

## ABSTRAK

### DAYA TERIMA, NILAI GIZI, DAN PROFIL TEKSTUR PADA BAKSO KERANG DARA (*Anadara granosa* L.) DENGAN SUBSTITUSI TEPUNG MOCAF

Ryanti Indraswari<sup>1</sup>

<sup>1</sup>Fakultas Ilmu-ilmu Kesehatan, Universitas Esa Unggul, Jakarta

xiv, VI BAB, 94 halaman, 15 Tabel, 8 Gambar

**Latar belakang:** Seiring dengan berjalananya waktu dan pesatnya perkembangan teknologi, manusia terus-menerus menciptakan inovasi di berbagai bidang, tak terkecuali di bidang pangan misalnya, bakso. Sebagian besar masyarakat Indonesia mengenal dua jenis bakso, bakso daging sapi dan bakso ikan. Atas dasar ini, diciptakan sebuah inovasi yaitu bakso berbahan dasar kerang dara.

**Tujuan :** Penelitian ini bertujuan untuk mengetahui pengaruh substitusi tepung *mocaf* terhadap mutu dan daya terima bakso kerang dara.

**Metode :** Metode ini merupakan studi eksperimental dengan enam formulasi lalu dilakukan uji hedonik pada 30 orang panelis tak terlatih. Substitusi tepung *mocaf* sebanyak 0g (P0), 20g (P1), 30g (P2), 40g (P3), 50g (P4), dan 60g (P5). Lalu dianalisis kadar air, kadar abu, lemak, protein, karbohidrat dengan metode proksimat (AOAC, 2005). Dilakukan pula analisis kalsium menggunakan AAS serta dilakukan analisis profil tekstur (*hardness*, *springiness*, *adhesiveness*, *cohesiveness*, *gumminess*, *chewiness*, dan *fracturability*) dengan *Brookfield Texture Analyzer CT V1.2 Build 9*. Analisis statistik yang digunakan adalah *ANOVA One Way* dan uji lanjut *Bonferroni*.

**Hasil :** Berdasarkan uji hedonik, nilai rata-rata tertinggi terletak pada rasa dan warna bakso pada formulasi kelima (P4) yaitu perlakuan dengan substitusi tepung *mocaf* sebanyak 50g. Hasil analisis proksimat menunjukkan bahwa dalam 100 g bakso kerang dara dengan substitusi tepung *mocaf* sebanyak 50g (P4) mengandung energi 168,04 kkal, kadar air 57,33%, kadar abu 1,16%, kadar lemak 0,40%, kadar protein 5,22%; kadar karbohidrat 35,89%; dan kadar kalsium 64,21 mg. Hasil uji profil tekstur memperlihatkan bahwa bakso ini memiliki *hardness* 677,3 gf, *springiness* 1,04 mm, *adhesiveness* 0,47 mJ, *cohesiveness* 0,85, *gumminess* 581,9 gf, *chewiness* 5,95 mJ, dan *fracturability* 677,3 gf.

**Kesimpulan :** Substitusi tepung *mocaf* memberikan pengaruh yang signifikan ( $p\ value < 0.05$ ) terhadap mutu dan daya terima (warna) produk bakso kerang dara.

**Saran :** Untuk penelitian selanjutnya, perlu dilakukan analisis lebih lanjut mengenai kadar natrium, kalium, magnesium, fosfor, seng, dan zat besi produk bakso kerang dara dengan substitusi tepung *mocaf*.

**Kata Kunci :** kerang dara, tepung *mocaf*, uji profil tekstur

**Daftar Bacaan :** 82 (1982 – 2016)

## ABSTRACT

### Acceptability, Nutritional Value, and Texture Profile of Blood Cockle Meatballs (*Anadara granosa* L.) by Mocaf Flour Substitution.

Ryanti Indraswari<sup>1</sup>

<sup>1</sup> Faculty of Health Sciences, University of Esa Unggul, Jakarta

xiv, VI chapter, 94 pages, 15 Tables, 8 pictures

**Background:** As time goes by and the rapid development of technology, humans are constantly creating innovations in many areas, not least in the field of food, for example, meatballs. The majority of Indonesian society recognizes two types of meatballs, beef balls and fish balls. On this basis, created an innovation that is meatballs made from blood cockle.

**Objective:** This study aims to determine the effect of mocaf flour substitution on the quality and acceptance of blood cockle meatballs.

**Design:** This is an experimental study with six formulations and hedonic test conducted on 30 untrained panelists. Mocaf flour used as a substitute are 0g (P0), 20g (P1), 30g (P2), 40g (P3), 50g (P4), and 60g (P5). The most favourable product furthermore was subjected to be analyzed the water content, ash content, fat, protein, carbohydrates with proximate analysis. These study included calcium analysis used AAS and texture profile analysis (hardness, springiness, adhesiveness, cohesiveness, gumminess, chewiness, and fracturability) with Brookfield Texture Analyzer CT V1.2 Build 9. Then, statistically analyzed by One Way ANOVA and Bonferroni.

**Results:** Based on the hedonic test, the highest average value lies in the taste and color of the meatballs on the fifth formulations (P4) was treated with 50g mocaf flour substitution. Results of the proximate analysis showed that in 100 g blood cockle meatballs with 50g mocaf flour substitution (P4) had energy 168.04 kcal, moisture content of 57.33%, ash content of 1.16%, fat content of 0.40%, protein content of 5.22%; carbohydrate content of 35.89%; and calcium of 64.21 mg. Furthermore, the texture profile test results showed of this product had a hardness of 677.3 gf, springiness of 1.04 mm, adhesiveness of 0.47 mJ, cohesiveness of 0.85, gumminess of 581.9 gf, chewiness of 5.95 mJ, and fracturability of 677.3 gf.

**Conclusions:** Mocaf flour substitution to the blood cockle meat have a significant effect (p value < 0.05) on the quality and acceptability (color) on product of blood cockle meatballs.

**Suggestion:** For further research, it is necessary to do more analysis of the levels of sodium, potassium, magnesium, phosphorus, zinc, and iron of blood cockle meatballs with mocaf flour substitution.

**Keywords:** *blood cockle, mocaf flour, texture profile analysis.*

**References:** 82 (1982 – 2016)