ABSTRACT

Obesity is one of the nutritional problems of children, can be caused by consumption of high calorie foods like ice cream. Child obesity needs ice cream modification with low in energy and add fiber. The purpose of this study analyzed the effect of adding various fruits fibrous waste to acceptance quality, nutritional value and economic value of healthy ice cream as child obesity's alternative food.

The type of research were true and quasi experimental by randomized block design with 6 repetitions. The best acceptance of ice cream, melt velocity, nutritional value, and economic value used descriptive analysis techniques. While Statistical analysis was used to determine the difference of acceptance of healthy ice cream by Friedman Test and Wilcoxon Sign Rank Test at α = 0.05.

Hedonic test showed that the most preferred of healthy ice cream was apple ice cream, mean 3.2 for mothers panelists and taste score 2.8 for children panelist. Papaya ice cream melt the fastest (41.3 minutes) and guava ice cream melt the latest (44.1 minutes), nutrient content of apple ice cream every 100 g were energy 189.1 kcal, carbohydrates 21.4%, protein 3.7%, fat 9.4%, and fiber 0.1%. The lowest food cost were apple ice cream, papaya and combination of apple and papaya (IDR 1063.46). Friedman test of panelist results showed difference on the characteristic color (p = 0.010), smell (p = 0.000), and taste (p = 0.000). While the panelists children showed differences on characteristic taste (p = 0.000).

Healthy ice cream can be used as child obesity’s alternative food. The composition of healthy ice cream need decrease the energy sources and adding of apple extract in the next experimental.

Key words: obesity, ice cream, fiber