

Conclusion. Based on the results of this analysis, could be concluded that kvass has a lot of benefits the human body. It has a pleasant refreshing taste, improves metabolism, and has a good effect on the cardiovascular system. Kvass has excellent taste properties; he quenches thirst due to the content of acid in it – milk and part of the vinegar; has a high energy value, promotes digestion due to the fact that it contains carbon dioxide, which facilitates the digestion of food, its absorption and increases appetite.

STUDY OF SOLVING THE PROBLEM DRUG ADDICTION

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Introduction. Nowadays, the problem of drug addiction is very acute for society. Addiction, which develops in one or another individual, is the result of the influence of a number of factors, both biological and psychological.

Drug addiction is a social phenomenon, as well as the worst disease of most countries. Drugs are substances that not only harm human health, but quickly and irreversibly destroy a person's identity. For many years, scientists all over the world have been trying to find a solution to this problem, which is one of the most urgent, both for health care and for society as a whole.

Aim. The study of new methods of modern medicine to deal and further eliminate drug addiction among society.

Materials and methods. Thanks to research of the American microbiologists, the problem of drug addiction has been solved. With the help of an adeno-associated virus, a vaccine has been created that makes the human body immune to narcotic substances. In turn, it should be noted that this virus does not pose a threat to human health. It is responsible for the transfer of genes that synthesize a protein that interferes with the action of drug.

Testing of vaccines was not conducted in humans. The influence of the preparation has a physiological effect, not a psychological one, as it was before. In this situation, the virus acts as a "messenger" which delivers the active substance to its intended purpose. As a result, the substance simply neutralizes the effect of the drug. The mechanism of action takes place in the following way in the first place the virus detains the drug in the blood, prevents it from entering the brain. Then, a protein that is synthesized under the influence of the virus neutralizes narcotic substances. The process of neutralization itself is carried out under the influence of antibodies produced by this protein.

Results and discussion. As a result of research, it was found out that adeno-associated virus is universal and is characterized by easy penetration into cells, as well as the ability to integrate into their genome. These non-cellular forms of life are widely used in gene therapy. The results of this experiment indicated that one injection of the preparation is enough for the complete rejection of the drug.

Conclusion. Vaccine is universal achievement of medicine and microbiology. Due to its properties it will allow to save mankind from drug addiction once and for all.

THE USE OF NANOTECHNOLOGY IN THE TREATMENT OF CANCER

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Introduction. Over the past few years, scientists have made great progress, working at the micro level. It is believed that nanotechnology will have the greatest success in medicine and have already ensured the delivery of drugs using nanoparticles. Modern nanomedicine has already created a scientific

breakthrough in the form of gold nanocapsules, which are designed to diagnose and treat cancer. This study has already been tested on laboratory animals and waiting for clinical trials.

Aim. The aim of this work is the theoretical substantiation of the use of nanoparticles for the diagnosis and treatment of malignant tumors.

Materials and methods. As objects for theoretical substantiation, nanoparticles of metals and nonmetals were chosen, which are used not only for delivering a pharmacologically active substance, but also as medicines on their own.

Results and discussion. To date, scientists have managed to get gold nanoparticles that detect cancer, with drugs against cancer, they can destroy the source of cancer cells. This will significantly reduce the side effect of many treatments. Potent drugs will act only on the cancer area and only for a certain time required for exposure to antibodies, but harmless to the person himself. Scientists plan to seize the opportunities of nanotechnology and force the voracious cancer cells to absorb everything in their field of vision, including nanoparticle-based drugs, to swallow their bait. In one of their experiments, scientists used modified bacterial cells that are 20 times smaller than normal cells. These cells were equipped with antibodies that were attached to cancer cells, and then "released" the anti-cancer drug they contained. Other scientists have used nanoparticles in combination with other treatments. As soon as the cancer cells absorbed these particles, they were heated by their magnetic field. As a result, the weakened cancer cells were more easily treated with chemotherapy.

American scientists have created cell repair machines. The essence of the method is that when passing through membranes, traveling through tissues and entering cells and viruses, machines can only repair any molecular damage, such as DNA damage or a lack of enzymes. Later, molecular machines will be programmed to a greater number of possibilities with the help of advanced artificial intelligence systems.

Nanocomputers are required to operate these machines. These computers will give the machine commands to inspect, disassemble and rebuild damaged molecular structures. Repair machines will be able to repair whole cells, structure by structure. Then, processing cell by cell and tissue by tissue, they can repair entire organs. Finally, processing organ by organ, they will restore the health of the whole body.

Conclusions. Thus, in the future, with the help of nanotechnology, mankind will be able to defeat non-treatable diseases, in particular cancer, diabetes, viral and bacterial diseases. In addition, the use of cell repair machines will be able to change the human genetic model, in particular, prevent aging and reconstruct all organs and systems.

THE PROCEDURE OF SPRS THERAPY – UNIQUE METHOD OF FACIAL AND BODY REJUVENATION

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Introduction. Service for Personal Regeneration of Skin technology therapy is a medical procedure that can only be carried out after being examined by a doctor to assess the condition of the skin and identify contraindications. A specialist after a visual inspection of the skin of the problem area assesses their thickness, elasticity and wrinkle severity. According to the results of the examination, the client is prescribed a certain number of procedures and the required number of cells. The preliminary stage of SPRS therapy involves the diagnosis of the patient's skin using multifunctional research methods and the creation of a special skin passport. Based on the data obtained, the specialist draws up an individual program for the correction of manifestations of aging and their prevention. Then a special preparation is created – a cell product based on the patient's own fibroblasts of the patient's skin. Only young fibroblasts are selected and cultivated. The sampling of skin particles (biopsy) is carried out from the ear region. It is from this piece in the laboratory that the necessary elements are mined and cultivated. Cultivation of fibroblasts is carried out for six weeks. After the material necessary for the selection of therapy is collected and a personal passport of the skin is developed, the specialist can begin the step of introducing fibroblasts into the patient's skin.