

Αξιοποίηση Φυσικών Αντιοξειδωτικών στην Εκτροφή των Αγροτικών Ζώων για Παραγωγή Προϊόντων Ποιότητας

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«The effects of quercetin dietary supplementation on broiler growth performance, meat quality and oxidative stability»

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«THE EFFECTS OF QUERCETIN DIETARY SUPPLEMENTATION ON BROILER GROWTH PERFORMANCE, MEAT QUALITY AND OXIDATIVE STABILITY» (2014)

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ABSTRACT The present study was conducted to describe the effects of quercetin dietary supplementation, at levels of 0.5 and 1 g/kg of feed, on growth performance, internal organ weights, meat quality, and meat oxidative stability during storage of broiler chickens reared from hatching to 42 d of age. Body weight and cumulative feed intake were not affected by quercetin supplementation ($P > 0.05$). However, poorer feed conversion ratio values were obtained with increasing levels of dietary quercetin (P -linear < 0.05). Relative heart weight was significantly higher for chickens that were given quercetin in comparison with the controls ($P < 0.05$). The rest of the internal organ weights measured (liver, spleen, and fat pad) and meat quality traits were not affected by dietary supplementation with quercetin, except for meat lightness and redness. Meat oxidative stability, expressed as nanograms of malondialdehyde per gram of meat, was improved ($P < 0.05$) during refrigerated storage for 3 and 9 d, when birds were fed quercetin at a level of 1 g/kg of feed. It is concluded that the incorporation of quercetin in broiler diets could prolong meat shelf life by reducing the rate of lipid oxidation, and increase relative heart weight, potentially contributing to improved animal health.

Η Επιτροπή Πιστοποίησης Παραδοτέων

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