

KANDUNGAN GIZI, KADAR SERAT KASAR, DAN DAYA TERIMA BERAS ANALOG BERBAHAN DASAR BERAS MENIR DENGAN SUBSTITUSI TEPUNG AGAR

Stephani Rosmauli Lumbantoruan¹, Lily Arsanti Lestari², Ida Setyobroto³

INTISARI

Latar belakang : Ketergantungan masyarakat terhadap beras sebagai makanan pokok cukup tinggi di Indonesia sehingga dibutuhkan inovasi dalam upaya diversifikasi pangan. Pemanfaatkan beras menir sebagai bahan baku produk beras analog bertujuan untuk meningkatkan nilai tambah menir sebagai hasil samping pengolahan padi menjadi beras. Substitusi tepung agar diharapkan dapat meningkatkan nilai gizi dan kadar serat beras analog.

Tujuan penelitian : Mengetahui kandungan gizi dan kadar serat kasar beras analog berbahan dasar beras menir dengan substitusi tepung agar serta daya terima nasi dari beras analog

Metode penelitian : Penelitian ini merupakan penelitian eksperimental dengan rancangan acak lengkap dengan faktor tunggal yaitu faktor substitusi tepung agar dalam beras analog dengan empat taraf perlakuan (0%, 0,5%, 1%, 1,5 % b/b) dan dibandingkan dengan beras utuh. Respon yang diamati adalah kandungan gizi serta kadar serat kasar beras analog serta uji daya terima nasi.

Hasil penelitian : Kadar air, karbohidrat, dan serat kasar beras analog dengan substitusi tepung agar menunjukkan perbedaan signifikan jika dibandingkan dengan beras utuh, sedangkan kadar abu, protein, dan lemak tidak menunjukkan perbedaan signifikan. Daya terima nasi analog lebih rendah dibandingkan nasi beras utuh. Substitusi tepung agar mempengaruhi penerimaan warna, tekstur, rasa, dan keseluruhan nasi analog sedangkan penerimaan aroma nasi analog tidak berbeda signifikan.. Secara keseluruhan, beras analog formulasi terbaik ialah beras dengan substitusi tepung agar 1%.

Kesimpulan : Terdapat perbedaan yang signifikan pada kadar air, karbohidrat, dan serat kasar beras analog dengan substitusi tepung agar. Terdapat perbedaan yang signifikan terhadap daya terima warna, tekstur, rasa, dan keseluruhan nasi analog dengan substitusi tepung agar.

Kata kunci : *kandungan gizi, serat kasar, daya terima, beras analog, menir, tepung agar*

¹ Mahasiswa Program Studi S1 Gizi Kesehatan, Fakultas Kedokteran Universitas Gadjah Mada

² Dosen Program Studi Gizi Kesehatan, Fakultas Kedokteran, Universitas Gadjah Mada

³ Dosen Jurusan Gizi, Politeknik Kesehatan Yogyakarta



THE NUTRIENT CONTENT, CRUDE FIBER, AND ACCEPTABILITY OF ANALOG RICE BASED BROKEN RICE SUBSTITUTED WITH AGAR POWDER

Stephani Rosmauli Lumbantoruan¹, Lily Arsanti Lestari², Idi Setyobroto³

ABSTRACT

Background : Community dependency on rice as a staple food in Indonesia is high enough, therefore it is necessary to make innovations in food diversification. The utilization of broken rice as the basic material for analog rice aims to increase the added-value of broken rice as a byproduct of rice processing. Substitution of agar powder is expected to enhance the nutritional value and fiber content of analog rice.

Objective : To determine the nutritional content and crude fiber of analog rice based broken rice substituted with agar powder and also the acceptability of analog rice.

Methods : This was an experimental study with a complete randomized design with single factor, substitution of agar powder in analog rice at four levels (0%, 0.5%, 1%, 1.5% w/w) compared with whole rice. The observed responses were nutrient content and crude fiber content of analog rice and the acceptability of rice.

Result : The water content, carbohydrates, and crude fiber of analog rice substituted with agar powder showed the significant differences compared to the whole rice, while the ash content, protein, and fat did not show significant differences. The acceptability of analog rice substituted with agar powder was lower than cooked rice. Substitution of agar powder affected the acceptability of color, texture, taste, and overall of analog rice, while the acceptance of aroma did not significantly different. Overall, the best formulation of analog rice was substitution of 1% agar powder.

Conclusion : There were significant differences in water content, carbohydrates, and crude fiber of analog rice substituted with agar powder. There were significant differences to the acceptability of color, texture, flavor, and overall of analog rice substituted with agar powder

Keywords : *nutrient content, crude fiber, acceptability, analog rice, rice, agar powder*

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

² Department of Health and Nutrition Program, Faculty of Medicine, Gadjah Mada University

³ Department of Nutrition, Health Polytechnic Yogyakarta.