The effects of dietary protein levels on the carcass composition of starter and grower broilers

ABSTRACT

Carcass analysis of most economical parts of broilers were studied after they were fed with different protein levels of 16, 18, 20 and 23% for the starter period and 16, 18 and 20% for the grower period. The energy value of the feed was constant at 3,200 kcal ME/kg. The results for the starter and grower broilers showed similar pattern of responses. There were significant increased in weight gain, feed intake, protein intake, while there were significant decrease in the feed conversion ratio (FCR), abdominal fat and carcass fat when dietary protein increased. For the economical parts of the carcass, most of the fats were found in the thigh meat, while the lowest was found in the breast meat. The protein levels did not influence the meat production of the breast, drumstick and thigh portion. Increasing the protein intake, increased the broiler performance in relation to increased protein content of the breast, drumstick and thigh meat. The different fat contents of the meat might be due to differences in the rate of pipogenesis and fat deposition of the meat.

Keyword: Carcass composition; Dietary protein; Starter and grower broilers