

## **Effects of baker's yeast as a growth promoter supplemented at different levels on growth performance, gut morphology, and carcass characteristics of broiler chickens**

### **ABSTRACT**

A study was performed to determine the effects of varying levels of baker's yeast supplementation on growing performance, nutrient digestibility, gut morphology, and carcass characteristics of broiler chickens. A total of 200 day-old male Cobb 500 broiler chicks were used and divided equally into 5 dietary treatments: T1 (control), T2 (control + 0.1% baker's yeast), T3 (control + 0.2% baker's yeast), T4 (control + 0.4% baker's yeast), and T5 (control + 0.8% baker's yeast) with 4 replicates per treatment and 10 birds per replicate. All birds were given the same management and environmental conditions. Significant differences ( $P < 0.05$ ) were observed, with T4 ( $71.26 \pm 0.03$  g/d) showed the highest value in weight gain compared to control diet ( $66.59 \pm 0.50$  g/d). In FCR, T4 ( $1.86 \pm 0.08$ ) showed the lowest value compared to control diet ( $2.07 \pm 0.08$ ). Also in ileum villus height T4 ( $1226.1 \pm 0.81$   $\mu$ m) showed the highest value compared to control diet ( $1080.7 \pm 0.48$   $\mu$ m). However, no significant difference ( $P > 0.05$ ) was observed for cryptal depth, dry matter and metabolizable energy among all treatments. Meat, bone, and fat ratios recorded significant differences ( $P < 0.05$ ) between dietary treatments and control group. However no significant difference was observed in the dressing percentage among all dietary treatments. The study indicates that dietary supplementation of 0.4% baker's yeast in the diet increases the growth performance and carcass characteristics, and also improves intestinal morphology and nutrient absorption of broiler chickens.

**Keyword:** Broiler chickens; Baker's yeast; Growth performance; Carcass characteristics; Gut morphology; Nutrient absorption