PENGARUH SUPLEMENTASI TEPUNG BAWANG PUTIH DAN TEPUNG TEMULAWAK TERHADAP KOMPOSISI KIMIA DAN KADAR KOLESTEROL AYAM BROILER

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh suplementasi tepung bawang putih (*Allium sativum*) dan tepung temulawak (*Curcuma xanthorrhiza* Roxb.) dalam ransum terhadap komposisi kimia dan kadar kolesterol ayam broiler. Sembilan puluh ekor ayam broiler umur sehari Strain *Arbor Acres* CP 707 *unsexed* ditempatkan secara acak kedalam 18 unit kandang, dan masing-masing berisi 5 ekor. Penelitian ini menggunakan enam macam perlakuan ransum, yaitu R-0 (98,00% ransum basal + 2,00% *filler*), RB-1 (98,00% ransum basal + 1,00% tepung bawang putih + 1,00% *filler*), RB-2 (98,00% ransum basal + 2,00% tepung bawang putih), RT-1 (98,00% ransum basal+1,00% tepung temulawak + 1,00% *filler*), RT-2 (98,00% ransum basal + 2,00% tepung temulawak), RB_1T_1 (98,00% ransum basal + 1,00% tepung bawang putih+ 1,00 % tepung temulawak). Setiap perlakuan diberikan replikasi 3 kali. Pada umur 7 minggu, ayam diambil sampel darahnya untuk dianalisis kadar kolesterol darah. Kemudian ayam dipotong untuk dianalisis kadar kolesterol daging, kadar lemak, kadar air dan kadar abu daging. Data hasil penelitian dianalisis statistik menggunakan Rancangan Acak Lengkap (RAL) Pola Searah. Apabila terdapat perbedaan yang nyata analisis dilanjutkan dengan *Duncan's new Multiple Range Test* (DMRT). Hasil penelitian menunjukkan bahwa suplementasi 1,00% tepung bawang putih dan 1,00% tepung temulawak dapat menurunkan kadar kolesterol daging ($P<0,05$) dari 0,79 mg/g (R-0) menjadi 0,55 mg/g (RB-1) dan 0,42 mg/g (RT-1). Penurunan kadar kolesterol pada RB-1 tersebut mencapai 46,83% dan pada RT-1 mencapai 30,38%. Akan tetapi suplementasi tepung temulawak dan tepung bawang putih hingga 2,00% tidak mempengaruhi konsumsi protein dan energi, kadar kolesterol darah, kadar lemak, kadar air, dan kadar abu daging. Dari hasil penelitian dapat ditarik kesimpulan bahwa suplementasi 1,00% tepung bawang putih dan 1,00% tepung temulawak dapat menurunkan kadar kolesterol daging tanpa mempengaruhi komposisi kimia daging ayam broiler.

Kata kunci: Ayam broiler, Tepung temulawak, Tepung bawang putih, Komposisi kimia, Kadar kolesterol.

THE EFFECT OF SUPPLEMENTATION GARLIC MEAL AND WHITE TURMERIC MEAL ON CHEMICAL COMPOSITION AND CHOLESTEROL CONTENT OF BROILER

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ABSTRACT

The aim of this research was conducted to observe the effect of garlic meal (*Allium sativum*) and white turmeric meal (*Curcuma xanthorriza* Roxb.) supplementation in the diets on chemical composition and cholesterol content of broiler. Ninety day old chick (DOC) unsexed strain Arbor Acres CP 707 were randomly plotted into 18 units of cage, containing 5 DOC broiler each. This research used six treatments, those are: R-0 (98,00% base diet+2,00% *filler*), RB-1 (98,00% base diet+1,00% garlic meal +1,00% *filler*), RB-2 (98,00% base diet+2,00% garlic meal), RT-1 (98,00% base diet+1,00% white turmeric meal +1,00% *filler*), RT-2 (98,00% base diet+ 2,00% white turmeric meal), and RB_1T_1 (98,00% base diet+1,00% garlic meal+1,00% white turmeric meal). Each treatment was done in three replicates. When the broiler reach seven weeks old, the blood samples were collected to analyze the blood cholesterol content. Later on, chickens were slaughtered. The meat sample were taken for cholesterol, fat, water as well as ash content determination. The data obtain were statistically analyzed by analysis of variance using One Way Completely Randomized Design (CRD), and continued by the Duncan's new Multiple Range Test (DMRT) for significant result. The results of this study showed that supplementation of 1,00% garlic meal and 1,00% white turmeric meal decreased meat cholesterol content ($P<0,05$) from 0,79 mg/g (R-0) to 0,55 mg/g (RB-1) and 0,42 mg/g (RT-1). The decreasing of meat cholesterol content can reach 46,83% on RB-1 and 30,38% on RT-1. However, supplementation of garlic meal and turmeric meal up to 2,00% didn't influence energy and protein intake, blood cholesterol content, fat content, water content, and meat ash content. It can be concluded that 1,00% garlic meal and 1,00% white turmeric meal supplementation in the diets can reduced meat cholesterol without the other chemical composition.

Key words: Broiler, White turmeric meal, Garlic meal, Chemical, composition, Cholesterol content.