

## EFFECT OF STABLE IODINE PREPARATION ON THE QUALITY OF POULTRY PRODUCTS

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**Summary.** Lithuania is part of a region with endemic iodine deficiency. It is therefore recommended to supplement poultry feed with iodine, manganese and zinc.

The goal of the investigations was to quantify the accumulation of iodine in broiler meat, as well as in table eggs and in livers of laying hens using the stable concentrated iodine preparation instead of the usual potassium iodide.

Investigations were carried out at the Research Laboratory of Biological Diversity and Technologies of Vilnius Pedagogical University, Lithuania, and under field conditions on the broiler farm SC „Vilniaus paukštynas“ and on the laying farm SC „Vievio paukštynas“.

The inclusion of stable iodine concentrate into the drinking water (at 0.5 and 5 mg iodine/ 1 H<sub>2</sub>O) increased the content of iodine in the meat of broilers by an average of 16 and 76%, compared with the control group receiving potassium iodide in the feed. Eggs from laying hens receiving feed with stable iodine concentrate (at levels of 1 and 4 mg iodine/kg feed) contained 24 and 196% more iodine than eggs of the control group. It was also established that addition of stable iodine concentrate to the feed of laying hens was increasing iodine levels in livers of the hens by 12,5 – 25% .

It can be proposed to promote iodine enriched poultry meat and eggs as functional food.

**Keywords:** iodine deficiency, broilers, laying hens, eggs, functional food.