

ZMENY V ORGANIZME KURČIAT PO ÚČINKU IONIZUJÚCEHO ŽIARENIA A ZINKU

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ABSTRACT

Daňová, D., Toropila, M., Kafka, I., Kaleničová, Z.: **Changes in the Organism of Chickens After Effect of Ionizing Radiation and Zinc**

In our experiment we observed effect of ionizing radiation and zinc on the metabolism of chickens. In our paper we observed effect of low dose of ionizing radiation on the organism of chickens with the incorporation of zinc chloride. We observed changes of glucose and cholesterol concentration and the activity of alaninaminotransferase (ALT) in time interval 3., 7., 14., 21. and 30 days after whole-body ionizing radiation with dose of 3 Gy gamma rays and in the combination of solution of zinc chloride 0,6 mg/kg. Chickens were 28 days old on the beginning of experiment. On the radiation of animals we used cobaltic gamma radiator CHISOSTAT from PF UPJS in Kosice. Concentration of glucose, cholesterol and activity of ALT we determined by set PLIVA-Lachema Diagnostika, Brno. From our present results that low doses of ionizing radiation concerning increased radioresistance organism of poultry reacts deducible changes of concentration of glucose, cholesterol and changes of activity selected enzyme.

Keys words: chickens, ionizing radiation, metabolic changes, zinc