# PENGARUH PERBANDINGAN TEPUNG KACANG TUNGGAK (*Vigna unguiculata*) DAN BUBUK BIJI RAMI (*Linum usitatissimum*) TERHADAP KARAKTERISTIK *GRANOLA BAR*

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## ABSTRAK

**Granola bar adalah produk makanan praktis yang berpotensi dikembangkan sebagai camilan bergizi melalui penggunaan bahan-bahan nabati. Penelitian ini bertujuan untuk mengetahui pengaruh variasi perbandingan tepung kacang tunggak (*Vigna unguiculata*) dan bubuk biji rami (*Linum usitatissimum*) terhadap karakteristik granola bar serta untuk mengidentifikasi formulasi yang optimal. Penelitian ini menggunakan rancangan acak lengkap dengan lima perlakuan dan tiga ulangan perbandingan tepung kacang tunggak terhadap bubuk biji rami. Dilanjutkan dengan Uji Duncan pada tingkat signifikansi 5%. Parameter yang diamati meliputi kekerasan, kadar air, kadar abu, kadar protein, kadar lemak, kadar karbohidrat, serat kasar, aktivitas air, nilai energi, jumlah total bakteri, dan evaluasi organoleptik. Hasil penelitian menunjukkan bahwa perbandingan tepung kacang tunggak terhadap bubuk biji rami memengaruhi karakteristik batang granola. Formulasi terbaik diperoleh pada Formulasi C dengan perbandingan 60:40%. Formulasi C dipilih sebagai formulasi terbaik berdasarkan keseimbangan antara kualitas fisikokimia dan penerimaan sensorik. Formulasi ini menghasilkan granola dengan kekerasan 90,30 N/cm², kadar air 9,08%, kadar protein 10,78%, kadar lemak 13,86%, serat kasar 7,31%, aktivitas air sebesar 0,63, nilai energi sebesar 574 kcal/100 g dan jumlah total bakteri sebesar 2,2 × 10³ CFU/g.**

**Kata kunci** : bubuk biji rami, *granola bar*, kacang tunggak

# THE EFFECT OF VARYING RATIOS OF COWPEA (Vigna unguiculata) FLOUR AND FLAXSEED (*Linum usitatissimum*) POWDER ON THE CHARACTERISTICS OF GRANOLA BAR

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**ABSTRACT**

**Granola bar are a convenient food product with the potential to be developed as a nutritious snack through the use of plant-based ingredients. This study aimed to determine the effect of varying ratios of cowpea (Vigna unguiculata) flour and flaxseed (Linum usitatissimum) powder on the characteristics of granola bar and to identify the optimal formulation. This study used a completely randomized design (CRD) with five treatments and three replicates of cowpea flour to flaxseed powder. Followed by Duncan's New Multiple Range Test at the 5% significance level. The parameters observed included hardness, moisture content, ash content, protein content, fat content, carbohydrate content, crude fiber, water activity, energy value, total plate count, and organoleptic evaluation. The results showed that the ratio of cowpea flour to flaxseed powder affected the characteristics of the granola bars.The best formulation was obtained in Formulation C, with a ratio of 60% cowpea flour and 40% flaxseed powder. Formulation C was selected as the best formulation based on the balance between physicochemical quality and sensory acceptance This formulation produced granola bar with a hardness of 90.30 N/cm², moisture content of 9.08%, protein content of 10.78%, fat content of 13.86%, crude fiber of 7.31%, water activity of 0.63, energy value of 574 kcal/100 g, and a total plate count of $2.2 \times 10^3$ CFU/g.**

***Keywords****: flaxseeds, granola bars, cowpea*