

PENGARUH KOMPOSISI TEPUNG JEWAWUT DAN TEPUNG KACANG KEDELAI TERHADAP KADAR SERAT, KADAR PROKSIMAT, DAN ORGANOLEPTIK SEREAL UNTUK PENDERITA DIABETES MELITUS

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Abstrak

Pengidap diabetes melitus (DM) mempunyai gejala sering merasa lapar. Upaya pengaturan jenis makanan dapat dilakukan untuk mengontrol gejala dan mencegah komplikasi. Serat dan protein adalah zat gizi yang dapat membantu rasa kenyang lebih lama dan mengontrol gula darah. Penelitian ini bertujuan dalam menganalisis pengaruh komposisi tepung jewawut dan tepung kacang kedelai terhadap kadar serat, kadar proksimat, dan organoleptik sereal untuk penderita DM. Metode penelitian yang digunakan berupa Rancangan Acak Lengkap (RAL) dengan 3 taraf perlakuan dan 2 kali pengulangan. Variasi komposisi tepung jewawut dan tepung kacang kedelai, yaitu F1 (100%:0%), F2 (75%:25%), dan F3 (50%:50%). Hasil analisis kimia dan organoleptik menunjukkan adanya perbedaan signifikan terhadap kadar abu, kadar protein, kadar lemak, kadar karbohidrat, kadar serat pangan, tekstur, dan rasa sereal. Namun, tidak terdapat perbedaan signifikan terhadap kadar air, warna, dan aroma sereal. Formulasi sereal terbaik ditetapkan pada F3 dengan 5,66% serat pangan, 17,48% protein, 20,58% lemak, dan 54,76% karbohidrat. Kesimpulan dari penelitian ini adalah komposisi tepung jewawut dan tepung kacang kedelai berpengaruh signifikan terhadap kadar abu, kadar protein, kadar lemak, kadar karbohidrat, kadar serat pangan, tekstur, dan rasa sereal, tetapi tidak berpengaruh signifikan terhadap kadar air, warna, dan aroma sereal.

Kata Kunci: Sereal, Diabetes_melitus, Serat_pangan, Jewawut, Kacang_kedelai

EFFECT OF MILLET FLOUR AND SOYBEAN FLOUR RASIO ON FIBER, NUTRITIONAL CONTENT, AND ORGANOLEPTIC OF CEREAL FOR PATIENT WITH DIABETES MELLITUS

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Abstract

People with diabetes mellitus (DM) have symptoms of frequently feeling hungry. Regulate the type of food can help control symptoms and prevent complications. Fiber and protein are nutritional components that can help you feel full longer and control blood sugar. The purpose of this study is to analyze the impact of the composition of millet flour and soybean flour on dietary fiber, proximate, and organoleptic cereals for people with DM. The method study is a Complete Randomized Design (CRD) with 3 levels of treatment and 2 repetitions. Variations in the composition of millet flour and soybean flour are F1 (100%:0%), F2 (75%:25%), and F3 (50%:50%). The chemical and organoleptic analysis showed there is significant differences in ash, protein, fat, carbohydrate, dietary fiber, texture, and cereal taste. However, there is no significant differences in water, color, and aroma of cereals. The best cereal formulation was determined to be F3 which contains 5.66% dietary fiber, 17.48% protein, 20.58% fat, and 54.76% carbohydrate. The conclusion is composition of millet flour and soybean flour had significant effects on ash, protein, fat, carbohydrate, dietary fiber, texture, and taste of cereals, but not on water, color, and aroma of cereals.

Keywords: Cereals, Diabetes_mellitus, Dietary_fiber, Millet, Soybean