

# NUTRITIONAL INTERVENTION IN THE EARLY GROWING BROILER CHICK

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## ABSTRACT

Today's broiler is commonly slaughtered between 35 and 56 days of age. The first 2 weeks of life, when it is still developing, now make up about 28% of the broilers life cycle yet accounts for less than 9% of total feed consumption. Rapid growth occurs during this period yet intake is minimal due to a low maintenance requirement, presenting an opportunity to use more expensive ingredients during this period to improve digestibility and growth of the chick without significantly increasing the total cost of feeding the bird. If growth and development can be improved during the pre-starter period, this effect may continue throughout the growout period and improve body weight and feed efficiency at market.

The experimental objectives, in 2 separate trials, were to determine if the addition of high dietary fat or porcine spray dried plasma protein during the pre-starter period could affect body weight or feed efficiency at market. Treatment diets were fed to either 10 or 14 days followed by diets constant across all treatment groups throughout the growout period. High fat addition improved growth performance during the treatment period and immediately following but these affects were not observed at 49 days of age. Spray dried plasma protein has been shown to improve growth performance and livability in high pathogen environments but no effects were observed in the present experiment when birds were housed in a normal, low pathogen environment.