

Public Abstract

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Title:DIGESTIBLE LYSINE AND THREONINE REQUIREMENTS OF MALE TURKEYS AND THEIR EFFECTS ON PERFORMANCE OF MALE TURKEYS FED PRACTICAL DIETS TO MARKET AGE

Seven experiments were conducted to determine the minimum requirements of digestible lysine (dLys) and digestible threonine (dThr) from 1 to 21 weeks of age for male turkeys. Requirement values were similar to NRC (1994) recommendations, after application of digestibility coefficients. The minimum requirements for dLys and dThr were then used to formulate low crude protein diets for male turkeys from 1 to 18 weeks of age, using safety factors of 0, 5 and 10% over the minimum amino acid requirements, compared with an industry average diet. Results indicate that a low crude protein diet formulated with a 10% safety factor with respect to the minimum recommended levels of digestible AA did not negatively affect performance, carcass, or meat yield, and resulted in significantly higher revenues as compared with an industry standard diet.