

SUBSTITUTION OF WHITE SORGHUM FLOUR AND SEAWEED FLOUR IN WET NOODLES ON THE ACCEPTANCE AND GLYCEMIC INDEX OF MIXED FOODS FOR ELDERLY DIABETES MELLITUS

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ABSTRACT

Diabetes Mellitus (DM) is a chronic disease characterized by blood glucose levels exceeding normal and impaired metabolism of carbohydrates, fats and proteins caused by a relative deficiency of the hormone insulin. Sorghum is a dry land crop that has various potentials. Sorghum grain has nutritional qualities comparable to rice and corn and a higher protein content. The addition of seaweed flour is done to improve the texture of the noodles to make them more chewy and not break easily. Apart from that, seaweed flour also has a high fiber content. This research aims to make wet noodles by substituting white sorghum flour and seaweed flour to determine the acceptability and glycemic index of mixed foods.

This type of research is quantitative research with experimental methods.

The results of this research were wet noodles with the substitution of 40% white sorghum flour, 40% wheat flour, 10% seaweed flour and 10% tapioca flour. The ingredients used are white sorghum flour, wheat flour, seaweed flour, tapioca flour, eggs, salt and water. The processing method is by boiling. Receptivity with 30 panelists consisting of 15 elderly people with diabetes mellitus and 15 healthy elderly people. In elderly people with diabetes mellitus, the color indicator is the largest in the like category, 60%, the aroma is in the like category, 73%, the taste is in the really like category, 42%, the texture is in the like category, 73%. Meanwhile, in healthy elderly people, the color indicator is the highest in the 47% category, the aroma category is 87% liked, the taste is in the like category 53%, the texture is in the like category 53%.

The glycemic index of mixed wet noodle food with substitution of sorghum flour and seaweed produces the same category, namely medium.

Keywords: Diabetes Mellitus, Glycemic Index of Mixed Foods, Wet Noodles, White Sorghum Flour