

## **Determination of Growth Performances and Meat Quality of the Broilers Fed with *Saccharomyces cerevisiae* as a Probiotic**

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The study was carried out to find the effect of growth performance and meat quality parameters of broilers fed with *Saccharomyces cerevisiae* (SC) as a probiotic that can enhance the gut microflora and gut health of the broilers. Total 1050 day old "cobb 500" chicks were divided in to 7 experimental units randomly. Each experimental unit consists of 3 replicates with 50 birds in each replicate. Negatively control group (Ti) was fed with only basal feed while other six test groups were fed with basal feed with different dosage (0.6%, 1%, 1.4%) of SC in short term (age of 1<sup>st</sup> day to 8<sup>th</sup> day) and long term (age of 1<sup>st</sup> day to 35<sup>th</sup> day) such as 0.6%SC long term (T2) and short term (T3), 1% SC long term (T4) and short term (T5), 1.4% SC long term (T6) and short term (T7). Average initial body weight, average final body weight, average feed intake and average Feed conversion ratio values were calculated and the birds were slaughtered and organ weight, carcass weight, breast weight, thigh muscle weight, meat quality parameters (pH, cooking loss and water holding capacity) and proximate analysis of meat were measured at the age of 35<sup>th</sup> day. Data were analyzed by one-way analysis of variance using the General Linear Models (GLM) procedures of SAS (2004). Highest average feed intake (3.31 kg) (p value= 0.0041) and lowest average body weight gain (1.80 kg) shown by T 1. Highest average body weight gain shown by T6 (2.07 Kg) and T7 (2.06 Kg) (p value= 0.0001). T6 and T7 gave the lowest FCR (1.49 and 1.54) and highest FCR gave by Ti (1.83) (p value= 0.0001). The highest liver weight (0.036%) (p value= 0.0166) was shown by the T6 group. T4 and T5 are the most preferable in order. T6 has lowest pH value (pH 5.5) (p value= 0.0091) and T1 has shown highest water holding capacity (78.89) (p value= 0.0002). So that broilers fed with SC shown significantly high growth performance than negative control group (T1). SC was not shown any significant effect on meat quality parameters, proximate results and internal organs weight. So SC can use as a good growth promoter of the broilers.

**Keywords:** Feed conversion ratio, Water holding capacity, Broilers, Probiotic