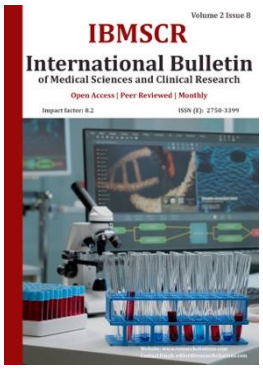

BIOLOGICALLY ACTIVE FOOD SUPPLEMENTS FOR THE CORRECTION OF DISORDERS THAT OCCUR WITH VIRAL HEPATITIS B

Sh.A.Kuramatova
"Central Asian Medical University"
8496.xash@gmail.com
Fergana, Uzbekistan.
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Annotation: with the increase in the population in modern times, a number of problems arise before humanity. In particular, one of the most kata problems is the increase in the population. An increase in population on earth is increasing demand for food. Malnutrition, on the other hand, leads to a deterioration in human health. And the health of mankind is the main factor. And the strengthening of human health and the treatment and Prevention of various diseases are huge problems of the entire Earth's surface. Viral hepatitis is considered an infectious and dangerous disease, preventing it and improving the diet of patients with this disease is the main issue.

Key words: hepatit,viral hepatitis, parches, nutritional diet, patients, Meat products, mucous membranes, medicinal herbs

Relevance of the problem. Recently, in medical practice, the direction associated with the use of biologically active substances (BAS), their complexes, in the production of biologically active additives (BAA) to food or for the enrichment of food products for therapeutic and preventive nutrition has been intensively developing. Food is a complex of millions of substances, each of which has a certain measure of biological activity. Many of the biologically active substances are found in foods in higher doses than they are used in the pharmacopoeia. Currently, food should be considered not only as a source of energy and plastic (building) substances, but also as a very complex pharmacological complex. BAS that help improve the functional state of the liver, as well as possible mechanisms of action of these substances, are discussed in this work. An analysis of studies conducted around the world to assess the effectiveness of the listed biologically active substances allowed us to determine the optimal component composition of dietary supplements. In particular, dietary supplements may include:

- Vitamins of groups A, B and C
- Minerals (iron, magnesium, zinc, potassium, manganese, etc.)
- Nutrients (eg amino acids and fatty acids)
- Substances that have a direct physiological effect on the patient's body (yeast spores, dried animal or plant cells, etc.).

Purpose of the study. The purpose of this work is to develop dietary supplements for patients with inflammatory liver diseases (hepatitis B) and the technology for its production. To determine the main classes of biologically active substances that have a positive effect on the functioning of organs and systems of the body in inflammatory diseases of hepatitis B.

In accordance with the set goal, the following were solved in the work:
tasks:

1. Analyze and systematize what happens in inflammatory diseases of hepatitis B.

2. Determine the main classes of biologically active substances and formulate component

composition of dietary supplements.

3. Develop a technology for the production of dietary supplements, recommendations for application.

Materials and methods of research. Research results.

As a result of the research, a food supplement for patients with inflammatory liver diseases (hepatitis) was created, and a technology for its production was developed. Based on clinical studies, recommendations have been proposed for the use of amino acids and vitamins as a component of specialized products and dietary supplements for hepatitis. Tests of the developed dietary supplement on laboratory animals showed its high effectiveness against viral liver damage.

Biochemical analysis of blood serum. Determined indicators of cytolytic syndrome (CS), in which there is damage to liver cells, primarily the cytoplasm, as well as cell organelles with a pronounced impairment of membrane permeability, were alanine (ALT) and aspartic (AST) aminotransferases.

According to studies of ALT and AST in patients in the control group, a clear increase in the concentration of enzymes in the blood serum was observed in relation to healthy people, which indicates the presence of cytolytic syndrome. When taking the product, the increase in enzyme concentrations is insignificant.

A biochemical study showed that the indicators of circulatory system and protein-synthetic function of the liver in the control group changed compared to the indicators of healthy rats. Taking dietary supplements against the background of ethanol consumption restrained fluctuations in enzyme concentrations and protein content.

Conclusions.

1. Data on the main pathogenetic disorders in the body that occur with hepatitis of various origins are analyzed, systematized, and summarized. Medical, biological and technological recommendations for dietary supplements for patients with hepatitis have been formulated.

2. Based on theoretical studies, the component composition of dietary supplements was substantiated, including arginine, phosphatidylcholine, gum arabic, and glycyrrhizin.

3. The state of the amino acid spectrum of the blood plasma of patients with chronic viral hepatitis has been established.

4. The hepatoprotective properties of the developed product were revealed as a result of studies on laboratory animals - a decrease in the activity of cytolytic syndrome, a corrective effect on the protein-synthetic function of the liver, a protective effect on liver tissue.

5. As a result of a study of a model of alcoholic liver damage in rats, negative changes in the composition of the intestinal microflora were established. As a result of the use of the product, the quantitative balance of representatives of all studied groups of microorganisms was maintained, and, above all, the content of lactobacilli and bifidobacteria.

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