

## **Evaluation of meat quality of broiler chicken fed diets with or without fishmeal from 21-42 days**

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### **Abstract**

Fishmeal is a high protein feedstuff often included in poultry diets. The use of fish meal in broiler diets has been limited due to its high cost. The objective of this research was to determine as to whether FM free diets affect the weight of various body parts/cuts and the organoleptic properties such as texture, flavor, appearance and colour of broiler chicken meat. Three hundred broiler chicken in 12 pens were fed diets with (FM+) or without (FM-) fishmeal from day 21-35. On day 36, one bird was randomly selected from each cage. After slaughtering, the weights of the leg, breast, gizzard, liver, heart, neck, head, wing, drumstick, crop, fillet, breast bone, keel bone, fat and thigh and dressed carcass were taken. Breast meat samples were boiled for 40 min and then subjected to sensory evaluation by 12 untrained panelists. Weights of body parts (leg, breast, gizzard, liver, heart, neck, head, wing, drumstick, crop, fillet, breast bone, keel bone, fat and thigh) as a percentage of empty carcass weight were not significantly ( $P>0.05$ ) different. Skin of birds ( $P=0.08$ ) was tend to be high for birds fed FM-. Dressing % of the birds fed FM- ( $76.98\pm 73.68$ ) was significantly ( $P<0.05$ ) higher than that of the birds fed FM+ diet ( $73.102\pm 70.230$ ). Flavor of the meat samples of the birds fed FM- diet was significantly ( $P<0.05$ ) higher than that of the bird fed FM+ diet. It was concluded that, dressing% and meat flavor were significantly ( $P<0.05$ ) higher when broilers were fed diet without FM from day 21-35.

**Keywords:** Broiler Chicken, Meat, Diet