

Abstract:

The aim of this study was to investigate the effects of conjugated linoleic acid (CLA) on the performance and carcass composition. Treatments Supplemental of CLA was added to the basal diet at expense of corn starch generating four treatments were different levels of dietary CLA (0, /5, 1, and 2% of diet) which were allocated from 28 to 42 d of age. The results showed that dietary CLA significantly reduced the abdominal fat, and fat content of breast meat ($p<0.05$). However, higher levels of dietary CLA significantly increased protein content of breast meat ($p<0.05$) there were not significant for feed intake and feed conversion between Treatments. Dietary CLA also significantly improved the qualitative characteristics of carcass protein including taste, odor, and palatability ($p<0.05$). Overall, inclusion of CLA in broiler diet improved the product quality and nutritive value of the edible protein. Blood variables were triglyceride, total cholesterol, high density lipoprotein (HDL), low density lipoprotein (LDL), and ratio of HDL:LDL. Statistical analysis revealed that the dietary CLA significantly increased HDL and decreased LDL in the serum ($p<0.05$), but did not affect triglyceride level in the blood. Dietary 1 and 2% CLA significantly increased total cholesterol and the ratio of HDL:LDL in the serum ($p<0.05$).

Key words: Conjugated linoleic acid, carcass quality, broiler.



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