

## THE IMPACT OF THE BioR REMEDY ON THE SERUM LEVEL OF CARNOSINE IN DIFFERENT PHYSIOLOGICAL STATES IN DOE RABBITS

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In recent years, some social-economic factors, such as the great amount of information on balanced and healthy nutrition, human population explosion, and privatization of agri-food sector led to higher rates of rabbit, broiler, quail growth, as well as to the development of advanced technologies. Rabbit breeding primary purpose is to obtain the meat and other products with maximum economic efficiency and in a short term. This is a complex activity, in strong connection with the scientific achievements of genetics, nutrition, hygiene, and veterinary medicine. At present, of great necessity is the development of new ecologically friendly and harmless bioactive compounds, such as BioR product, obtained from cyanobacterium *Spirulina platensis*.

Therefore, the health status and certain physiological-metabolic indices level, especially carnosine, have been studied in rabbits following administration of the BioR remedy. The studies were carried out on 4 groups of pregnant rabbits and afterwards lactating ones, 3 of which received intramuscularly BioR in doses of 1; 1,5; 2,0 ml/head. The control group received saline 0,9% . Blood was collected for laboratory investigations from 5 animals of each group at the 14th day of gestation, and at the 7th and 45th day after parturition. Clinical investigations have shown that BioR is well tolerated by rabbits in different physiological states. Serum carnosine dynamic monitoring in the control group, at the 1<sup>st</sup> research, showed an increase by 29,3% compared to the beginning of the study, while in the experimental groups was registered a decrease by 1,7–2,0 times compared to the control group. On the 7th day, after parturition, carnosine, in the control group, decreased, while in the experimental groups increased compared to the 1st investigation, but still registering a level lower by 11,7 – 15,6% compared to the control group. At the end of the study, in intact doe rabbits, carnosine decreased by 1,7 times compared to the previous investigation, while in the experimental groups this parameter increased by 1,4 – 1,7 times compared to the control group. The obtained results are positive and reflect the way of BioR involvement in restoring the metabolic status of doe rabbits regarding their reproductive cycle.

In conclusion, the remedy BioR administered to doe rabbits, is well tolerated, does not cause side effects and induces an increase of the dipeptide histidine-carnosine in serum, in different physiological states.