

INTISARI

UJI PROKSIMAT (PROTEIN DAN DIETARY FIBER) DAN UJI KESUKAAN ROTI TAWAR SUBSTITUSI TEPUNG BIJI BUNGA MATAHARI (*Helianthus Annuus L.*) SEBAGAI ALTERNATIF MAKANAN POKOK KAYA NUTRISI

Natura Kusumadewi¹⁾, Fatma Zuhrotun Nisa²⁾, Noorti Fauzah³⁾

Latar Belakang : Makanan praktis dan cepat saji yang kini digemari memiliki kandungan gizi kurang seimbang dan dapat menyebabkan berbagai gangguan kesehatan apabila dikonsumsi dalam jangka panjang. Biji bunga matahari yang selama ini biasa digunakan sebagai makanan ringan atau penghasil minyak nabati, merupakan sumber protein nabati dan serat. Substitusi tepung biji bunga matahari pada pembuatan roti tawar diharapkan dapat menciptakan makanan yang tidak hanya praktis namun juga kaya nutrisi dan baik bagi tubuh.

Tujuan Penelitian : Mengetahui pengaruh substitusi tepung biji bunga matahari (*Helianthus Annuus L.*) pada tepung terigu terhadap tingkat kesukaan, sifat fisik dan nilai gizi (protein dan serat pangan) roti tawar.

Metode Penelitian : Jenis penelitian kuantitatif dengan metode eksperimental murni serta desain penelitian rancangan acak lengkap. Uji kesukaan dianalisis menggunakan uji Kruskal-Wallis dan Mann-Whitney. Sifat fisik tekstur diuji secara subjektif dan volume diukur secara kuantitatif menggunakan metode *Rapeseed Displacement Test*. Uji proksimat dilakukan terhadap kadar protein dan serat pangan. Data dianalisis menggunakan uji ANOVA dilanjutkan uji Duncan.

Hasil : Kandungan protein dan serat tertinggi pada substitusi 25%. Daya terima tertinggi pada roti tawar kontrol dan semakin menurun dengan bertambahnya substitusi namun masih dapat diterima. Volume pengembangan tertinggi terdapat pada roti dengan substitusi 10%.

Kesimpulan : Terdapat perbedaan nyata terhadap kandungan gizi dan sifat fisik roti tawar. Semakin tinggi jumlah substitusi, semakin tinggi nilai gizi roti tawar namun daya terima semakin menurun.

Kata Kunci : roti tawar, biji bunga matahari, sifat fisik, uji kesukaan, protein, serat pangan

¹⁾Mahasiswa S1, Program Studi Gizi Kesehatan, Fakultas Kedokteran UGM

²⁾Staff Pengajar, Program Studi Gizi Kesehatan, Fakultas Kedokteran UGM

³⁾Staff Pengajar, Politeknik Kesehatan, Yogyakarta

ABSTRACT

PROXIMATE TEST (PROTEIN AND DIETARY FIBER) AND AFFECTIVE TEST OF WHITE BREAD WITH SUNFLOWER SEED FLOUR SUBSTITUTION (*Helianthus Annuus L.*) AS AN ALTERNATIVE STAPLE FOOD WITH HIGH NUTRITION VALUE

Natura Kusumadewi¹⁾, Fatma Zuhrotun Nisa²⁾, Noorti Fauzah³⁾

Background : The common popular practical fast food nowadays is usually have unbalanced nutrition value. When it's consumed for long-term period, it could lead to several health problems. Sunflower seed which usually used as a snack or natural oil source is also the good source of fiber and protein. The substitution of sunflower seed flour in white bread is expected to create a food which is not only practical but also rich in nutrition value and beneficial for health.

Objectives : This reserach wants to know the amount of protein and dietary fiber in the white bread substituted with sunflower seed (*Helianthus Annuus L.*) flour, physical properties of the products, and the acceptance level of the products.

Methods : This study is qunatitative research with true experimental methods with complete random design. Affective test is analyzed with Kruskal-Wallis and Man-Whitney test. Texture properties measured using subjective evaluation, and bread volume properties measured using objective evaluation with Rapeseed Displacement Test. The proximate test of protein and dietary fiber analyzed using ANOVA and Duncan test.

Results : The results of this study shows that bread with 25% flour substitution have the highest protein and dietary fiber properties. The more sunflower seed flour added to the formula, the less desirable the bread become but the bread still acceptable. Bread with 10% of substitution reach the highest volume.

Conslusion : There are significant differences in the nutritional value and physical properties of the bread. The more substitution amount, the higher nutritional value reached, the acceptance level decreased but still acceptable.

Keyword : White bread, sunflower seed, Physical properties, Affective test, Protein, Dietary fiber

¹⁾Student of Health and Nutrition, Faculty of Medicine, Gadjah Mada University

²⁾Lecturer of Health and Nutrition, Faculty of Medicine, Gadjah Mada University

³⁾Lecturer of Nutrition Departement, Health Polytechnic of Health Ministry, Yogyakarta