

# **SUBSTITUTION OF WHITE SORGHUM FLOUR IN MAKING STEAMED SPONGE CAKE ON ACCEPTABILITY AND GLYCEMIC LOAD IN PATIENTS WITH DIABETES MELLITUS**

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## **Abstract**

Diabetes mellitus is a condition that occurs in a person which is characterized by high levels of glucose in the blood due to a lack of insulin in the body or a disruption in insulin metabolism, both in total and relative amounts. This research aims to make steamed sponge cake with the substitution of white sorghum flour in order to determine the acceptability and glycemic load of this product.

This type of research is qualitative research with experimental methods. Meanwhile, the design of this research is descriptive research, namely research that is more directed at uncovering a problem. Descriptive test, this test is carried out with the aim of identifying and describing the product from the raw materials used, identifying the production process.

The results obtained from this research were steamed sponge cake with substitution of white sorghum flour and wheat flour 60%:40% (white sorghum flour: wheat flour). The ingredients used were white sorghum flour, wheat flour, cornstarch, margarine, eggs, palm sugar, cake emulsifier, vanilla, cake softener. The acceptability of steamed sponge cake to the public with results in DM sufferers has the greatest taste characteristics in the liking category at 52%, the texture is greatest in the liking category at 80%, the aroma in the liking category is 68%, the color is in the liking category at 68%. Elderly panelists without diabetes mellitus on taste characteristics in the very like category 80%, texture in the like category 100%, in aroma category like 60%, in color category like 80%.

The glycemic load of steamed sponge cake products with the substitution of sorghum flour and wheat flour produces the same category, namely medium but the glycemic index has different results. The sorghum flour substitution has a low glycemic index of 44% but the steamed sponge cake with wheat flour or without sorghum flour substitution has the same results. 70% high category.

**Keywords: Diabetes mellitus, Glycemic load, Glycemic Index, Steamed buns, White sorghum flour,**