

**STUDI PERLEMAKAN DAN KANDUNGAN KOLESTEROL SERTA TRIGLISERIDA PLASMA DARAH AYAM PETELUR FASE PULLET YANG DIBERI PAKAN DENGAN CAMPURAN MINYAK GORENG BEKAS**

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**INTISARI**

Penelitian ini bertujuan untuk mengetahui gambaran deposisi lemak, kandungan kolesterol, dan trigliserida plasma darah ayam fase pullet (14-20 minggu) yang diberi pakan dengan campuran minyak goreng bekas. Sebanyak 270 ekor ayam calon petelur umur 14-20 minggu dibagi secara acak menjadi 6 kelompok perlakuan, tiap perlakuan terdiri dari 3 ulangan dan tiap ulangan terdiri atas 15 ekor ayam. Kelompok perlakuan berturut-turut adalah kelompok ayam yang diberi pakan dengan penambahan minyak goreng bekas 0, 1, 2, 3, 4, dan 5% dengan kandungan protein 14% dan kandungan energi 2900 kcal ME/kg yang diberikan secara *ad libitum*. Data yang diambil meliputi lemak abdominal (g), berat hati (g), berat empedu (g), kolesterol plasma darah (mg/dl), trigliserida plasma darah (mg/dl), HDL (mg/dl), dan LDL (mg/dl). Hasil yang diperoleh untuk berat lemak abdominal adalah 68,28; 48,12; 61,90; 32,40; 44,11 dan 26,79g, LDL 48,38; 68,29; 18,54; 22,30; 64,56 dan 47,20, berat empedu 1,29; 2,16; 1,68; 2,18; 2,29 dan 4,46g, kadar kolesterol plasma darah 117,94; 123,03; 105,12; 115,38; 128,20 dan 106,40 mg/dl, kadar trigliserida plasma darah 35,89; 76,92; 76,92; 56,40; 35,89 dan 64,09 mg/dl, berat hati adalah 20,74; 20,70; 21,78; 24,32; 21,12; dan 20,77g, dan kadar HDL 69,56; 54,76; 86,58; 94,72; 63,64 dan 59,20 mg/dl, untuk perlakuan pakan R-0, R-1, R-2, R-3, R-4 dan R-5 secara berturut-turut. Hasil analisis statistik menunjukkan bahwa pemberian berbagai tingkatan minyak goreng bekas dalam pakan menurunkan lemak abdominal, LDL dan meningkatkan berat empedu, Tetapi tidak berpengaruh secara nyata terhadap kolesterol plasma darah, trigliserida plasma darah, berat hati dan HDL.

Kata kunci: Ayam Fase Pullet, Minyak Goreng Bekas, Perlemakan, Kolesterol, Trigliserida.

**Study on Fattiness and Cholesterol, Triglyceride of  
Blood Plasma of Chicken aged 14-20 Weeks Fed With  
Supplementation of Used Cooking Oil**

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**ABSTRACT**

The experiment was conducted to determine the effects of dietary used cooking oil on fat deposition, cholesterol content and triglyceride of blood plasma in pullet phase. Two hundred and seventy of 14-20 weeks of age layers of Lohmann strain were placed randomly into six treatments, with three replications of 15 birds each. The experimental diets consisted of 0, 1, 2, 3, 4, and 5% used cooking oil added to rations containing 14% protein and 2900 kcal ME/kg energy which were fed *ad libitum*. Abdominal fat weight, liver weight, bile weight, cholesterol, triglyceride of blood plasma, HDL and LDL were measured. The results showed that abdominal fat weight was 268.28; 48.12; 61.90; 32.40; 44.11 and 26.79g, LDL was 48.38; 68.29; 18.54; 22.30; 64.56 dan 47.20 mg/dl, bile weight was 1.29; 2.16; 1.68; 2.18; 2.29 dan 4.46g, cholesterol of blood plasma was 117.94; 123.03; 105.12; 115.38; 128.20 and 106.40 mg/dl, triglyceride of blood plasma was 35.89; 76.92; 76.92; 56.40; 35.89 and 64.09 mg/dl, liver weight was 20.74; 20.70; 21.78; 24.32; 21.12; and 20.77g, HDL was 69.56; 54.76; 86.58; 94.72; 63.64 and 59.20 mg/dl for diets R-0, R-1, R-2, R-3, R-4, and R-5, respectively. In conclusion, used cooking oil in fed decreased abdominal fat weight, LDL, and increased bile weight. There was no effect of used cooking oil in diets on cholesterol blood plasma, triglyceride of blood plasma, liver weight and HDL.

Key word: Layer Chicken Pullet Phase, Used Cooking Oil, Fattiness, Cholesterol, Triglyceride