

Performance and production costs of two commercial broiler strains following feed restriction or feeding with dried chick excreta

F.M. Attia, A.A. Alsobayel and M.S. Bayoumi

Department of Animal Production, College of Agriculture, King Saud University, P.O. Box 2460, Riyadh 11451, Saudi Arabia

(Received 26 June 1990; accepted 11 December 1990)

ABSTRACT

Attia, F.M., Alsobayel, A.A. and Bayoumi, M.S., 1991. Performance and production costs of two commercial broiler strains following feed restriction or feeding with dried chicken excreta. *Anim. Feed Sci. Technol.*, 34: 1-10.

This study was undertaken to investigate the influence of early severe feed restriction or the addition of dried chick excreta to finisher diets on broiler performance and feed costs. Mini Bro and Red Bro chicks were subjected to three dietary treatments: (1) controls fed ad libitum (AL); (2) similar to AL, but with 2 weeks restriction to 50% of control feed intake between 1 and 3 weeks of age (FR); (3) identical to AL except that dried excreta (DX) replaced 20% of the finishing diet during 5 and 6 weeks of age.

Feed restriction significantly ($P < 0.05$) depressed the performance of both strains. However, cumulative feed conversion ratios (F/C), abdominal fat percentages and feed costs for AL and FR birds were the same. The addition of 20% DX to finisher diets had no adverse effects on broiler performance. Feed costs per kilogram live weight were significantly ($P < 0.05$) improved by the addition of DX to finisher diets. At 7 weeks of age, females of both strains had significantly ($P < 0.05$) higher abdominal fat percentages than males. Strain had no effect on abdominal fat percentage.

It is concluded that incorporating DX in finisher diets is economically feasible, whereas the 50% restriction level is not.