

**ABSTRAK**

**DAVIN ANDHIKA RIZKI**

**PENGEMBANGAN BRONIS PANGGANG BERBAHAN DASAR TEPUNG SORGUM DENGAN PENAMBAHAN TEPUNG KACANG KEDELAI DAN TERIGU UNTUK IBU HAMIL KURANG ENERGI KRONIK**

Kurang Energi Kronik (KEK) pada ibu hamil merupakan salah satu masalah gizi yang dapat meningkatkan risiko komplikasi pada ibu dan janin. Salah satu upaya pencegahan KEK adalah melalui pengembangan Pemberian Makanan Tambahan (PMT) dengan kandungan energi dan protein tinggi, seperti bronis sorgum kacang kedelai. Penelitian ini terdiri dari dua tahap, yaitu penentuan formula dasar dan penelitian utama yang bertujuan untuk menganalisis perbedaan hasil uji organoleptik, kandungan energi, dan kandungan proksimat pada bronis. Penelitian ini merupakan penelitian eksperimen dengan rancangan acak lengkap (RAL). Uji organoleptik dilakukan dengan menilai aspek warna, aroma, rasa, dan tekstur menggunakan skala hedonik. Analisis kandungan energi dilakukan menggunakan metode bom kalorimeter, sedangkan analisis proksimat meliputi kadar air, abu, protein, lemak, dan karbohidrat. Data dianalisis menggunakan uji *Kruskal-Wallis*, *One Way ANOVA*, dan *Independent Sample t-test* dengan tingkat signifikansi 95%. Hasil penentuan formula dasar menunjukkan bahwa formula F2 memiliki tingkat penerimaan terbaik. Hasil Penelitian utama menunjukkan bahwa variasi formulasi bronis tidak memberikan perbedaan yang signifikan terhadap hasil uji organoleptik, kandungan energi, dan kadar abu ( $p > 0,05$ ), tetapi memberikan perbedaan yang signifikan terhadap kadar air, protein, lemak, dan karbohidrat ( $p < 0,05$ ). Formula P2 dipilih sebagai formula terbaik berdasarkan tingkat penerimaan panelis. Formula terpilih (P2) memiliki kandungan energi 4,88 kkal/g, kadar air 22,7%, kadar abu 1,53%, kadar protein 9,72%, kadar lemak 23,24%, dan kadar karbohidrat 43,33%. Kesimpulannya, bronis ini sudah mencukupi kebutuhan ibu hamil sesuai ketentuan standar PMT untuk selingan, sehingga produk ini bisa disarankan untuk dikonsumsi oleh ibu hamil sebagai makanan selingan atau camilan.

**Kata Kunci:** bronis, ibu hamil, kedelai, kurang energi kronik, sorgum.

**ABSTRACT**

**DAVIN ANDHIKA RIZKI**

***DEVELOPMENT OF SORGHUM FLOUR-BASED BAKED BROWNIES WITH THE ADDITION OF SOYBEAN FLOUR AND WHEAT FLOUR FOR PREGNANT WOMEN WITH CHRONIC ENERGY DEFICIENCY***

*Chronic Energy Deficiency (CED) in pregnant women is a nutritional problem that can increase the risk of complications for both the mother and the fetus. One strategy for preventing CED is the development of supplementary foods with high energy and protein content, such as sorghum-soybean bronis. This study consisted of two phases: the determination of the base formula and the main study, which aimed to analyze differences in organoleptic test results, energy content, and proximate composition in bronis. This study was an experimental study using a completely randomized design (CRD). Organoleptic testing was conducted by evaluating color, flavor, taste, and texture using a hedonic scale. Energy content analysis was performed using a bomb calorimeter, while proximate analysis included moisture, ash, protein, fat, and carbohydrate content. Data were analyzed using the Kruskal-Wallis test, one-way ANOVA, and the independent samples t-test at a 95% significance level. The results of the base formula evaluation indicated that formula F2 had the highest acceptance rate. The main research findings indicate that variations in the bronis formulation did not result in significant differences in organoleptic test results, energy content, and ash content ( $p > 0.05$ ), but did result in significant differences in moisture, protein, fat, and carbohydrate content ( $p < 0.05$ ). Formula P2 was selected as the best formula based on the panelists' acceptance ratings. The selected formulation (P2) has an energy content of 4.88 kcal/g, a moisture content of 22.7%, an ash content of 1.53%, a protein content of 9.72%, a fat content of 23.24%, and a carbohydrate content of 43.33%. In conclusion, this product meets the nutritional needs of pregnant women in accordance with the PMT standards for snacks, so it can be recommended for consumption by pregnant women as a snack or light meal..*

**Keywords:** *brownies, chronic energy deficiency, pregnant women, sorghum, soybeans.*