

PERFORMANCE OF TWO STRAINS OF GROWING PULLETS
OFFERED FREE CHOICE OF DIETS

I.M. MASTLKA*

An experiment was conducted to study the effect of choice feeding on the performance of two strains of growing pullets. A complete randomized design with 2 x 2 x 2 factorial arrangement was used in this experiment and each treatment consisted of 4 replicates.

Three hundred and twenty **8-week** old birds of two strains (one hundred and sixty birds of Super Harco or Hi-line) were divided into thirty two groups of ten birds each and were fed either a complete mash (14.6% CP; 12.13 Mj ME/kg) or a choice of diets (concentrate 27.3% CP; 8.84 Mj/kg and corn). Birds were also offered either insoluble grit (sand) or soluble grit (oyster shell) in a separate container.

The results of the experiment indicated strain differences, but body weight, weight gain, feed consumption and feed conversion ratio of the birds of **the** same strain at 20 weeks of age were not affected by the systems of feeding or grit supplementation.

However, Super Harco birds consumed significantly more feed (**32.8%**), had 43.1% higher body weight and 48.7% higher weight gain than Hi-line birds ($p < 0.05$). Birds of Super Harco or Hi-line strains offered a choice of diets consumed as much energy as the birds fed a complete mash diet. Furthermore, in a choice situation, Hi-line birds consumed as much protein as the birds fed a complete mash diet, however, the Super Harco birds consumed **significantly** more protein (**11.7%**) **than** those fed a complete mash diet ($p < 0.05$).

***Department** of Animal Nutrition, Faculty of Animal Husbandry, University of Udayana, Denpasar, Bali, Indonesia.