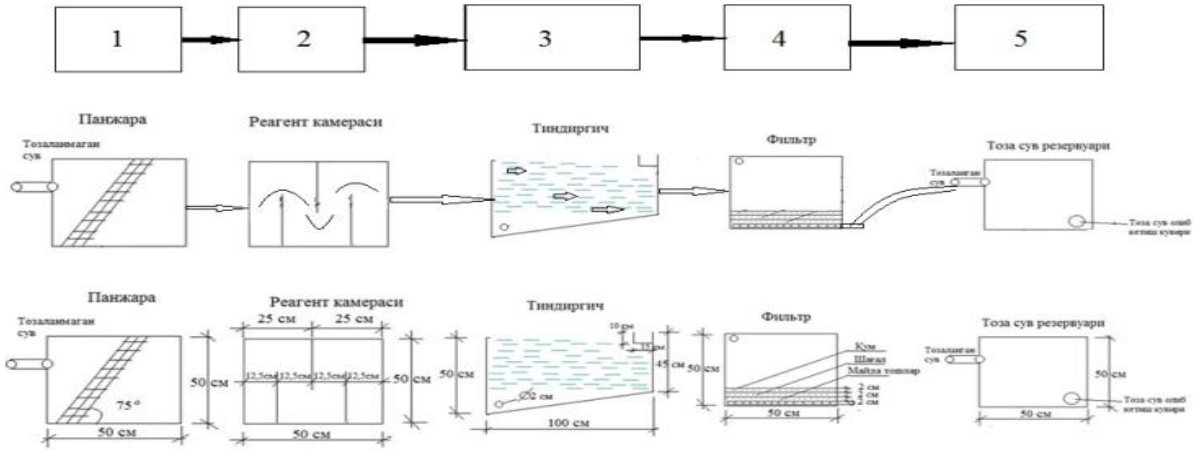

Fig 2. Sewage treatment sequence.

1. The grille is a device that traps dirt. 2. Reagent chamber (Mixer). 3. sump. 4. Filter.5. Clean water tank.

Sewage enters the first cell (1). Here, the waste and dirty things that flow with the water are trapped by a grate. Then the water (2) enters the reagent cell. In this cell, water is mixed by adding reagents to the water. The mixture falls into the precipitator (3). The water in the settler is drained and the thick turbid water is removed. The water above enters the filtration cell. In the filtration cell, water is filtered using sand, gravel and small stones. Clean water (5) falls into the fresh water tank.

Here, instead of the grate, it is possible to use slag-alkaline newspaper with 300 kg/m weight, that is, cellular concrete. Because aerated concrete is a very light material, the cells have a large diameter. There are tiny holes between the pores. Water flows through these holes and dirty things stay outside.

Water supply for external networks and structures is specified in building codes and regulations [3].

During a fire, people's life activities are endangered. Water supply will be needed to extinguish the fire. There are a number of works by our scientists on water supply in fire case [4.5].

Water was this life source, that is, for humans, for all living things on earth, and for the plant world. Without water supply, there will be no life on earth.

Conclusion.

Water is the most important source in the human body, helping a person digest food in the body.

Based on the experimental equipment, wastewater can be treated and delivered to the consumer.

Instead of steel bars, aerated concrete from local raw materials can be used.

The device can be visualized to the student as a laboratory and give water purification impression sequence in the students' minds.

References

1. Resolution of the Republic of Uzbekistan "On water and water use" on 06.05.1993 №837-XII.
2. .https://kun.uz/59582884. Сувнинг ҳаёт, саломатлик, гўзаллик ва озиш учун фойдаси.
3. 3.ҚМ ва Қ –2.04.02-97 Water supply. External networks and structures. Tashkent 1997.
4. **Kachalov A.A. and others. Fire-fighting water supply: A textbook for fire-technical schools / A. A. Kachalov, Yu. P. Vorotyntsev, L. V. Vlasov.— M.: Stroyizdat, 1985.p.286**
5. http://library.ziyonet.uz/uzc/book/57927. Gadaev A.N. "Textbook on the "Fire water supply". Samarkand 2008.
6. Lobanov F.I., Yuan Gao, Kinebas A.K., Tararykov O.Yu. Effective and environmentally friendly technologies for disinfection of drinking water supply facilities. Technologies for water purification "TECHNOVOD-2018". Materials of the XI International scientific and practical conference December 11-14, 2018 Sochi, Krasnaya Polyana. p. 129.