Sponge Cake Making with Pumpkin Flour Substitution as Functional Food Source of Fiber

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Degenerative diseases are non-communicable diseases with health conditions that experience a gradual decline in organ function due to the aging process or an unhealthy lifestyle. One of the treatments for degenerative diseases is consuming functional foods such as foods that are sources of fiber because they contain essential content that can have a positive impact on a person's health if consumed regularly in a daily diet menu. The pattern of dietary fiber consumption in Indonesia based on the Basic Health Research is still low at 95.5%. The purpose of this study was to examine the characteristics of *sponge cake* formulations with pumpkin flour substitution as a functional food source of fiber. This type of research is analytical experiment with a research design used, namely a non-factorial Completely Randomized Design (CRD). In this study, there were 5 treatments with a ratio of wheat flour and pumpkin flour used, namely P1 = 45:55, P2 = 40:60, P3 = 35:65, P4 = 30:70, and P5 = 25:75. The results showed that there were significant differences in the fiber content and expansion power of pumpkin *sponge cake*. Based on the determination of the best treatment, the best treatment results were obtained in the fifth treatment, namely pumpkin *sponge cake* with a formulation of wheat flour and pumpkin flour is 25:75. The characteristics of the pumpkin *sponge cake* produced based on the best treatment were dark yellow in color, strong pumpkin aroma, strong pumpkin taste, soft and slightly smooth texture, and contained 4.64% dietary fiber. The resulting expansion power is quite small, which is 10.6%. Based on the results of the hedonic organoleptic test, the level of panelists' preference for the characteristics of the pumpkin sponge cake in the best treatment is like.

Keywords: Characteristics, Expansion power, Fiber, *Sponge cake*, Yellow pumpkin flour.