

RedOx – REDUCTION OF WATER OXIDATION

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Introduction. In our life we constantly do many actions that we do not even pay attention to, but some of them lead to loss of health. Human life is directly related to the quality of drinking water. It plays the most important role in the life of the organism. The quality of our lives depends on the quality of the water we drink.

Aim. The purpose of this work is to determine the further introduction of water with the correct oxidation-reduction potential (ORP) for the human health maintaining.

Materials and methods. The difference in the ORP of the human body internal environment (from -100 to -150 mV) and drinking water (from +150 to +400 mV) means that the body is forced to spend energy on changing the ORP, thereby wearing out and aging rapidly. When drinking clean water with negative ORP, all metabolic processes are improved, there is a rapid recovery of the body, even after chemotherapy.

Results and discussion. The activity of electrons is the most important characteristic of the internal environment of the organism, since it is directly related to the fundamental processes of life. Virtually all biologically important systems that determine the accumulation and consumption of energy, replication and the transfer of hereditary features, all kinds of enzyme systems of the body, contain molecular structures with separated charges. Recent studies have made it clear, that these fields determine largely the transfer of charges in biological systems and determine the selectivity and automatic control of individual stages of complex biochemical transformations, and that ORP, as an indicator of the electrons activity, greatly affects the functional properties of the electrically active components of biological systems. The imbalance in the mechanisms of oxidation-reduction processes regulation occurring in the human body is currently considered to be the most important cause of many human diseases. In order for the body to use drinking water optimally in the exchange processes with a positive value of the oxidation-reduction potential, its ORP should correspond to the value of the organism internal environment ORP. The required change in the ORP of water in the body occurs due to the expenditure of cell membranes electrical energy, that is, the energy of the highest level, which in fact is the final product of the nutrients transformation biochemical chain. The amount of energy consumed by the body to achieve the biocompatibility of water is proportional to its amount and the difference between the ORP of water and the internal environment of the organism. If drinking water, entering the body, has ORP close to the ORP value of the human body internal environment, then the cell membranes electrical energy (vital energy of the organism) is not spent on the water electrons activity correction and water is immediately absorbed because it has biological compatibility for this parameter. If drinking water has an ORP more negative than the ORP of the organism internal environment, then it feeds it with this energy used by the cells as an energy reserve of organism antioxidant protection from the adverse effects of the environment.

Conclusions. For this work, a theoretical analysis on the vital importance of the water ORP was carried out. Having analyzed theoretical material, we can say that the using of "live" water can improve our lives, we can not only save our health, but also extend our lives for 10 – 20 years. Nowadays, just few people are engaged in this problem, but this is the future.