THE INFLUENCE OF SEA BUCKTHORN (*HIPPOPHAE RHAMNOIDES*) AND RED PEPPER (*CAPSICUM ANNUUM*) FLOUR ON THE CHEMICAL COMPOSITION OF MEAT IN ROSS 308

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Abstract

The use of plant additives as natural sources of bioactive compounds represents a promising strategy for replacing synthetic pigments and improving the nutritional quality of poultry meat. This paper evaluates the influence of dietary supplementation with sea buckthorn powder (Hippophae rhamnoides) and red pepper powder (Capsicum annuum) on the chemical composition and nutritional value of muscle tissue (breast and thighs) in Ross 308 broiler chickens.

The results highlight significant changes in the chemical profile depending on the sources of carotenoids and the type of tissue. At the breast level, the administration of 2% red pepper powder resulted in the highest concentration of crude protein (21.88%), surpassing the control group (20.56%), along with a substantial reduction in fat (1.2% compared to 2.2%).

Supplementation with 2% sea buckthorn powder in the breast slightly increased the lipid fraction (2.5%). At the thigh level, both sources of carotenoids promoted a decrease in lipids, with the lowest level recorded in the 3% red pepper powder group (6.7%), and the 2% sea buckthorn powder group (6.8%), compared to the control group (7.1%). The ash content (1.01-1.18% breasts; 0.77-1.06% thighs) and moisture (75.28-76.30% breast; 72.05-74.90% thighs) remained within normal physiological limits.

Key words: *Ross 308, Hippophae rhamnoides, Capsicum annuum, meat, chemical composition*