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## The effects of citrus peel oil supplementations on some blood parameters in broilers

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The present study was conducted to determine dietary supplemental citrus peel oils (orange, lemon, bergamot) in different levels (1, 2 and 3 ml/kg) on some blood parameters in broilers. The trial consisted of 1-day-old male and female (250 male and 250 female) Ross 308 chicks. The study consisted of 10 groups in total and each group had 5 subgroups. Experimental diets were prepared by adding orange, lemon and bergamot peel oil levels (1, 2 and 3 ml/kg) to basal diet. It was observed that supplementation of citrus peel oils to their diets significantly changed HDL-Cholesterol. Especially, the highest HDL-Cholesterol value was obtained from broilers fed with 1 ml/kg orange peel oil. However, LDL-Cholesterol value was not affected by supplementing citrus peel oils. It was found that the lowest total cholesterol level was in the groups which had 2ml/kg of orange peel oil in the ration and the highest cholesterol level was in the groups which had 1ml/kg of orange peel oil in the ration. Citrus peel oils except for levels of 1 ml significantly increased glucose values. The lowest glucose value was obtained from broilers fed with 1 ml/kg lemon peel oil. Highest TG concentration was in the groups added 1 ml/kg of lemon peel oil but the lowest was in the groups added 3 ml/kg of orange peel oil to the ration. In this study, it was observed that with 2 ml/kg lemon and 3 ml/kg orange additions triglycerides values decreased significantly, but 1 ml/kg lemon peel addition increased the value of triglyceride. As a result, because HDL cholesterol increased and decreased TG value and LDL cholesterol (numerically), 2 ml/kg lemon peel oil and 3 ml/kg orange peel oil addition to the ration may be suggested.

### Biography

Ş Canan Bölükbaşı has completed his PhD from Atatürk University in Turkey. He has been working as an Associate Professor in Agricultural Faculty, the Department of Animal Sciences at Atatürk University.

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