

Making Milk Pie Substitution Breadfruit Flour as an Alternative Snack to Prevent Hypertension

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ABSTRACT

Hypertension is a non-communicable disease characterized by increased blood pressure in the arteries. Non-pharmacological therapy that can be given to hypertension sufferers is a diet high in potassium. This research aims to examine making milk pie with breadfruit flour as an alternative snack to prevent hypertension. The research design used was a Completely Randomized Design (CRD) with 5 treatments and 5 replications with treatments P1 (90% wheat flour and 10% breadfruit flour), P2 (80% wheat flour and 20% breadfruit flour), P3 (70% breadfruit flour), P4 (60% wheat flour and 40% breadfruit flour), and P5 (50% wheat flour and 50% breadfruit flour). Based on the research results, it shows that the more substitutions for breadfruit flour, the higher the potassium content in milk pie, namely at P5 with a potassium content of 380.46 mg/100 grams. The results of the research on breadfruit flour milk pie had an effect or difference ($P < 0.05$) on organoleptic results, namely hedonic (breadfruit taste, color, aroma and texture) and hedonic quality (breadfruit taste, color, aroma), while there was no hedonic quality of texture difference ($P > 0.05$). The best treatment in this study was Treatment P2 (80% wheat flour and 20% breadfruit flour) with the taste of breadfruit tending to be weak, the color tending to be bright brown, the aroma tending to be typical of strong breadfruit, and the texture tending to be crunchy and the overall level of liking was favored by the panelists. The serving size for one consumption is 66 grams or 2 milk pies with an energy content of 307 kcal, 9 grams of protein, 17 grams of fat and 28 grams of carbohydrates.

Keywords: *Hypertension, potassium, milk pie, breadfruit*