

## **RESEARCH OF POSSIBILITIES TO IMPROVE IMMUNITY OF BIOLOGICAL OBJECTS**

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In modern conditions of environmental pollution, the adverse effects of climate change, the state of the body's immune system is especially relevant. Partial damage of cellular immunity and immune system leads to a large number of diseases, including cancer and AIDS. Great attention has been given to activation and strengthening of the immune system in the latest scientific developments of the leading countries of the world.

Despite the fact that recently a large number of works have been devoted to the problems of EHF (extremely high frequency) reflexology, the mechanisms of functioning of biological active points (BAP), including the mechanisms of activation of immunity during EHF irradiation of biological active points, have been studied insufficiently.

Despite the complexity of the biological structure, a biological active point has a simple equivalent circuitry containing an internal power source, an oscillatory circuit and active elements with negative resistance, simulating the electrical properties of nerve endings. Due to this, from an electrical point of view, the biological active points have all the necessary and sufficient conditions for the generation and reception of EHF radiation, which is confirmed by the studies.

Among the various mechanisms of immune defense, the immune response, in particular, may be due to the reaction of mast cells of a biological object. The greatest number of them is in the connective tissues of the skin and in the mucous membranes of the body, and they are directly in contact with biologically active points. Mast cells are filled with a multitude of granules that they release when a biological object is threatened with infection.

Upon excitation of the biological active points, represented by a cylindrical resonator, due to the action of EHF radiation in the range 36 ... 70 GHz, acoustic vibrations occur in the piezoelectric layer of collagen. These vibrations activate mast cells and provide their effective massage. Through a network of neurons and the main channels of acupuncture, excitation is transmitted to the cellular aggregations of lymphocytes responsible for immunity.

Thus, the influence of EHF radiation on biological active points of living organisms leads to activation of the immune defense mechanisms and helps to improve the state of the body's immune system.