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Influence of full-fat sunflower seed on performance and blood parameters of broiler chickens

Nassiri Moghaddam, H., Salari, S., Arshami, J. and Golian, A.G., Ferdowsi university of Mashhad, Excellent center of Animal science, Azadi square, 0098 Mashhad, Iran; hnassirim@gmail.com

Influence of full-fat sunflower seed on performance and blood parameters of broiler chickens As an alternative to fats and oils, full-fat oilseeds such as soybean seed are used to replace the supplemented fats and oils in broiler diets. However, soybean seed has anti-nutritional factors such as trypsin inhibitors, which need further processing, thus increasing the cost of soybean seed. Among the various oilseeds available on the market, full-fat sunflower seed (FFSS) contains more ether extract and is available at a relatively low price. This experiment was conducted to study the effect of FFSS on performance of broiler chickens. 176 day-old male broiler chickens were allocated to four treatments with four replicate in a completely randomized design for 7 weeks. Treatments were 0, 7, 14 and 21% of FFSS. The diets were isocaloric and isonitrogenous. At 28 d, blood samples were taken and during the experiment, performance parameters were recorded. Data for all parameters were subjected to an analysis of variance, using the general linear model procedure of SAS. Feed intake and weight gain increased significantly when increasing levels of FFSS was incorporated in the diet during the experiment. Except for 1 to 21 and 1 to 49 days of age, FCR improved significantly. The triglyceride concentrations tended to be lower in the birds fed increasing levels of FFSS, but this effect was not significant. Other factors including glucose, total cholesterol, HDL, LDL, alkaline phosphatase, protein, calcium and phosphorus were not significantly affected. Although a small reduction in LDL and an increase in HDL observed. FFSS was proven as a good source of CP and ME in broiler diets. The results from the current experiment indicated that substitution of FFSS for corn, soybean meal up to 210 g/kg of diet had positive effect on performance parameters.