

**EFFECTS OF REDUCED PROTEIN, AMINO ACID SUPPLEMENTED DIETS  
ON PRODUCTION AND ECONOMIC PERFORMANCE OF COMMERCIAL  
BROILERS FED FROM HATCH TO MARKET AGE**

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**ABSTRACT**

Five studies were conducted to determine the effects of reduced crude protein (CP) of commercial broilers fed for further processing. In experiments (EXP) 1, 2, and 3, birds were fed diets with up to 1.5% reduction in CP. The results were consistent for the three experiments. Performance and meat yield were not affected by the decrease in CP, but abdominal fat yield increased as CP decreased. In EXP3 and 4, birds were fed diets with up to 2.1% decrease in CP. In EXP4, the lowest CP-diet (CT-2.1%) received supplementation of arginine (Arg), valine (Val), isoleucine (Ile), leucine (Leu), or a mixture of these four amino acids (All). In EXP4, a decrease in breast meat yield was observed when CT-2.1% was fed whereas in EXP5 there was no effect on breast meat yield, which may have been due to the fewer replicates utilized for EXP2. In EXP4, carcass yield decreased and supplementation with Ile/All recovered carcass yield.