

The distribution of nanosilver in quail eggs at oral ingestion of nanosilver preparation

V.F. Babiy¹, O.E. Kondratenko¹, M.V. Pimushina¹

¹ *SI “O.M. Marzeyev Institute for Hygiene and Medical Ecology, National Academy of Medical Sciences of Ukraine”, Kyiv*

Nanosilver preparations are increasingly used in veterinary medicine and in agriculture for the prevention of diseases in warm-blooded animals, including birds, which are grown for the consumption of meat production and eggs. In this regard, the security issue is relevant to human food products obtained using nanosilver preparations.

The purpose of our study was to investigation of the features of accumulation of nanosilver in food domesticated quail eggs when you receive it naturally through the gastrointestinal tract.

The research were carried out on quail breed Pharaoh 40-day-old, for 30 days quail fed a solution of the drug at concentrations of nanosilver 0,01; 0,02; 0,03 %. The determination of silver in food quail eggs were determined by atomic absorption spectrophotometry.

Results showed that the average silver content of the edible portion of quail eggs group III (nanosilver maximum load) is 2,2 times higher as compared with the control group, indicating that the dependence of the amount of silver in the eggs of the dose received in the watering of quail. The food for quail contains $0,07 \pm 0,01$ mg / kg of silver, which explains the presence of silver in the eggs of the control group. The highest silver content is determined in the shell, which is explained osteotropic properties of silver.