

Carrot as a Functional Ingredient in Ice Cream

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Objective

In recent times, consumers demand for foods with natural additives has been dramatically increased. The production of ice cream from using vegetables like carrot with good sensory quality will be more economical and acceptable to the consumers. Incorporation of carrot in ice cream is a novel approach in this direction. The objectives of the study included selection of most suitable form/s of carrot and the level of incorporation of carrot in different forms and develop a method for manufacture of acceptable quality carrot ice cream.

Methodology

Two varieties of carrot available from local market were screened for their suitability for preparation of processed carrot viz. *Pusa Kesar* and *Pusa Rudhira*. Methods for processing the forms of carrot viz. cubes, shreds and puree were standardized. The most suitable form of carrot (*Pusa Rudhira*) for preparation of carrot ice cream was a combination of processed carrot shreds and puree. Ice cream was prepared using a combination of selected form viz. shreds and puree using different combination levels. The data were analyzed using Response Surface Methodology (RSM).

Result and Discussion

The optimized process suggested by statistical package consisted of addition of processed shreds at 6.73 % and processed puree at 5.91 %. The mean score for fat (%), total solids (%), melting resistance (%), ash (%) and acidity (% lactic acid) were 10.7, 39.5, 49.7, 0.94 and 0.186 respectively. The carrot ice cream developed by optimized process was found to contain 5.576 mg/ 100 g β -carotene, 0.014 % crude fibre and 0.3 mg/ 100 g Vitamin C.

Conclusion

It is concluded that carrot can be incorporated as a functional ingredient to obtain a highly acceptable ice cream with better nutritional values.

ABSTRACT



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