

ABSTRAK

ERIMA NURI HIDAYAH

FORMULASI TEPUNG KOMPOSIT (TEPUNG TERIGU DAN TEPUNG MOCAF) PADA ROTI ISI ABON IKAN LELE UNTUK SARAPAN ANAK SEKOLAH

Anak sekolah kerap kali melewatkan sarapan. Kebiasaan melewatkan sarapan dapat meningkatkan risiko kejadian obesitas dan peluang mengalami penurunan konsentrasi belajar. Padahal, dari sarapan yang adekuat dapat memenuhi sebanyak ≥ 25 % dari Angka Kecukupan Gizi (AKG). Roti menjadi salah satu makanan praktis yang sering dijadikan menu sarapan. Penelitian ini bertujuan untuk mengetahui daya terima, kandungan energi, dan kandungan protein roti berbahan tepung komposit (tepung terigu dan tepung mocaf) dengan isian abon ikan lele untuk sarapan anak sekolah. Metode penelitian menggunakan metode eksperimen dengan Rancangan Acak Lengkap (RAL) pada empat taraf perlakuan. Daya terima dilakukan melalui uji hedonik pada 40 orang mahasiswa Program Studi Gizi Fakultas Ilmu Kesehatan Universitas Siliwangi. Data daya terima dianalisis menggunakan uji *one-way* ANOVA. Penentuan formula terpilih berdasarkan rata-rata nilai tertinggi uji daya terima. Uji kandungan energi dilakukan menggunakan metode bom kalorimeter. Hasil uji kandungan energi selanjutnya dilakukan uji analisis statistik menggunakan uji *independent sample t-test*. Uji kandungan protein dilakukan menggunakan metode Kjeldahl. Hasil uji kandungan protein selanjutnya dilakukan uji analisis statistik menggunakan uji *independent sample t-test*. Hasil daya terima menunjukkan substitusi tepung komposit (tepung terigu dan tepung mocaf) pada roti isi abon ikan lele tidak memberikan pengaruh ($p > 0,05$) terhadap daya terima tekstur, aroma, rasa, dan warna. Formula F3 menjadi formula terpilih dengan rata-rata nilai keseluruhan tertinggi. Substitusi tepung komposit (tepung terigu dan tepung mocaf) pada roti isi abon ikan lele formula terpilih memberikan pengaruh terhadap peningkatan kandungan energi sebanyak 8,808 kkal (*sig. tailed* 0,021) dan penurunan kandungan protein sebanyak 0,819 g (*sig. tailed* 0,022) untuk pemenuhan sarapan anak sekolah usia 10-12 tahun. Berdasarkan Angka Kecukupan Gizi (AKG), maka saran saji produk adalah dua sajian (140 g).

Kata kunci : Energi, Hedonik, Protein, Roti, Tepung Mocaf

FACULTY OF HEALTH SCIENCES
SILIWANGI UNIVERSITY
TASIKMALAYA
NUTRITION STUDY PROGRAM
2024

ABSTRACT

ERIMA NURI HIDAYAH

FORMULATION OF COMPOSITE FLOUR (WHEAT FLOUR AND MOCAF FLOUR) IN CATFISH FLOSS STUFFED BREAD FOR STUDENT'S BREAKFAST

Student's often skip breakfast. The habit of skipping breakfast can increase the risk of obesity and the chance of experiencing a decrease in learning concentration. In fact, an adequate breakfast can fulfill as much as $\geq 25\%$ of the Recommended Dietary Allowances (RDA). Bread is one of the practical foods made from wheat flour with the addition of artificial food coloring and is often used as a breakfast item. This study aims to determine the acceptability, energy content, and protein content of bread made from composite flour (wheat flour and mocaf flour) with catfish floss filling for student's breakfast. The research method used an experimental method with a completely randomized design (CRD) at four levels of treatment. Acceptability was carried out by hedonic test on 40 students of the Nutrition Study Program, Faculty of Health Sciences, Siliwangi University. Acceptability data were analyzed using the One-Way ANOVA test. Determination of the selected formula based on the average of the highest value of the acceptability test. Energy content test was conducted using the bomb calorimeter method. The results of the energy content test were then subjected to statistical analysis using the independent sample t-test test. Protein content test was conducted using the Kjeldahl method. The results of the protein content test were then subjected to statistical analysis using the independent sample t-test test. The results of acceptability showed that the substitution of composite flour (wheat flour and mocaf flour) in catfish floss stuffed bread did not affect the acceptability ($p > 0,005$) of texture, aroma, taste, and color. Formula F3 became the selected formula with the highest average overall score. Substitution of composite flour (wheat flour and mocaf flour) in the selected formula of catfish floss stuffed bread has an effect on increasing the energy content of 8,808 kcal (sig. tailed 0,021) and a decrease in protein content of 0.819 g (sig. tailed 0,022) to fulfill breakfast for students aged 10-12 years. Based on the Recommended Dietary Allowances (RDA), then the product serving suggestion is two servings (140 g).

Keywords : *Bread, Energy, Hedonic, Mocaf Flour, Proteins*