

Development of a Milk Based Condensed Curd

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The dairy sector requires value added and quality enhanced dairy products. Therefore, this study was conducted to develop a value added condensed curd from fresh milk. There were 20 undergraduates (semi-trained panelists) used to evaluate the product sensory characteristics using the descriptive analysis method. Acceptability of the prepared sweetened buffalo curd (T_1) and cow milk curd (T_2), were evaluated sensorily (ST_1) compared to the traditional cow milk curd (T_3). Accordingly, T_1 was the most preferred ($p < 0.05$) curd. Sugar levels: very low (L_1), low (L_2), medium (L_3), and high (L_4) were tested sensorily (ST_2) in T_1 to identify the most preferred sweetness level, which was L_3 . Third sensory test (ST_3), was conducted using T_1L_3 to check the most preferred texture due to three condensation levels of fresh milk; low (C_1), medium (C_2), and high (C_3), where C_2 had the most preferred texture. The non flavoured curd was sensorily much preferred than the flavoured curd with strawberry (V_1), vanilla (V_2), and chocolate (V_3) flavours. According to the proximate analysis, the most preferred curd contained $5.1\% \pm 0.4\%$, protein, $4.4\% \pm 0.2\%$ fat, 126.3 kcal/100g energy, 0.1 % ($\pm 0.05\%$ Ca) and $71.4\% \pm 1.2\%$ moisture. The shelf life of the $T_1L_3C_2$ was over 14 days under refrigerated conditions with titratable acidity 0.83%. The shelf life was extended over 28 days with a titratable acidity of 0.85% under refrigerated conditions by adding Potassium sorbate as the preservative. The market survey conducted on the new product using 300 undergraduates (untrained panelists) at the university premises revealed that a sweetened condensed curd with non flavor, a medium level of sweetness and condensation that can be successfully prepared by buffalo milk was the most acceptable condensed sweet curd for dairy customers.

Keywords: Buffalo milk, Dairy products, Sweet curd, Sensory analysis