



UNIVERSITAS ANDALAS

**UJI ORGANOLEPTIK DAN UJI KANDUNGAN GIZI *COOKIES* BUBUK
KULIT KAYU MANIS (*Cinnamomum Burmanii*) SUBSTITUSI TEPUNG
SORGUM (*Sorghum Bicolor L. Moench*) SEBAGAI INOVASI MAKANAN
RINGAN BAGI PENDERITA *DIABETES MELLITUS***

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FAKULTAS KESEHATAN MASYARAKAT

UNIVERSITAS ANDALAS

PADANG, 2025

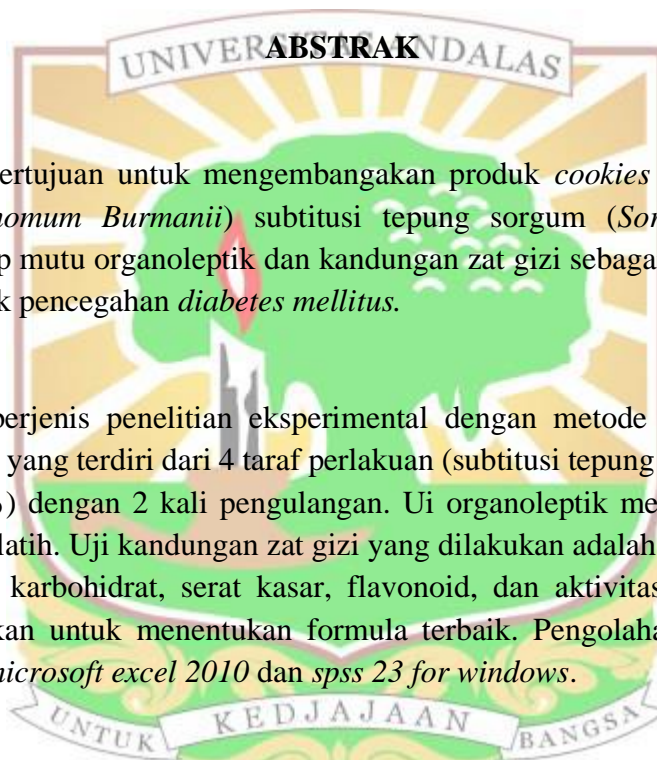
**FAKULTAS KESEHATAN MASYARAKAT
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UJI ORGANOLEPTIK DAN UJI KANDUNGAN GIZI *COOKIES* BUBUK KULIT KAYU MANIS (*Cinnamomum Burmanii*) SUBSTITUSI TEPUNG SORGUM (*Sorghum Bicolor L. Moench*) SEBAGAI INOVASI MAKANAN RINGAN BAGI PENDERITA *DIABETES MELLITUS*

x + 91 halaman + 26 tabel + 15 gambar + 14 lampiran



Tujuan

Penelitian ini bertujuan untuk mengembangkan produk *cookies* bubuk kulit kayu manis (*Cinnamomum Burmanii*) substitusi tepung sorgum (*Sorghum bicolor L. Moench*) teradap mutu organoleptik dan kandungan zat gizi sebagai inovasi makanan fungsional untuk pencegahan *diabetes mellitus*.

Metode

Penelitian ini berjenis penelitian eksperimental dengan metode Rancangan Acak Lengkap (RAL) yang terdiri dari 4 taraf perlakuan (substitusi tepung sorgum 0%, 25%, 75%, dan 100%) dengan 2 kali pengulangan. Uji organoleptik melibatkan 30 orang panelis semi terlatih. Uji kandungan zat gizi yang dilakukan adalah uji kadar air, abu, protein, lemak, karbohidrat, serat kasar, flavonoid, dan aktivitas antioksidan. Uji *ranking* dilakukan untuk menentukan formula terbaik. Pengolahan data dilakukan menggunakan *microsoft excel 2010* dan *spss 23 for windows*.

Hasil

Berdasarkan hasil total skor uji hedonik dan uji kandungan gizi, diperoleh F3 sebagai formula terbaik dengan karakteristik berwarna agak terang, beraroma harum, berasa manis, dan bertekstur rapuh. Kandungan zat gizi formula terpilih adalah kadar air 10,75%, kadar abu 1,6%, lemak 18,91%, protein 8,56%, karbohidrat 60,15%, serat kasar 0,93%, flavonoid 0,147 mEQ/gr, dan aktivitas antioksidan 10418,71 ppm.

