

Use of Basil (Tulsi) as Flavouring Ingredient in the Manufacture of Ice Cream

Vishal Trivedi, J. P. Prajapati, C. N. Dharaiya and Suneeta V. Pinto

Department of Dairy Technology, SMC College of Dairy Science, AAU, Anand-388110
Email: jashuprajapati@gmail.com

Introduction

Ice cream is one of the most consumed dairy products in the world. Mostly, ice cream available commercially is generally poor in natural flavours and colours. Recent trend of consumer expectation is to explore the possibility of improving the nutritional attributes of ice cream using ingredients with health benefits, focusing on natural antioxidants, natural colorants, flavourings, and freedom from synthetic additives. Also, such products are commonly referred to as “natural” because their source.

Objective

1. To optimize the rate of addition of the basil powder and to standardize the process for basil ice cream.
2. To assess product for its physico-chemical characteristics, sensory attributes and microbiological quality.

Methodology

Ice cream was prepared using 5 different level of basil powder i.e. 0, 0.5, 1.0, 1.5 and 2% designated as P0, P1, P2, P3 and P4 respectively. The basic ice cream mix had 12.0% milk fat, 11.5% MSNF, 15.0% sugar, 0.15% sodium alginate and 0.15% glycerol monostearate. The whole experiment based on 4 replications (i.e. totally 20 lots of ice cream) were statistically analysed by CRD design.

Result and Discussion

Addition of basil powder resulted in a progressive decrease in fat and pH, while there was an increase in protein, total carbohydrate, total solids, ash, melting resistance and acidity. Addition of basil powder had no significant difference in overrun of ice cream. Among all samples, ice cream made with 1% addition of basil powder (P2) had the highest total score (89.48) as compared to all other experimental samples which was also found to be statistically significant. Based on the consumer acceptance study carried out for this new variety of ice cream, it was revealed that 84.0 per cent respondents (out of 120) rated basil powder ice cream as ‘Like very much to like extremely’.

Conclusion

Based on sensory scores it can be concluded that good quality basil ice cream can be obtained from standardized formulation with addition of 1% basil powder. This frozen delicacy product also conformed to the FSSAI requirements for plain ice cream.

