

RATIO OF THE CONTENT OF FREE AMINO ACIDS IN THE BLOOD AND SPERM OF ROOSTERS

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Abstract

In this paper are presented the experimental results obtained after the administration of polyphenols of plant origin extracted from green walnuts and their influence on the ratio of free amino acids content in blood serum and reproductive material of roosters. It was demonstrated that the total content of free amino acids in the blood serum of roosters is 437.14 ± 45.23 mcm/100 ml. The highest share belongs to proline – 31.34%, glycine – 10.63%, alanine – 7.73%, threonine – 7.62% and glutamine – 7.37% of the total content of all amino acids. Seminal fluid is characterized by a 3 times higher content of free amino acids than in blood serum, which constitutes - 1885.42 ± 130.43 mcm/100 ml. For seminal fluid, it is characteristic that the highest share is represented by the content of asparagine – 16.3%, glutamine 40.16%, glutamic acid – 9.64% of the summary content of amino acids in the seminal plasma. The total content of free amino acids in the reproductive cells of roosters constitutes 110.69 ± 3.28 mcm/100 ml. In this biological material the highest share belongs to taurine with a value of 37.28%, followed by arginine with a value of 17.68%, glycine – 15.19%, alanine – 6.55%, proline – 6.43%, glutamine – 5.80%.

Key words: *free amino acids, roosters, reproductive material, plasma, spermatozoa*