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Use of Green Coconut Pulp as Cream, Milk, Stabilizer and Emulsifier Replacer in Germinated Brown Rice Ice Cream

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Abstract : The aim of this study was to determine physicochemical and sensory properties of germinated brown rice ice cream as affected by replacement of cream, milk, stabilizer, and emulsifier with green coconut pulp. Five different formulations of ice cream were performed. Regular formulation of ice cream consisted of GBR juice, milk cream, milk powder, stabilizer, emulsifier, sucrose and salt. Replacing of cream, milk, stabilizer, and emulsifier with coconut pulp resulted in an increase in viscosity and overrun, but a decrease in hardness, melting rate, lightness (l*) and redness (a*). However, there was no significant difference among all formulations on any sensory attributes. The results also showed that the ice cream with replacement of coconut pulp contained less fat and protein than those of the regular ice cream. The findings suggested that green coconut pulp can be used as alternative ingredient to replace fat, milk stabilizer and emulsifier even in a high carbohydrate ice cream formulation.

Keywords : ice cream, germinated brown rice, coconut pulp, milk, cream
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