EFFECTS OF YEAST *(SACCHAROMYCES CERIVISIAE)* IN BROILER DIETS ON PERFORMANCE AND CARCASS CHARACTERISTICS

M.E. Ahmed

Department of Poultry Production and Technology, Faculty of Agricultural Technology and Fish Science, Alneelain University, P.O. Box 12702, Postal Code 11121, Khartoum, Sudan
Corresponding author: moha_555@hotmail.com

Yeast *Saccharomyces cerivisiae* from malted grains fermentation also known as "baker's yeast" is a rich source of protein, vitamin B complex, trace minerals and many other beneficial factors. Use of antibiotics as an additive in poultry diets to improve growth has been discussed in relation to bacterial resistance and the development of new products. This study was conducted to evaluate the effect of feeding different levels of yeast on broiler performance and carcass characteristics. One day old Hubbard broiler chicks ($n=160$) were randomly allocated to five dietary treatments. Each treatment consisted of 4 replicates of 8 broilers each. The dietary treatments contained 0% yeast as a negative control diet, 0% yeast + 30ppm Oxytetracycline as a positive control, 1% yeast, 2% yeast and 3% yeast in the starter and finisher diets. Parameters collected during the experimental period of 6 weeks were feed intake, body weight gain and feed conversion ratio. At the end of the experimental period, carcass characteristics were recorded. Growth performance parameters were significantly ($p \leq 0.05$) affected by experimental diets.
Chicks fed 3% and 1% yeast had higher ($p < 0.05$) feed intake and body weight gain compared to the positive control, respectively. The Yeast supplementation caused no significant ($p \geq 0.05$) changes in all growth performance parameters compared to the negative control. However, chicks fed 3% yeast expressed poor ($p \leq 0.05$) feed conversion ratio compared to the negative control. The inclusion of different dietary treatments had no significant $\geq$ effects on dressing percentage on hot base and relative weights of heart, gizzard and abdominal fat. Nevertheless, feeding 3% yeast significantly ($p \leq 0.05$) decreased relative weight of liver compared to negative control.Relative weights of breast and thigh were significantly ($p \leq 0.05$) higher in birds fed 1% yeast than those fed 3% yeast. It was concluded that yeast can be included in broiler diet at 1-2% without detrimental effects on performance; therefore, it can serve as a natural substitute for antibiotics.

Keywords: Broiler performance, Carcass, *Saccharomyces cerivisiae*