

**INFLUENCE OF VARIATIONS IN MIXING WHEAT FLOUR  
AND JACKFRUIT SEED FLOUR (ARTOCARPUS HETEROPHYLLUS)  
TO PHYSICAL PROPERTIES, ORGANOLEPTIC PROPERTIES  
AND THE DIETARY FIBER CONTENT OF COOKIES  
AS AN ALTERNATIVE SNACK  
OBESITY PREVENTION**

Stevi Indriastuti Maharadi<sup>1</sup>, Agus Wijanarka<sup>2</sup>, Esthy Rahman Asih<sup>3</sup>  
Departement of Nutrition Health Politechnic of Health Ministry Yogyakarta  
Jl. Tata Bumi No. 3 Banyuraden, Gamping, Sleman, Yogyakarta, 55293  
(Email : [stevimaharadi22@gmail.com](mailto:stevimaharadi22@gmail.com) )

**ABSTRACT**

**Background:** Obesity is one of the nutritional problems that is still commonly found in various places and various age groups. Jackfruit seed flour has a fiber content per 100 gr of 6.8 g, which functions to preserve and prevent obesity and several degenerative diseases such as diabetes mellitus, stroke, heart. Jackfruit seed flour can be mandated as mixing cookies.

**Objective:** Produce high-fiber cookies based on mixing wheat flour and jackfruit seed flour which were received by panelists as an alternative to obesity prevention snacks.

**Methods:** A type of purely experimental research with a simple random design. There were 4 treatments with a ratio of wheat flour and jackfruit seed flour 100%:0%, 70%:30%, 60%:40%, 50%:50%. Physical properties are analyzed descriptively. Organoleptic assays were analyzed by statistical tests, if there were differences followed by mann whitney tests. Dietary fiber levels were analyzed descriptively and statistically tested one way anova, followed by Duncan's test if there were differences.

**Results:** Physical properties show that the more the mixture of jackfruit seed flour on the cookies, the more brownish the color, the aroma is slimmer, the taste remains sweet and the texture remains crispy. Organoleptic properties show that the most preferred cookie products in terms of color are B treatment cookies (70% wheat flour and 30% jackfruit seed flour mixture), while the most preferred in terms of aroma, taste, and texture are C treatment cookies (60% wheat flour and 40% jackfruit seed flour mixture). Dietary fiber content, the more the mixture of jackfruit seed flour, the more the dietary fiber content in cookies increases.

**Conclusion:** There is an influence of variations in the mixing of jackfruit seed flour on cookies on physical properties, organoleptic properties and dietary fiber content with treatment A (100%:0%), treatment B (70%:30%), treatment C (60%:40%), and treatment D (50%:50%).

**Keywords:** Cookies, jackfruit seed flour, physical properties, organoleptic properties, dietary fiber content.

**PENGARUH VARIASI PENCAMPURAN TEPUNG TERIGU  
DAN TEPUNG BIJI NANGKA (*ARTOCARPUS HETEROPHYLLUS*)  
TERHADAP SIFAT FISIK, SIFAT ORGANOLEPTIK  
DAN KADAR SERAT PANGAN *COOKIES*  
SEBAGAI ALTERNATIF KUDAPAN  
PENCEGAH OBESITAS**

Stevi Indriastuti Maharadi<sup>1</sup>, Agus Wijanarka<sup>2</sup>, Esthy Rahman Asih<sup>3</sup>  
Jurusan Gizi Politeknik Kesehatan Kemenkes Yogyakarta  
Jl. Tata Bumi No.3 Banyuraden, Gamping, Sleman, Yogyakarta, 55293  
(Email : [stevimaharadi22@gmail.com](mailto:stevimaharadi22@gmail.com) )

**ABSTRAK**

**Latar Belakang:** Obesitas merupakan salah satu masalah gizi yang masih banyak dijumpai diberbagai tempat dan berbagai kelompok usia. Tepung biji nangka memiliki kandungan serat per 100 gr sebanyak 6,8 g, yang berfungsi memelihara dan mencegah obesitas serta beberapa penyakit degenerative seperti diabetes mellitus, stroke, jantung. Tepung biji nangka dapat dimanfaatkan sebagai pencampuran *cookies*.

**Tujuan Penelitian:** Menghasilkan *cookies* tinggi serat berbahan dasar pencampuran tepung terigu dan tepung biji nangka yang diterima panelis sebagai alternatif kudapan pencegah obesitas.

**Metode Penelitian :** Jenis penelitian eksperimental murni dengan rancangan acak sederhana. Terdapat 4 perlakuan dengan perbandingan tepung terigu dan tepung biji nangka 100%:0%, 70%:30%, 60%:40%, 50%:50%. Sifat fisik dianalisis secara deskriptif. Uji organoleptik dianalisis dengan uji statistik *kruskal wallis*, apabila ada perbedaan dilanjutkan uji *mann whitney*. Kadar serat pangan dianalisis secara deskriptif dan uji statistik *one way anova*, dilanjutkan uji *Duncan* apabila terdapat perbedaan.

**Hasil Penelitian :** Sifat fisik menunjukkan semakin banyak campuran tepung biji nangka pada *cookies* maka warna semakin kecoklatan, aroma semakin langu, rasa tetap manis dan tekstur tetap renyah. Sifat organoleptik menunjukkan produk *cookies* yang paling disukai panelis dari segi warna yaitu *cookies* perlakuan B (70% tepung terigu dan 30% campuran tepung biji nangka), sedangkan yang paling disukai dari segi aroma, rasa, dan tekstur yaitu *cookies* perlakuan C (60% tepung terigu dan 40% campuran tepung biji nangka). Kadar serat pangan, semakin banyak campuran tepung biji nangka maka semakin meningkat kandungan serat pangan pada *cookies*.

**Kesimpulan :** Terdapat pengaruh variasi pencampuran tepung biji nangka pada *cookies* terhadap sifat fisik, sifat organoleptik dan kadar serat pangan dengan perlakuan A (100%:0%), perlakuan B (70%:30%), perlakuan C (60%:40%), dan perlakuan D (50%:50%).

**Kata Kunci :** *Cookies*, tepung biji nangka, sifat fisik, sifat organoleptik, kadar serat pangan.