

Effect of different levels of threonine on growth performance, efficiency of carcass and morphology of the small intestine of broilers

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Abstract

The purpose of this experiment was to evaluate the effect of different levels of threonine on growth performance, efficiency of carcass and in broilers. The experiment was done in a completely randomized design arrangement and chicks (Ross 308, 1-d old) were randomly assigned to 4 treatment groups of 4 replicates each including 10 chicks per replicate. Chicks were offered four levels of threonine including: basal diet (without adding threonine), diets containing threonine as recommended by Ross 308 manual guide (level 0/05% threonine + basal diet), level 0/1% threonine + basal diet and level 0/15% threonine + basal diet at Starter (1-10), Grower (11-24 days) and finisher (25-42 days) periods. The threonine level on daily gain, feed intake and feed conversion ratio were significant effect ($P < 0/05$). The best Growth Performance of 1-42 day in terms of daily weight gain, feed intake and feed conversion ratio was treatment 0/1% of the threonine and the lowest was the control (non-Thr), respectively. Also, The results of experiment showed that treatment 0/1% of the threonine increased villus height at 42 days ($P < 0/05$). With regard to condition of this experiment, Level of 0/1% of the threonine surplus theronine basal diet improved the Growth performance, Carcass efficacy and morphology of the small intestine of broilers.

Key words: Threonine, Growth performance, Carcass efficacy, Morphology small intestine

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