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Nucleotides in broiler chicken diet: effect on breast muscles quality

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The study evaluated the effects of nucleotide dietary supplementation on the physical and nutritional characteristics of the Pectoralis major muscle of male broiler chickens (n = 60 000), divided into two homogeneous groups: Control (C) and Nucleotides (N). The animals of the two groups, from the birth (24 h of age) to the slaughtering age (52 days), received the same diet, supplemented (N) or not (C) with 0.1% of a Nucleotide pool. At the slaughtering, on a sample of 130 animals per group, randomly selected, the physical and nutritional characteristics of *Pectoralis major muscle* were determined. The meat of the N group showed significantly higher redness and Hue values, lower shear force values, higher lipid and ash percentages and iron content. Moreover, nucleotides

significantly increased monounsaturated acids and linolenic acid and decreased eicosapentanoic and docosahexanoic acids. The unsaturation degree was higher in the Nucleotides group and Atherogenic index was positively influenced by the nucleotide supplementation. Nucleotide dietary supplementation improved the physical and nutritional characteristics of the Pectoralis major muscle of broiler chickens.

Keywords:

dietary nucleotide; meat; broiler chicken

[fulltext]