

**EFFECT OF DIETARY FATS ON LIPID CONSTITUENTS IN EGG
AND SERUM OF LOCAL HEN STRAIN DOKKI 4.**

BY

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ABSTRACT

Egg production (for Dokki 4 hens strain) was increased by different dietary treatments and also by age of hens.

The increment in egg weight is due to age progress rather than dietary oil feeding. The ration based on wheat germ oil produced the lowest egg weight and production.

Diet based on 10% acidulated corn oil soapstock reduced the total cholesterol content of yolk by 12.03% while diet containing 5% wheat germ oil caused a high cholesterol content in yolk.

Lipids in egg yolk was not significantly influenced by the dietary oils.

The diet containing 10% acidulated corn oil soapstock or 10% corn oil reduced the total cholesterol content of serum by 25% and 37% respectively. The total lipids in serum increased with age progress. Hens fed 10% corn oil or 10% soybean oil were characterized by lower lipid content in serum than the other feeding diets.

Phospholipids content in serum was significantly increased in all treatments.

INTRODUCTION

The addition of oil to laying hen diets increased egg weight. Vegetable oils i.e. soybean and sunflower oils, were significantly better in improving the average egg weight than animal fats, Guenter *et al.* (1971). On the other hand, Horani and Sell (1977) stated that the addition of fats in levels ranged from 2 to 4% to the diet of laying hens from different sources did not affect egg production.