

Substitusi Tepung Mocaf (*Modified Cassava Flour*) Pada Pembuatan Mocatucini Sebagai Inovasi Pangan lokal

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ABSTRAK

Latar belakang: Konsumsi pangan berbahan tepung olahan perlu diimbangi dengan pemenuhan zat gizi, terutama protein dan serat. Tepung mocaf (*Modified Cassava Flour*) merupakan bahan pangan lokal yang memiliki kandungan serat lebih tinggi dibandingkan tepung terigu sehingga berpotensi digunakan sebagai bahan substitusi dalam pembuatan pasta. Tujuan: Penelitian ini bertujuan mengetahui pengaruh substitusi tepung mocaf terhadap karakteristik organoleptik serta kandungan zat gizi, protein, dan serat Mocatucini. Metode: Penelitian ini merupakan penelitian eksperimental menggunakan Rancangan Acak Lengkap (RAL) dengan tiga formulasi, yaitu P1 (75% tepung terigu:25% tepung mocaf), P2 (55%:45%), dan P3 (35%:65%), masing-masing dengan dua kali pengulangan. Uji organoleptik dilakukan pada 30 panelis agak terlatih dengan parameter mutu hedonik dan tingkat kesukaan terhadap warna, rasa, aroma, dan kekenyalan. Data dianalisis menggunakan ANOVA dan dilanjutkan dengan uji Duncan. Produk terpilih kemudian dianalisis kandungan protein dan serat pangan di laboratorium. Hasil: Substitusi tepung mocaf berpengaruh terhadap mutu hedonik warna ($p=0,006$) dan kekenyalan ($p=0,031$), tetapi tidak berpengaruh terhadap mutu hedonik rasa dan aroma. Pada uji hedonik, substitusi tepung mocaf tidak berpengaruh terhadap tingkat kesukaan warna ($p=0,051$), rasa ($p=0,398$), kekenyalan, dan aroma. Produk terpilih adalah P3 dengan formulasi 35% tepung terigu dan 65% tepung mocaf. Dalam 100 gram Mocatucini P3 terkandung energi 266,67 kkal, protein 17,25 gram, lemak 3,65 gram, karbohidrat 51,23 gram, dan serat 6,67 gram. kesimpulan: Peningkatan proporsi tepung mocaf memengaruhi karakteristik warna dan kekenyalan, namun tetap menghasilkan tingkat penerimaan yang tidak berbeda nyata antarperlakuan. Mocatucini P3 merupakan produk terpilih dengan kandungan protein dan serat yang lebih tinggi dibandingkan produk fettucini pembanding di pasaran, sehingga berpotensi dikembangkan sebagai inovasi pangan berbasis bahan pangan lokal.

Kata kunci: Mocatucini; Tepung mocaf; Serat pangan

Substitution of Mocaf (*Modified Cassava Flour*) in the Production of Mocatucini as a Local Food Innovation

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ABSTRACT

Background: Consumption of processed flour-based foods needs to be balanced with adequate nutrient intake, particularly protein and dietary fiber. Mocaf (*Modified Cassava Flour*) is a local food ingredient with a higher dietary fiber content than wheat flour, making it a potential substitute in pasta production. **Objective:** This study aimed to determine the effect of mocaf flour substitution on the organoleptic characteristics and nutritional, protein, and dietary fiber content of Mocatucini. **Methods:** This experimental study used a Completely Randomized Design (CRD) with three formulations: P1 (75% wheat flour:25% mocaf flour), P2 (55%:45%), and P3 (35%:65%), each with two replications. Organoleptic testing was conducted with 30 moderately trained panelists, assessing hedonic quality and preference levels for color, taste, aroma, and elasticity. Data were analyzed using ANOVA followed by Duncan's test. The selected product was subsequently analyzed for protein and dietary fiber content in a laboratory. **Results:** Mocaf flour substitution significantly affected hedonic quality of color ($p=0.006$) and elasticity ($p=0.031$), but did not affect hedonic quality of taste and aroma. In the hedonic test, mocaf flour substitution did not significantly affect preference for color ($p=0.051$), taste ($p=0.398$), elasticity, and aroma. The selected product was P3 with a formulation of 35% wheat flour and 65% mocaf flour. Per 100 grams, Mocatucini P3 contained 266.67 kcal of energy, 17.25 g protein, 3.65 g fat, 51.23 g carbohydrate, and 6.67 g dietary fiber. **Conclusion:** Increasing the proportion of mocaf flour affected the color and elasticity characteristics but did not result in significant differences in panelist preference among treatments. Mocatucini P3 was the selected product, with higher protein and dietary fiber content than the commercial fettuccine products used for comparison, indicating its potential as a local food-based innovation.

Keywords: Mocatucini; Mocaf Flour; Dietary Fiber