

EFFECTS OF INACTIVATED BREWER'S YEAST (*SACCHAROMYCES CEREVICIAE*) ON EGG PRODUCTION, SERUM ANTIBODY TITRES AND CHOLESTEROL LEVELS IN LAYING HENS¹

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Abstract. The aim of this study was to investigate the effects of dietary supplementation with inactivated brewer's yeast (*Saccharomyces cerevisiae*) produced from waste of beer industry, on egg production, feed efficiency, serum antibody titers and cholesterol levels in laying hens. A total of 320, twenty two wks old laying hens (Lohmann Brown) were randomly divided into 4 equal groups (each of them 80 hens) with 4 replicates according to the diet regimen; birds were supplemented for 16 wks with 1, 3, 5% *Saccharomyces cerevisiae* whereas in the control group, layers were not supplemented. All diets were formulated to meet or exceed the National Research Council (NRC, 1994) recommended layer requirements for all nutrients and study was carried out for 16 wks. Egg production, feed intakes and feed efficiency were determined biweekly whereas serum antibody titers and cholesterol levels were explored on wks 2 and 16 in 15 birds from each group. At the end of the study, there were no significant effects of yeast supplementation on egg production, feed intake and feed conversion ratio in laying hens whereas there were significant differences ($P < 0.05$) between control and other treatment groups about feed conversion ratio parameters at 28–29th wks of study. Similar to serum antibody titers, cholesterol levels of laying hens also were not altered by yeast supplementation. As a conclusion, *Saccharomyces cerevisiae* had no beneficial effect on production parameters of hens fed with optimal diets and reared under proper management conditions.

Keywords: antibody, cholesterol, egg yield, layers, yeast.

¹Some part of this trial has been presented as a poster at „Kümes Hayvanları Kongresi, 2010, Kayseri“