ABSTRACT

FITRIANI AZIS RAMADHANI. Formulation and Product Development of Spicy Mixed Vegetable Ice Cream (Es Krim rujak multisayur) as A High Provitamin A Snack Alternative. Under direction of AHMAD SULAEMAN and EDDY SETYO MUDJAJANTO

Spicy Mixed Vegetable Ice Cream (Es krim rujak multisayur) is an alternative to the usual ice cream which is made from vegetable products that can be used in an effort to increase vegetable consumption of Indonesian population. This ice cream has a unique flavor. The vegetables used were carrot (Daucus carota L), tomato (Solanum Lycopersicum) and katuk leaves (Capsicum frutescens L).

The general objective of this study was to develop and evaluate the physico-chemical and organoleptic characteristics of the ice cream products made from vegetables (Spicy Mixed Vegetable Ice Cream). The research method was divided into four stages. There are trial and error process, formulation of materials process, manufacturing processes and packaging of ice cream, organoleptic test, characteristics and nutrient content analysis, and calculation of energy amount as well as the analysis of vitamin A contribution in its requirement for children, adolescents and adults.

The data obtained was processed by Microsoft Excel 2007 and analyzed with SPSS 17 statistical program for Windows. Formulas which were chosen based on the hedonic test of the ice cream were, F0 (0:0:0), F2 (1:2:0.5), F5 (2:2:0.5), F6 (2:3:0.5), F8 (3:2:0.5), and F9 (3:3:0.5).

Contribution of vitamin A per serving size of ice cream (85 grams) was more than 20% of the recommended reference Label Nutrition (ALG) at 600 RE. Therefore, the ice cream product can be categorized as high in provitamin A.

Based on hedonic test, nutrient content and cost analysis, it was shown that F9 was the best formula of Spicy Mixed Vegetable Ice Cream. Price of ice cream per serving size of products (85 grams) was Rp 3522.4, with the price per unit of vitamin A being Rp 12.9. The amount of other nutrients (%wet basis) contained within the F9 were, 3.14% protein, 10.52% fat, 21.16% carbohydrate, total fiber of 8.20% and 192 kcal energy.

Keyword: Ice Cream, provitamin A, vegetable, carotene