ABSTRAK

Subsitusi Tepung Okara Dan Penambahan Tepung Daun Kelor *(Moringa oleifera)* Dalam Pembuatan *Cookies* Sebagai Makanan Selingan Anak

Pemanfaatan tepung okara dan tepung daun kelor *(Moringa oleifera)* dalam peningkatan kandungan serat, protein dan vitamin pada pembuatan *cookies* berpotensi untuk dikembangkan. Rumusan masalah penelitian ini bagaimana kandungan serat, protein, β-karoten dan pemenuhan AKG produk *cookies* substitusi tepung okara dan penambahan tepung daun kelor sebagai makanan selingan anak. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan 3 ulangan yaitu substitusi tepung okara dibanding tepung terigu dan penambahan tepung kelor yang terdiri dari 5 formula: O1K1 = 100% : 0% : 3%, O2K2 = 75% : 25% : 3%, O3K3 = 50% : 50% : 3%, O4K4 = 25% : 75% : 3%, O5K5 = 0% : 100% : 3%. Analisa meliputi kandungan serat kasar (gavimetri), protein (lowrey) dan β-karoten (spektrofotometri). Hasil dianalisis menggunakan analysis of variance (ANOVA), dilanjutkan uji Duncan dan uji korelasi bivariate pearson. Hasil menunjukkan kandungan tertinggi pada serat kasar perlakuan O4K4 yaitu 2,779%, protein perlakuan O1K1 yaitu 1,454% dan β-karoten perlakuan O2K2 yaitu 11,730mg/100g. Pemenuhan serat, protein dan β-karoten *cookies* sebagai makanan selingan dengan kontribusi AKG anak usia 4-6 tahun pada perlakuan O4K4 yaitu memenuhi serat kasar 2,78 g/100 g, protein 1,34 g/100 g dan β-karoten (vitamin A) 8,69 mg/100g. Simpulan penelitian ini substitusi tepung okara dan penambahan daun kelor berpengaruh terhadap kadar serat kasar, protein dan β-karoten. Formula O4K4 berkontribusi terhadap AKG usia anak 4-6 tahun untuk kebutuhan serat, protein dan vitamin A.

Kata kunci: cookies okara dan daun kelor, serat kasar, protein dan β-karoten

ABSTRACT

Substitution of Okara Flour and Addition of Moringa Leaf Flour (Moringa oleifera) in Making Cookies Children's Snacks

The utilization of okara flour and Moringa oleifera flour in increasing the content of fiber, protein and vitamins in making cookies has the potential to be developed. The formulation of the problem of this research is how the content of fiber, protein, β-carotene and the fulfillment of RDA of cookies products substituted with okara flour and the addition of moringa flour as a child's snack. The experimental design used a completely randomized design (CRD) with 5 treatments and 3 replications, namely the substitution of okara flour compared to wheat flour and the addition of moringa flour consisting of 5 formulas: O1K1 = 100% : 0% : 3%, O2K2 = 75% : 25% : 3%, O3K3 = 50%: 50% : 3%, O4K4 = 25% : 75% : 3%, O5K5 = 0% : 100% : 3%. Analysis included crude fiber content (gavimetric), protein (lowrey) and β-carotene (spectrophotometric). Results were analyzed using analysis of variance (ANOVA), followed by Duncan's test and Pearson's bivariate correlation test. The results showed the highest content of crude fiber in treatment O4K4 which was 2.779%, protein treatment O1K1 which was 1.454% and β-carotene treatment O2K2 which was 11.730mg/100g. Fulfillment of fiber, protein and β-carotene cookies as a snack food with the contribution of AKG for children aged 4-6 years in the O4K4 treatment which fulfills crude fiber 2.78 g/100 g, protein 1.34 g/100 g and β-carotene (vitamin A) 8.69 mg/100g. The conclusion of this study is that the substitution of okara flour and the addition of moringa leaves affect the levels of crude fiber, protein and β-carotene. Formula O4K4 contributes to the RDA of children aged 4-6 years for fiber, protein and vitamin A needs.

Keywords*: okara and moringa cookies, crude fiber, protein and β-carotene*