

**PENGARUH PERBANDINGAN FLAKE TEMPE
SPIRULINA (*Spirulina Sp.*) DAN BIJI LABU
KUNING (*Cucurbita moschata.D*) TERHADAP
KARAKTERISTIK *SNACK BAR***

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Pengaruh Perbandingan Flake Tempe Spirulina (*Spirulina Sp.*) dan Biji Labu Kuning (*Cucurbita moschata.D*) Terhadap Karakteristik *Snack Bar*

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh perbandingan flake tempe spirulina (*Spirulina sp.*) dan biji labu kuning (*Cucurbita moschata D.*) terhadap karakteristik snack bar serta menentukan formulasi terbaik. Kombinasi kedua bahan diharapkan dapat menghasilkan snack bar dengan komposisi gizi seimbang serta cita rasa yang baik. Penelitian menggunakan rancangan acak lengkap (RAL) dengan lima perlakuan perbandingan flake tempe spirulina dan biji labu kuning (75:25, 70:30, 65:35, 60:40, 55:45) dan tiga ulangan. Analisis meliputi kadar air, abu, protein, lemak, karbohidrat, serat kasar, aktivitas antioksidan, asam amino, kekerasan, serta uji organoleptik (warna, aroma, rasa, tekstur). Data dianalisis menggunakan ANOVA dan uji DNMRT 5%. Hasil penelitian menunjukkan bahwa perbandingan flake tempe spirulina dan biji labu kuning berpengaruh nyata terhadap komposisi kimia, fisik, dan organoleptik snack bar. Formulasi terbaik diperoleh pada perlakuan D (60:40), dengan karakteristik kadar protein 31,37%, lemak 26,44, serat kasar 8,35%, karbohidrat 20,63%, profil asam amino pembatas yaitu lisin, serta skor organoleptik tertinggi (4,09). Snack bar ini telah memenuhi standar zat gizi yang ditetapkan sehingga berpotensi menjadi alternatif pangan fungsional berbasis bahan lokal.

Kata kunci: biji labu kuning; flake tempe spirulina; pangan fungsional; snack bar

The Effect of the Ratio of Spirulina Tempeh Flakes (*Spirulina Sp.*) and Yellow Pumpkin Seeds (*Cucurbita moschata.D*) on the Characteristics of Snack Bars

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ABSTRACT

This study aimed to determine the effect of the ratio of spirulina tempeh flakes (*Spirulina sp.*) and yellow pumpkin seeds (*Cucurbita moschata D.*) on the characteristics of snack bars and to determine the best formulation. The combination of these two ingredients is expected to produce snack bars with balanced nutritional content and good taste. The study employed a completely randomized design (CRD) with five treatment combinations of spirulina tempeh flakes and yellow squash seeds (75:25, 70:30, 65:35, 60:40, 55:45) and three replications. The analysis included moisture content, ash, protein, fat, carbohydrates, crude fiber, antioxidant activity, amino acids, hardness, and organoleptic tests (color, aroma, taste, texture). The data were analyzed using ANOVA and the DNMRT test at 5%. The results of the study indicate that the ratio of spirulina tempeh flakes and yellow pumpkin seeds significantly affects the chemical, physical, and organoleptic composition of the snack bar. The best formulation was obtained in treatment D (60:40), with characteristics of protein content 31.37%, fat 26.445, crude fiber 8.35%, carbohydrates 20.63%, the limiting amino acid profile is lysine, and the highest organoleptic score (4.09). This snack bar meets established nutritional standards, making it a potential alternative to functional foods made from local ingredients.

Keywords: functional foods; pumpkin seeds; snack bars; spirulina tempeh chips