

Making Purple Sweet Potato Ice Cream with the Addition of Butterfly Pea Flower Essence as a Snack Containing Antioxidants

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ABSTRACT

Antioxidants are compounds that work by inhibiting the oxidation process, namely by capturing free radicals and reactive molecules that can damage cells. The body requires antioxidant intake from outside the body, in order to maintain the body when experiencing oxidative stress which is feared that the amount of free radicals is more dominant than the amount of antioxidants. The purpose of this study was to examine the manufacture of purple sweet potato ice cream with the addition of butterfly pea flower extract as a snack containing antioxidants. The observation parameters of the study consisted of analysis of antioxidant activity, organoleptic, best treatment, nutrient content, comparison with SNI ice cream (01-3713-2018), serving size, and nutritional value information. The samples used were 6 samples with 4 repetitions. The research method used RAL. The treatment of butterfly pea flower extract concentration was P1 = 1.6%, P2 = 2.6%, P3 = 3.6%, P4 = 4.6%, P5 = 5.6%, and P6 = 6.6%. The results of this study showed that the highest antioxidant activity level was in the P6 treatment of 58.39%, and the lowest was in the P1 treatment of 41.53%. There was a difference in antioxidant activity levels between treatments (sig < 0.05). The best treatment in this study was the P5 treatment with antioxidant activity of 54.70% and IC50 of 82.08 ± 0.08 ppm, the organoleptic test results were a rather bright purple color, strong purple sweet potato aroma, sweet taste, soft texture and overall the panelists liked the purple sweet potato ice cream and butterfly pea flower extract products, while for the nutritional content the water content was 59.39%; ash content 0.88%; fat content 3.31%; protein content 3.36%; carbohydrate content 33.06%. The serving portion for a snack in one meal is 100 grams, with a total energy content of 175 kcal (7%), 3 grams of protein (6%), 3 grams of fat (5%), and 33 grams of carbohydrates (10%).

Keywords: *Antioxidant activity, butterfly pea flower, ice cream, snacks, purple sweet potato.*