

Supplementation of Alpha Lipoic Acid on Growth Performance of Broilers Fed with Animal Fat

Murali P*, George Sherin K, Mercy A.D, Dipu M.T and Narayanankutty K

*Department of Animal Nutrition, College of Veterinary and Animal Sciences,
Mannuthy, Trichur, Kerala-680 651.
E-mail: *muralivet67@gmail.com*

Abstract

The aim of this study was to investigate the effects of five percent dietary fat with or without alpha lipoic acid in diets of broiler chicken on growth performance (body weight, cumulative weight gain, feed intake and feed conversion ratio). Eighty, day-old commercial broiler chicks (Vencobb) were used as experimental birds in completely randomized design at two treatments with four replicates of ten chicks each. The birds were fed with standard broiler starter ration (23 per cent crude protein and 2800 kcal ME/kg of feed) up to 4 weeks of age and finisher ration (20 per cent crude protein and 2900 kcal ME/kg of feed) up to 6 weeks of age. The birds fed with experimental diets T₁ (Control ration as per BIS, 1992 specifications with five per cent animal fat) and T₂ (control ration supplemented with 100 mg of alpha lipoic acid/kg diet). The diets used were isocaloric and isonitrogenous and were fed adlibitum to chicks throughout the experimental period. Growth performance parameters such as body weight, cumulative weight gain, feed intake and feed conversion ratio were evaluated at weekly intervals for six weeks of experimental period. At sixth week of age, body weight, cumulative weight gain, feed intake and feed conversion ratio of birds were 2091.24 and 2098.36 g, 2031.45 and 2051.75 g, 3976.49 and 4063.45 g, and 1.96 and 1.98 for control and alpha lipoic acid supplemented groups respectively and the data were similar in both the treatment groups. It can be concluded that, the alpha lipoic acid supplementation had no effect on the growth performance of birds in the present study.

Keywords: Alpha lipoic acid, Animal fat, Broilers, Growth performance.