

# PENGARUH KOMPOSISI TEPUNG SUWEG DAN TEPUNG PORANG TERHADAP UJI PROKSIMAT, SERAT PANGAN, DAN SIFAT ORGANOLEPTIK *COOKIES*

Rizky Putra Maulana

## Abstrak

Diabetes Melitus merupakan penyakit umum didunia yang disebabkan oleh gangguan sekresi insulin dan ketidakmampuan jaringan untuk merespon insulin dan ditandai dengan naiknya gula darah. Serat memiliki manfaat bagi kesehatan khusus pada penderita diabetes, seperti dapat menjaga kadar glukosa dalam darah. Tujuan penelitian ini untuk menganalisis pengaruh komposisi tepung suweg dengan tepung porang terhadap uji proksimat, serat pangan, dan sifat organoleptik *cookies* bagi penderita DM tipe 2. Penelitian ini dilakukan dengan studi eksperimental dengan metode Rancangan Acak Lengkap (RAL) dengan dua kali pengulangan terdiri dari 5 taraf perlakuan pada tepung suweg dengan tepung porang, yaitu F1 (0%:100%) F2 (25%:75%), F3 (50%:50%), F4 (75%:25%), dan F5 (100%:0%). Analisis data menggunakan *Analysis of Variance* (ANOVA) dan dilanjutkan uji *Duncan Multiple Range Test* (DMRT) pada kandungan zat gizi dan serat pangan. Uji Kruskal Wallis dilanjutkan dengan uji Mann-Whitney pada parameter organoleptik, dan metode De Garmo untuk menentukan formula terpilih. Hasil uji ANOVA menunjukkan bahwa terdapat perbedaan pada nilai rata-rata ( $p = 0,000$ ) kadar serat pangan, kadar protein ( $p = 0,002$ ), lemak ( $p = 0,000$ ), dan karbohidrat ( $p = 0,010$ ). Hasil analisis Kruskal Wallis pada tingkat kesukaan panelis terhadap parameter rasa ( $p = 0,012$ ), dan tekstur ( $p = 0,000$ ) namun tidak berbeda nyata nilai median terhadap parameter warna ( $p = 0,169$ ) dan aroma ( $p = 0,466$ ). Formula *cookies* terbaik adalah F5 yang mengandung 19,8% kadar air, 3,62% kadar abu, 25,53% lemak, 5,57% Protein, 45,46% karbohidrat, 7,86% kadar serat pangan.

**Kata Kunci :** Analisis Proksimat, *Cookies*, Serat Pangan, Tepung Porang dan Tepung Suweg

# **THE EFFECT OF THE COMPOSITION OF SUWEG FLOUR AND PORANG FLOUR ON PROXIMATE TESTS, DIETARY FIBER, AND ORGANOLEPTIC PROPERTIES OF COOKIES**

**Rizky Putra Maulana**

## ***Abstract***

*Diabetes Mellitus is a common disease in the world caused by impaired insulin secretion and the inability of tissues to respond to insulin and is characterized by an increase in blood sugar. Fiber has health benefits, especially in people with diabetes, such as being able to maintain glucose levels in the blood. The purpose of this study is to analyze the effect of the composition of suweg flour with porang flour on the proximate, dietary fiber, and organoleptic properties of cookies for patients with type 2 diabetes. This study was conducted by an experimental study with the Complete Random Design (RAL) method with two repetitions consisting of 5 levels of treatment on suweg flour with porang flour, namely F1 (0%:100%), F2 (25%:75%), F3 (50%:50%), F4 (75%:25%), and F5 (100%:0%). The data analysis used was Analysis of Variance (ANOVA) and continued with the Duncan Multiple Range Test (DMRT) test on the content of nutrients and dietary fiber. The Kruskal Wallis test was followed by the Mann-Whitney test on organoleptic parameters, and the De Garmo method to determine the selected formula. The results of the ANOVA test showed that there were differences in the average value ( $p = 0.000$ ) of dietary fiber content, protein content ( $p = 0.002$ ), fat ( $p = 0.000$ ), and carbohydrates ( $p = 0.010$ ). The results of Kruskal Wallis analysis at the level of the panelists preference for taste parameters ( $p = 0.012$ ), and texture ( $p = 0.000$ ) but there was no significant difference in the median values for colour parameters ( $p = 0.169$ ) and aroma ( $p = 0.466$ ). The best cookie formula is F5 which contains 19.8% water content, 3.62% ash content, 25.53% fat, 5.57% protein, 45.46% carbohydrates, 7.86% dietary fiber content.*

**Keywords :** Cookies, Food Fiber, Porang Flour , Proximate Analysis and Suweg Flour