

CHANGES IN THE IRON AND COPPER CONCENTRATIONS IN BLOOD SERUM OF THE RABBITS UNDER THE INFLUENCE OF PHYSIOLOGICALLY ACTIVE MICROMINERAL SUPPLEMENTATION 1-FENIL-2-PIROLIDIN-4-KARBOKSI-1 IRON, COPPER, COBALT SULPHATE AND ZINC ACETATE NARIUM SALT

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Summary. The aim of our experiments was to determine the iron and copper concentrations under the influence of micromineral supplementation. The composition of micromineral supplementation 1-fenil-2-pirolidin-4-karboksi-1 iron, copper, cobalt sulphate and zinc acetate natrium salt was the following: iron sulphate - 25.6-26.0 %, copper sulphate - 3.8-4.0 %, cobalt sulphate - 0.63-0.65 %, zinc acetate - 25.5-26.0 % and 1-fenil-2-pirolidin-4-karboksi-1 natrium salt - 44.0-44.5 %. Such composition of microminerals can modulate growth and development, erythropoiesis intensity, hemoglobin synthesis and stimulate immunocompetence of animals, but we have no information about the mechanism of the action. We determined the iron level and copper concentrations in blood serum of the rabbits by the method of colorimetry using biokites of Fe (70) and Cu (35). The first group of rabbits was control and the second group of rabbits got micromineral supplementation of 2 grammes. The concentration of iron and copper changed in all groups of rabbits during the experiments. The iron concentrations were greater 8.6 % ($p < 0.05$) in blood serum of rabbits fed the 1-fenil-2-pirolidin-4-karboksi-1 iron, copper, cobalt sulphate and zinc acetate natrium salt. Copper concentration was higher 6.4 % ($p < 0.05$) in rabbits of the second group when compared with the control one. It can be concluded from the experiments that copper had positive influence on the resorption of iron in the organism of the second group of rabbits.

Keywords: blood serum, 1-fenil-2-pirolidin-4-karboksi-1 iron, copper, cobalt sulphate and zinc acetate natrium salt, iron, copper, rabbits.