Kesimpulan

Berdasarkan taraf perlakuan *cookies*, ditetapkan F3 sebagai formula terbaik dengan substitusi tepung sorgum 100%.

Daftar pustaka : 84 (2002 – 2024)

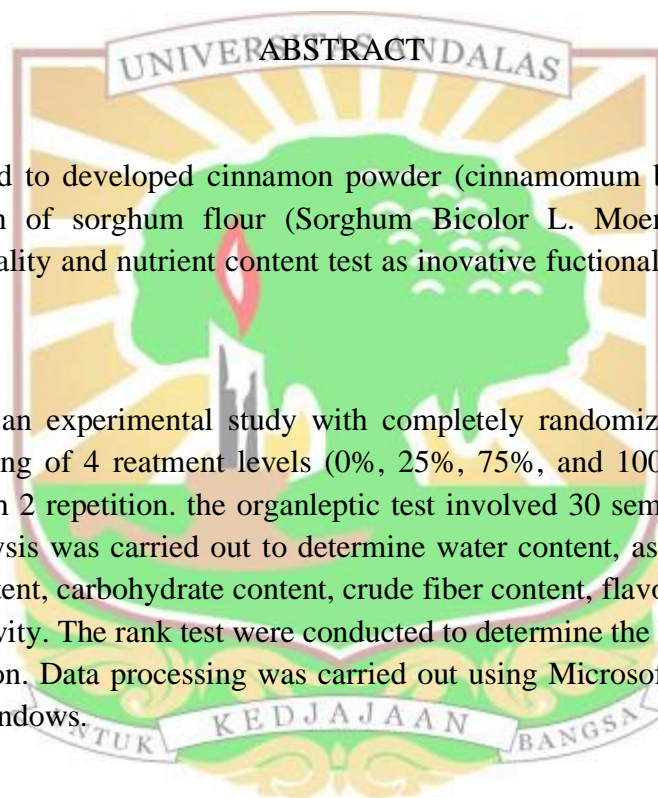
Kata kunci : *cookies*, *diabetes mellitus*, kayu manis, sorgum

Ungraduated Thesis, November 2024

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ORGANOLEPTIC AND NUTRIENTS CONTENT TEST OF CINNAMON POWDER (*Cinnamomum Burmanii*) COOKIES WITH SUBSTITUTION OF SORGHUM FLOUR (*Sorghum Bicolor L. Moench*) AS INOVATIVE SNACK FOR DIABETES MELLITUS PATIENT

x + 91 pages + 26 table + 15 pictures + 14 attachment



ABSTRACT

Objective

this study aimed to developed cinnamon powder (*cinnamomum burmanii*) cookies with substitution of sorghum flour (*Sorghum Bicolor L. Moench*) in terms of organoleptic quality and nutrient content test as inovative fuctional food for diabetes mellitus patient.

Method

this study was an experimental study with completely randomized design (CRD) method consisting of 4 reatment levels (0%, 25%, 75%, and 100% sorghum flour substitution) with 2 repetition. the organleptic test involved 30 semi-trained panelist. Proximate analysis was carried out to determine water content, ash content, protein content, fat content, carbohydrate content, crude fiber content, flavonoid content, and antioxidant activity. The rank test were conducted to determine the best formula from these formulation. Data processing was carried out using Microsoft Excel 2010 and SPSS 23 for Windows.

Result

Based on te results of the total score of the hedonic and nutrient content test, the best formula was F3 with the characteristics of cookies slightly light in color,sweet in taste, fragrent, and crunchy in texture. The nutritional content of the selected formula was 10,75% of water content, 1,6% ash content, 18,91% fat content, 8,56% protein content, 60,15% carbohydrate content, 0,93 crude fiber content, 0,147 mEQ/g flavonoid content, and 10418,71 ppm antioxidant activity.

Conclusion

Based on the levels of treatment of cookies, F3 was determined as the best formula with 100% sorghum flour substitution.

References : 84 (2002 – 2024)

Keyword : cinnamon, cookies, diabetes mellitus, sorghum