

**EFFECT OF PENERGETIC-t SUPPLEMENTATION ON PERFORMANCE
AND MEAT QUALITY PARAMETERS IN BROILER CHICKEN**

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This study was conducted to investigate the effect of *penergetic-t* supplementation on growth performance and meat quality parameters of broiler chicken. One hundred and forty-four-day-old Cobb 500 broiler chicks were randomly divided into four dietary treatments expanded with four replicates containing, ten chicks per each in a Completely Randomized Design. The experimental diets were based on basal diet supplement with different dosages of *penergetic-t* feed supplement, control (commercial broiler feed), basal feed with a low dosage of *penergetic-t* (125 gt^{-1}), basal feed with the recommended dosage of *penergetic-t* (150 gt^{-1}) and basal feeds with a high dosage of *penergetic-t* (175 gt^{-1}) feed supplement. Growth performances were observed during the study period. Carcass quality parameters were measured at slaughtering on day 42. Data were analysed using a one-way ANOVA System. Dressing percentage, weights of breast, legs, wings, liver, heart, and gizzard and also ash, protein, fat, and fibre contents were not differed significantly ($p > 0.05$) among treatments. The significantly ($p < 0.05$) highest and lowest feed intakes were reported in treatment 1 ($4082 \pm 23.6 \text{ g}$) and treatment 3 ($3918 \pm 23.6 \text{ g}$), respectively. The significantly ($p < 0.05$) best feed conversion ratio was reported in treatment 3 (1.42 ± 0.01). Significantly ($p < 0.05$) high and low carcass weights were reported in treatment 4 ($2110 \pm 6.03 \text{ g}$) and treatment 1 ($1940 \pm 6.03 \text{ g}$), respectively. Abdominal fat % was significantly ($p < 0.05$) high in treatment 4 (2.34 ± 0.07). Also pH, water holding capacity, dry matter percentage were significantly different ($p < 0.05$) among the treatments. According to the cost-benefit analysis, treatment 4 reported higher profit compared to the other treatments. Supplementation of *penergetic-t* showed a significant change in growth performances and abdominal fat deposition. But, it did not cause any significant changes in meat quality characters. However, *penergetic-t* feed supplementation seems to be a better solution for the increase of the growth performance in broilers.

Keywords: Abdominal fat, Carcass quality, Penergetic -t, Profit