

COCONUT DRUGS FLOUR SUBSTITUTION COOKIES AS A LOWER GLYCEMIC INDEX INTERFERENCE FOR TYPE 2 DIABETES MELLITUS PATIENTS

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ABSTRACT

Diabetes mellitus cases in the world are expected to increase every year. Type 2 diabetes mellitus is diabetes that occurs due to peripheral insulin resistance and decreased insulin production. One way to manage type 2 DM is through medical nutrition therapy, namely diet management by selecting high-fiber carbohydrates. One food ingredient that is high in dietary fiber is coconut dregs which can be used as a functional food for cookies as a substitute for coconut dregs flour. The aim of this research is to determine fiber content, organoleptic properties, best treatment, nutritional composition, compare with SNI, fiber claims based on BPOM No. 1 of 2022, and the glycemic index value of cookies substituted for coconut dregs flour. The experimental design used in this research was a Randomized Group Design (RAK) with 4 formulations and 6 replications with treatments of coconut dregs flour: wheat flour, namely 10%:90%, 20%:80%, 30%:70%, and 40 %:60%. Based on the research results, the best treatment is treatment P2 with a proportion of 80% wheat flour and 20% coconut dregs flour. The results of the chemical analysis of the best treatment cookies were energy 434.17 kcal, protein content 14.99%, fat 11.37%, carbohydrates 67.97%, dietary fiber content 3.41 grams, ash content 1.62%, and water content 3.97%. Based on the results of calculating the glycemic index value, the best treatment has an IG value of 40.85 so it is included in the low glycemic index category.

Keywords: Cookies, Diabetes Mellitus Type 2, Glycemic Index, Coconut Dregs Flour