INFLUENCE PROBIOTIC CULTURES *AEROCOCCUS VIRIDANS* STRAIN BI-07 ON MORPHOLOGY OF THE IMMUNE SYSTEM BROILER CHICKENS

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One of the main reasons for the decline of young vitality, increasing the incidence of infectious and noninfectious etiologies, and mortality is a low level of functional efficiency immune biological reactivity due to intensive exploitation of technology physiological resources against a background of depleting the body's stress environment.

To increase the vitality of young poultry with medical-prophylactic use of biologically active substances. The most environmentally correct and physiologically effective probiotics are based on the use of living organisms of different taxonomic subordination, the effects of which adequately prevailing in the evolution of the microorganism biomechanisms patronage nesingen transient microorganisms environment. So first of all, the prospects for the practical use of probiotics in poultry associated with the correction of dysbacteriosis and immune morphogenesis stimulation of central and peripheral organs of the immune system, regulation of microbial processes in the digestive tract, prevention of non-specific treatment of diseases of the gastrointestinal tract nutritional and infectious etiology. The use of probiotics to speed up the growth of calves and reduce waste, eliminate the use of feed antibiotics to stimulate growth and development of the birds from the first day of life. Replacing antibiotics with probiotics it is also linked with the essential task of veterinary and human medicine - increased environmental biosafety poultry production and consumer quality.

The most important way of improving probiotic preparations is to find new, original, biologically active probiotic cultures related to the saprophytic aerococcuses found in the intestines of healthy, physiologically full of broiler chickens. We have isolated probiotic culture *Aerococcus viridans* strain BI-07 from healthy broiler chickens in intensive fattening, studied its morphological and tinctorial, cultural, biochemical and biological properties. Showing her a pronounced positive effect on the immune immune morphogenesis of microorganism. On the basis of experimental studies found that the use of probiotic culture broth mikrobionta *Aerococcus viridans*
BI-07 strain does not cause pathological changes in the central and peripheral organs of the immune system, formation of elements optimizes the immunocompetent cells and inhibits the early involution of the immune system, leading to a more active form cellular and humoral immunity. At the same time the use of probiotic cultures *Aerococcus viridans* strain BI-07 instead of a set of antibiotics in the initial stage of fattening broiler effectively protects them from dysbiosis infectious etiology of diarrheal and respiratory syndrome and enables Biosafety meat products of high quality food with no residual amounts of antibiotics.

A feature of the immune system of broiler chickens is that it is in the stage of formation and development, and this determines the originality of its response to antigenic stimulation. For a correct understanding bio-mechanisms adequate immune host response is very important histological evaluation of the lymphoid organs, because their microenvironment is the most important factor of differentiation and function of lymphocytes - cells of the central immune-genesis implementing body's immune response to nesingen factors external and internal environment.

**Keywords:** IMMUNOLOGICAL REACTIVITY, PROBIOTICS, BIO-SECURITY, *AEROCOCCUS VIRIDANS*, BROILER CHICKENS, MORPHOLOGICAL AND TINCTORIAL, CULTURAL, BIOCHEMICAL AND BIOLOGICAL PROPERTIES.