

Utilization of Arrowroot Flour (*Maranta arundinaceae*) and Agar Flour as Raw Material for High Fiber Klemben Cake for High Patients with Hypercholesterolemia

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ABSTRACT

High cholesterol levels have a strong relationship with the pathology of arterial atherosclerosis - vital arteries that can increase the risk of various dangerous diseases such as cerebrovascular disease, cardiovascular disease and peripheral vascular disease. One of alternative to lower cholesterol levels is with foods that contain fiber. Utilization of arrowroot flour and agar flour to aim for fiber enrichment. One of the desserts that many people interested in is dry sponge. Modification of dry sponge with Garut Flour and Agar Flour is expected to be one of the dessert that can meet the needs of fiber for all circles of ages. The aims of the research are to identify the utilization of arrowroot flour (*Maranta arundinaceae*) and agar flour as a raw material for making high fiber dry sponge for people with hypercholesterolemia. The experimental design used was Completely Randomized Design. This study uses One Way Anova test and Duncan test and if the data is not normally distributed, will be performed non parametric statistical test by using Kruskal Wallis test and followed by Mann Whitney test. Determination of formulation in this research is by doing different formulation of Garut Flour with agar flour that is A0 = 100%: 0%, A1 = 97%: 3%, A2 = 94%: 6%, A3 = 91%: 9%, A4 = 88%: 12%, A5 = 85%: 15% and in each treatment repeated 4 times. The results showed that the content of dry sponge fiber showed significantly different between treatments hedonic organoleptic results and hedonic quality have a significant effect on taste and are not significantly different from the color, aroma and texture of the dry sponge. The best treatment was found in treatment A0 with formulation 100% arrowroot flour : 0% agar flour. Provision of dried sponge as a high-fiber dessert is about 2-3 pieces a day.

Keywords: Hypercholesterol, Fiber, Sponge dry