

DEVELOPMENT OF NATURAL MANGO LAYERED BUFFALO CURD D.K.J.K. Perera, C.S.

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Curd (*Meekiri*) is a popular fermented milk product in South Asia obtained by coagulation of buffalo milk using the lactic acid bacteria. It is commonly consumed with syrups and substitution of these syrups with natural fruit pulp would be much healthier and may be attractive to some consumers. This study was conducted to develop a natural mango layered buffalo curd. Based on the preliminary trials, 7:3 ratio was selected as the curd: mango layer proportion when fill the cup (mango layer on top). Mango pulp layers were developed by using gelatin, sugar and water and five different levels of mango pulp as follows: T₁ (no mango pulp, but with mango emulsion colouring), T₂ (25% mango pulp), T₃ (50% mango pulp), T₄ (75% mango pulp) and T₅ (95% mango pulp). Treatments were arranged in Completely Randomized Design (CRD) with three replicates. Sensory evaluation was carried out to find the best treatment with 15 untrained panelists using five point Hedonic scale. Shelf life of the selected mango layered curd was determined by chemical analysis (pH and acidity; three days interval for a period of one month) and microbial tests (coliform and yeast & mold counts; seven days interval for one month) during storage

at 4 °C. According to the sensory evaluation T₃ was selected as the best combination and there were significant differences in flavor ($p=0.032$) and overall acceptability ($p=0.004$) among the treatments. pH value of T₃ samples were varied from 3.91 ± 0.01 to 4.21 ± 0.02 and acidity was increased from $0.65\pm 0.07\%$ to $1.5\pm 0.1\%$ during storage. Yeast and mold counts exceeded the Sri Lanka standard (SLS) after one week of production. This study revealed that the possibility of incorporation of mango pulp into buffalo curd as a healthy alternative to syrups.

Key words: Buffalo curd, Fruit layers, Mango pulp