

# **POTENSI PRODUK PANGAN DARURAT *FOOD BAR* BERBASIS TEPUNG UBI CILEMBU, TEPUNG KACANG BOGOR, DAN *PUFFED* HANJELI SEBAGAI PANGAN SUMBER FOLAT BAGI IBU HAMIL**

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## **Abstrak**

Kondisi bencana dapat membatasi akses terhadap pangan bergizi dan meningkatkan risiko kekurangan zat gizi pada kelompok rentan, termasuk ibu hamil. Selama masa mengandung, folat menjadi zat gizi mikro krusial yang mendukung sintesis DNA, produksi sel darah merah, serta pembentukan sistem saraf pusat pada janin. Tujuan dari penelitian ini adalah menganalisis pengaruh proporsi tepung ubi cilembu dan tepung kacang bogor terhadap komposisi proksimat, kadar folat, dan penerimaan organoleptik *food bar* berbasis tepung ubi cilembu, tepung kacang bogor, dan *puffed* hanjeli, serta menentukan formulasi terpilih sebagai pangan darurat sumber folat bagi ibu hamil. Penelitian menggunakan Rancangan Acak Lengkap (RAL) dengan tiga formulasi. Analisis meliputi uji proksimat dan folat, serta uji organoleptik hedonik. Hasil penelitian menunjukkan kadar air 32,25—34,21%, kadar abu 1,4—1,62%, protein 7,99—10,66%, lemak 9,95—11,32%, karbohidrat 42,2—48,33%, dan folat 106,78—209,61 µg/100 g. Sedangkan untuk skor uji organoleptik hedonik yang didapat, nilai median warna berkisar 5—6,5, aroma 5—6, rasa 4,5—6, dan tekstur 4—6. Proporsi tepung ubi cilembu dan tepung kacang bogor berpengaruh signifikan terhadap kadar abu, protein, karbohidrat, rasa, dan tekstur ( $p < 0,05$ ). Formulasi terpilih adalah F2 dengan kandungan energi 155,86 kkal, protein 4,66 g, lemak 5,01 g, karbohidrat 23,04 g, dan folat 72,78 µg per sajian 50 g. Penelitian ini menyimpulkan bahwa *food bar* yang dihasilkan dapat diklaim sebagai pangan sumber folat, tetapi kandungan energi, kadar air, dan lemak masih belum memenuhi syarat pangan darurat sehingga formulasi perlu dioptimalkan lebih lanjut.

**Kata Kunci:** *food bar* darurat, ibu hamil, folat, tepung ubi cilembu, tepung kacang bogor

# **POTENTIAL OF EMERGENCY FOOD PRODUCTS FOOD BAR BASED ON CILEMBU SWEET POTATO FLOUR, BAMBARA GROUND NUT FLOUR, AND PUFFED COIX SEED AS A FOOD SOURCE OF FOLATE FOR PREGNANT WOMEN**

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## **Abstract**

Disaster situations can limit access to nutritious foods and increase the risk of nutrient deficiencies among vulnerable groups, including pregnant women. Folate is an essential nutrient during pregnancy, playing a critical role in red blood cell formation, DNA synthesis, and fetal nervous system development. This study aimed to evaluate the effect of varying proportions of cilembu sweet potato flour and bambara groundnut flour on the proximate composition, folate content, and sensory characteristics of a food bar formulated with cilembu sweet potato flour, bambara groundnut flour, and puffed coix seed, as well as to determine the selected formulation as emergency food product as a source of folate for pregnant women. A Completely Randomized Design (CRD) with three formulations was employed. Analyses included proximate composition, folate content, and hedonic sensory evaluation. The results showed moisture, ash, protein, fat, carbohydrate, and folate contents ranging from 32.25–34.21%, 1.40–1.62%, 7.99–10.66%, 9.95–11.32%, 42.20–48.33%, and 106.78–209.61 µg/100 g, respectively. The median hedonic scores ranged from 5 to 6.5 for color, 5 to 6 for aroma, 4.5 to 6 for taste, and 4 to 6 for texture. The proportion of cilembu sweet potato flour and bambara groundnut flour significantly affected ash, protein, carbohydrate contents, taste, and texture ( $p < 0.05$ ). The selected formulation (F2) contained 155.86 kcal of energy, 4.66 g protein, 5.01 g fat, 23.04 g carbohydrate, and 72.78 µg folate per 50 g serving. This study concludes that the developed food bar can be claimed as a source of folate but does not yet meet emergency food requirements in terms of energy, moisture, and fat content, thus requiring further optimization of the formulation.

**Keywords:** emergency food bar, pregnant women, folate, cilembu sweet potato flour, bambara groundnut flour