

**PERTUMBUHAN OTOT PECTORALIS THORACICUS AYAM JAWA
SUPER [*Gallus gallus gallus* (Linnaeus,1758)] SETELAH PEMBERIAN
PAKAN *PRE-STARTER* DENGAN VARIASI RASIO ENERGI DAN
PROTEIN**

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INTISARI

Penelitian ini dilakukan untuk mengetahui pengaruh rasio energi dan protein pada pakan *pre-starter* terhadap pertumbuhan dan perkembangan otot pektoralis ayam Jawa Super. Saratus dua puluh *Day Old Chicken* (DOC) dibagi menjadi empat kelompok, yang masing-masing kelompok terdiri dari 30 DOC. Kelompok pertama yaitu kelompok tipe A diberi pakan dengan level diet protein 25,1% dan nilai ME sebesar 3500 kkal/kg. Kelompok B diberi pakan protein 22% dan nilai ME sebesar 3200 kkal/kg. Kelompok C dengan level diet protein 22,7% dan nilai ME sebesar 3400 kkal/kg dan terakhir kelompok tipe D memiliki pakan dengan level diet protein 18% dan nilai ME sebesar 3200 kkal/kg. Pemberian pakan dilakukan dari masa *posthatch* hingga ayam berumur 14 hari. Parameter yang diukur adalah berat badan ayam umur 0,3,7 dan 14 hari, berat otot pektoralis, luas area otot pektoralis dan luas area myofiber pada 7 dan 14 hari. Dilakukan penimbangan berat hati dan jantung sebagai konfirmasi ada atau tidaknya perlemakan. Data yang diperoleh kemudian dianalisis menggunakan *Oneway Anova* yang diikuti dengan *Tukey Test*. Hasil penelitian menunjukkan bahwa kelompok dengan tipe C dan D memiliki bobot tubuh, berat otot pektoralis, luas area otot pektoralis dan luas area myofiber yang lebih rendah dibanding kelompok tipe A dan B. Kelompok B dengan level protein 22% dan nilai ME sebesar 3200 kkal/kg menunjukkan hasil yang tertinggi dibanding dengan kelompok lain serta memberikan pengaruh positif pada pertumbuhan dan perkembangan otot pektoralis pada Ayam Jawa Super.

Kata kunci : Ayam Jawa Super, level protein dan energi, *Metabolism Energy*, otot pektoralis, pertumbuhan berat badan

**PECTORALIS THORACICUS MUSCLE GROWTH OF JAWA SUPER
CHICKS [*Gallus gallus gallus* (Linnaeus, 1758)] AFTER *PRE-STARTER*
FEED ADMINISTRATION WITH VARIATIONS THE RATIO OF
ENERGY AND PROTEIN**

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ABSTRACT

This study was performed to examine effect of protein and energy level of starter feed on growth as well as pectoralis muscle development of *Super Java* chicks. One hundred twenty *Super Java* day old chicks (DOC) were fed with pre starter diet during the experimental period. The chicks were divided into four groups with 30 DOCs each. The first group was given pre starter type A diet contained 25,1% protein level and 3500 kcal/kg ME. The second group was treated with pre starter diet type B which had 22% protein and 3200 kcal/kg ME. The third group was treated with pre starter diet type C (22,7% protein and 3400 kcal/kg ME) and the last group was given pre starter diet type D with 18% protein and 3200 kcal/kg ME. The treatment feed was given for 14 days from post hatch (day 1). The parameters measured were body weight from 0, 3, 7 and 14d posthatch. The weight and muscle area of *Pectoralis thoracicus* muscle as well as the cross-sectional area of the myofibers at day 7 and 14 were observed. Observation of liver and hearts weight were done to confirm the presence of fatty. Gathered data were then statistically analyzed using one way anova, followed by Tukey tests. The results showed that groups C and D had lower body weight, *Pectoralis thoracicus* weight, muscle area, and cross-sectional myofiber area compared to group A and B ($P \leq 0,05$). Type B with protein level of 22% with ME value of 3200 kcal/kg showed the highest positive impact on the growth and development of the pectoralis muscle in *Super Java* chicken.

Keywords: *Super Java*, protein and energy rations, *Pectoralis thoracicus* muscle, body weight growth