ABSTRAK

SUBSTITUSI TEPUNG UBI JALAR UNGU DAN TEPUNG TEMPE TERHADAP SIFAT ORGANOLEPTIK, SERAT DAN AKTIVITAS ANTIOKSIDAN MI BASAH SEBAGAI PANGAN ALTERNATIF PENDERITA HIPERKOLESTEROLEMIA

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Latar Belakang: Alternatif pencegahan hiperkolesterolemia dapat dilakukan dengan meningkatkan asupan serat dan antioksidan, salah satunya dengan pemanfaatan tepung ubi jalar ungu dan tepung tempe dalam pembuatan mi basah. Penelitian ini bertujuan untuk mengetahui pengaruh substitusi tepung ubi jalar ungu dan tepung tempe terhadap sifat organoleptik, kadar protein, serat kasar dan aktivitas antioksidan mi basah sebagai pangan alternatif penderita hiperkolesterolemia.

Metodologi: Penelitian ini menggunakan studi eksperimental dengan metode rancangan acak lengkap faktorial yaitu substitusi tepung ubi jalar ungu (A): 10%, 20%, 30%, dan substitusi tepung tempe (B): 20% dan 30%. Sifat organoleptik mi basah dianalisis menggunakan uji *Friedman,* sedangkan kadar protein dianalisis menggunakan uji *Anova*, kemudian keduanya dilanjutkan dengan uji DMRT. Formula terbaik ditentukan menggunakan metode indeks efektivitas.

Hasil Penelitian: Substitusi tepung ubi jalar ungu dan tepung tempe berpengaruh nyata terhadap sifat organoleptik dan kadar protein mi basah. Kadar protein mi basah berkisar antara 8,49%-12,53%.

Kesimpulan: Formula mi basah terbaik yang disukai panelis adalah A2B1 (60%:20%:20%) dengan warna kuning kecokelatan, aroma langu khas tempe agak tercium, rasa agak asin, tekstur agak kenyal, kadar protein 8,49%, serat kasar 17,60% dan nilai IC_{50} sebesar 11,57 ppm. Konsumsi mi basah sebanyak 200 g dapat memenuhi %AKG protein remaja sebesar 22,64%-33,96%.

Kata Kunci: hiperkolesterolemia, mi basah, tepung ubi jalar ungu, tepung tempe.

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ABSTRACT

SUBSTITUTION OF PURPLE SWEET POTATO FLOUR AND TEMPE FLOUR ON ORGANOLEPTIC PROPERTIES, CRUDE FIBER AND ANTIOXIDANT ACTIVITY OF WET NOODLES AS AN ALTERNATIVE FOOD FOR HYPERCHOLESTEROLEMIA PATIENTS

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Background: Alternative prevention of hypercholesterolemia can be done by increasing the intake of fiber and antioxidants, one of which is the use of purple sweet potato flour and tempe flour in making wet noodles. This study aims to determine the effect of the substitution of purple sweet potato flour and tempe flour on the organoleptic properties, protein content, crude fiber, and antioxidant activity of wet noodles as an alternative food for hypercholesterolemia patients.

Methods: This study used an experimental study with a factorial completely randomized design method, namely purple sweet potato flour substitution (A): 10%, 20%, and 30%, and tempe flour substitution (B): 20% and 30%. The organoleptic properties of wet noodles were analyzed using the Friedman test, while the protein content was analyzed using the Anova test, then both were continued with the DMRT test. The best formula was determined using the effective index method.

Result: The substitution of purple sweet potato flour and tempe flour significantly affected the organoleptic properties and protein content of wet noodles. The protein content of wet noodles ranged from 8,49%-12,53%.

Conclusion: The best wet noodle formula favored by the panelist was A2B1 (60%:20%:20%) with a yellow-brown color, slightly pungent aroma of tempe, slightly salty taste, slightly chewy texture, 8,49% protein content, 17,60% crude fiber content and the IC_{50} value of 11,57 ppm. Consumption of wet noodles as much as 200 g can meet the %RDA for adolescents protein by 22,64%-33,96%.

Keywords: hypercholesterolemia, wet noodles, purple sweet potato flour, tempe flour.

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