

DEVELOPMENT OF JACK FRUIT (*Aartocarpus heteropyllus*) AND TAMARIND
(*Tamarindus indica*) FLAVOURED ICE CREAM USING CHEESE WHEY

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Cheese whey is a byproduct produced during the manufacturing process of cheese. It is an excellent source of protein, mineral and lactose. However, 90% of total volume of milk used in cheese manufacturing is wasted as whey. Thus, there is a great interest growing throughout the world in utilizing cheese whey as a component in product development. Therefore, present study was conducted at Milco factory, Digana to develop ice cream using cheese whey and to incorporate jack fruit (Waraka) and Tamarind fruit pulp for the value addition. Preliminary study was conducted to determine the optimum time - temperature combination for the pasteurization of cheese whey. (Since it become sour with the time, giving an unpleasant flavour and odour, it was tested to identify the best temperature to dissolve milk powder in cheese whey). Before developing ice cream from whey, jack fruit (waraka) and tamarinds fruit pulps were prepared. Eight types of ice cream were prepared for testing by incorporating different levels of jack fruit and tamarinds pulp. The levels of Jack fruit pulp incorporated were 5%, 10%, 15%, and 20% by weight of ice cream. Tamarinds fruit pulp were incorporated at 5%, 7.5%, 10%, and 12.5% by weight of ice cream. Vanilla flavoured whey ice cream was selected as the control. Ice cream samples were evaluated organoleptically using consumer panelists consisting of 30 members. Panelists were asked to give scores according to the appearance, flavour, body and texture, melting quality and overall acceptability. The data were analyzed using MINITAB computer package. The optimum time temperature combination for the pasteurization of cheese whey was 80 °C / 30min and the best temperature to dissolve

mile power in cheese whey was 55 - 60 ° C, in the mix making tank. According to the results, it was concluded that 15% of jack fruit (waraka) incorporated whey ice cream and 7.5% tamarinds incorporated ice cream were the most acceptable products.

Key words: Whey, Ice cream, Jackfruit, Tamarind