

**FAKULTAS ILMU KESEHATAN
UNIVERSITAS SILIWANGI
TASIKMALAYA
PROGRAM STUDI GIZI
2026**

ABSTRAK

DIKA PRATAMA

**DAYA TERIMA, PROTEIN DAN SERAT PADA BROWNIES SORGUM
DENGAN PENAMBAHAN TEPUNG KACANG KEDELAI SEBAGAI
KUDAPAN BERGIZI ANAK SEKOLAH DASAR**

Rendahnya asupan protein dan serat akibat tingginya konsumsi jajanan tinggi karbohidrat, lemak, dan penyedap rasa menjadi masalah gizi anak usia sekolah dasar yang berisiko meningkatkan gangguan pertumbuhan dan obesitas. Pengembangan kudapan bergizi berbasis pangan lokal, seperti brownies berbahan tepung sorgum dan tepung kacang kedelai, menjadi salah satu upaya untuk memperbaiki kualitas asupan gizi anak. Penelitian ini bertujuan untuk menganalisis daya terima, kandungan protein, dan serat pangan brownies sorgum dengan penambahan tepung kacang kedelai sebagai kudapan bergizi bagi anak sekolah dasar. Penelitian menggunakan desain eksperimen dengan Rancangan Acak Kelompok (RAK) satu faktor yang terdiri atas empat formulasi (F0, F1, F2, dan F3) berdasarkan variasi rasio tepung sorgum, tepung terigu, dan tepung kacang kedelai. Uji daya terima dilakukan pada 60 panelis tidak terlatih, yaitu siswa kelas VI SDN 2 Pasirpanjang, dengan menilai aspek warna, aroma, rasa, dan tekstur menggunakan skala hedonik, kemudian dianalisis menggunakan uji Friedman dan uji lanjut *Wilcoxon*. Analisis kandungan protein dan serat pangan dilakukan pada formulasi kontrol (F0) dan formulasi terpilih. Hasil penelitian menunjukkan bahwa brownies formula F0 mengandung serat pangan 5,72% dan protein 6,15%, sedangkan formula terpilih mengandung serat pangan 7,91% dan protein 7,83%. Dibandingkan dengan estimasi Nutrisurvey, terdapat selisih kandungan serat pangan sebesar 3,93% pada F0 dan 5,72% pada F3, sementara selisih kandungan protein sebesar 0,25% pada F0 dan 0,03% pada F3. Seluruh formulasi dapat diterima oleh panelis meskipun terdapat perbedaan tingkat kesukaan pada setiap perlakuan.

Kata kunci: brownies sorgum, daya terima, protein, serat, tepung kacang kedelai.

**FACULTY OF HEALTH SCIENCES
SILIWANGI UNIVERSITY
TASIKMALAYA
NUTRITION SCIENCE STUDY PROGRAM
2026**

ABSTRACT

DIKA PRATAMA

**ACCEPTABILITY, PROTEIN, AND FIBER OF SORGHUM BROWNIES
WITH THE ADDITION OF SOYBEAN FLOUR AS A NUTRITIOUS
SNACK FOR ELEMENTARY SCHOOL STUDENTS**

Low protein and fiber intake resulting from high consumption of snacks rich in carbohydrates, fat, and flavor enhancers has become a nutritional problem among elementary school-aged children, increasing the risk of growth disorders and obesity. The development of nutritious snacks based on local food sources, such as brownies made from sorghum flour and soybean flour, represents one effort to improve the quality of children's nutritional intake. This study aimed to analyze the acceptability, protein content, and dietary fiber content of sorghum brownies with the addition of soybean flour as a nutritious snack for elementary school children. The study used an experimental design with a one-factor Randomized Block Design (RBD) consisting of four formulations (F0, F1, F2, and F3) based on variations in the ratio of sorghum flour, wheat flour, and soybean flour. The acceptability test was conducted on 60 untrained panelists, namely sixth-grade students of SDN 2 Pasirpanjang, who evaluated the aspects of color, aroma, taste, and texture using a hedonic scale, which was then analyzed using the Friedman test and the *Wilcoxon* follow-up test. Analysis of protein and dietary fiber content was carried out on the control formulation (F0) and the selected formulation. The results showed that the F0 formula brownies contained 5.72% dietary fiber and 6.15% protein, while the selected formula contained 7.91% dietary fiber and 7.83% protein. Compared with Nutrisurvey estimates, there was a difference in dietary fiber content of 3.93% for F0 and 5.72% for F3, while the difference in protein content was 0.25% for F0 and 0.03% for F3. All formulations were acceptable to the panelists, although there were differences in preference levels across treatments.

Keywords: sorghum brownies, acceptability, protein, dietary fiber, soybean flour.