RESEARCHES REGARDING RELATION BETWEEN GLUTATION PEROXIDASE ACTIVITY AND SELENIUM BLOOD LEVEL ON BROILERS FEED WITH VITAMIN E AND SELENIUM SUPPLEMENTS

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Key words: selenium, vitamin E, chicken, blood

SUMMARY

The physiological role of selenium consisting in the participation at a variety of the metabolism functions. As important constituent of selenium proteins, selenium has enzymatic and structural functions, knows as antioxidant and catalyst for the obtaining thyroidian hormone. Selenium is an important constituent of different selenoproteins and makes used in two ways: first of all, it prevent the formation of free radicals and second of all, it decomposes the free radicals (Avram et al. 1992, Suray 2000).

The purpose of this paper is to establish correlations between glutation-peroxidase and blood level of selenium on broilers fed with different doses of vitamin E and selenium. The experiment was made on 147 broilers divided in seven groups. The enzymatic activity of GSH-Px was determined by spectrophotometer and the level of blood selenium by atomical absorption.

CERCETARI PRIVIND INFLUENTA ZINCULUI ASUPRA NUMARULUI DE CELULE SOMATICE DIN LAPTE LA BALTATA CU NEGRU ROMANEASCA[1]

RESEARCHES CONCERNING INFLUENCE OF ZINC SUPPLEMENT ON SOMATIC CELLS FROM MILK IN ROMANIAN BLACK PIE DAIRY COW

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Cuvinte cheie: carența**,** celule somatice, zinc, taurine
Key words: deficiency, somatic cells, zinc, cattles

SUMMARY

Zinc deficiency reduces the immune response to viral and bacterial infections. In healthy mammary gland the number of cells can be up to 200.000/ml of milk but after mammary infections the number of somatic cells increase to millions/ml of milk. The goal of the study was to evaluate the influence of diet supplemented with inorganic zinc on the number of somatic cells from milk. The study was made on 16 Romanian Black Pie healthy cows, 4-7 years old, beginning from 10-30th days postpartum, divided in 2 groups, each of 8 cows: experimental (E) and control (M). The experimental group received 10 g zinc sulphate, orally, weekly, 20 doses. At the beginning of the study the plasmatic level of zinc was lower than normal in both groups (group E 0,68±0,31mg/L; group M 0.67±0,20mg/L). After 2 month of treatment (8 doses) the zinc concentration of plasma become normal in group E (1,08±0,38mg/L) and the number of somatic cells from milk was of 754±774,56x10^3 cells/ml, while in control group showed a significantly lower plasma concentration of zinc (0,74±0,54mg/L) but also a significantly increase of somatic cells from milk (772,88±1056,22x10^3 cells/ml). During the whole period of study the reduction of somatic cells from milk was significant in E group in comparison with M group $t(10)=49,33$, $p<0,05$.

[1] Cercetări finanțate prin grant PN2 2203/2007