

## THE EFFECT OF SEQUENTIAL FEEDING OF PELLET AND MASH DIETS ON PERFORMANCE OF BROILER CHICKENS

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### INTRODUCTION

Sequential feeding (Seq) is a feeding program, which consists of giving several diets of different nutritional values, for 1 to several-day cycles. It might significantly reduce feed cost and also incorporate higher amounts of cheap raw materials, 1 d out of 2. Several Seq schedules have also been shown to improve welfare of broiler chickens. (Leterrier et al, 2006). This trial was conducted to investigate the effect of Seq of pellet and mash diets on performance of broiler chickens.

### MATERIALS AND METHODS

In this experiment, 490 day-old chickens (Ross 308) were used in completely randomized design with 7 treatments and 5 replicates. Experimental treatments consisted of pellet control, mash control, 24 h mash and 48 h pellet, 24 h pellet and 48 h mash, 24 h mash and 24 h pellet, 48 h mash and 48 h pellet and choice Feeding of mash and pellet. Birds had free access to water and feed during the Performance parameters (body weight gain, feed intake and feed conversion ratio) were measured biweekly. The data were analyzed using the GLM procedures by SAS soft ware (2008) and individual treatment mean differences were determined by Duncan's multiple-range test.

### RESULTS AND DISCUSSION

As results showed, feed intake, body weight and body weight gain were significantly higher ( $P < 0.05$ ) in pellet control and 24 h mash and 48 h pellet groups than other treatments. Feed conversion ratio (FCR) in pellet control, 24 h mash and 48 h pellet treatments was significantly lower ( $P < 0.05$ ) than other groups. In accordance with finding Nir et al (1995) the feeding of pellets, compared to mash improved broiler growth rate, which was associated with an increased feed intake and improved FCR.

**KEYWORDS:** Sequential feeding, Diet, Performance, Broiler chickens

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