

ABSTRACT

Milk fermentation is one of the oldest methods which is mainly done for extending the shelf life of the milk products. Since milk contains no dietary fiber and orange (*Citrus aurantium*) peel is high in dietary fibre, so an attempt was made to increase the dietary fiber content in misti dahi (sweet curd) by incorporating orange peel powder in misti dahi. Misti dahi was prepared by adding high dietary fiber orange peel in different levels viz. 0%, 0.5%, 1%, 1.5% and 2% and its affect on the curd pH, syneresis, water activity, moisture content, texture, color and sensory properties was studied. From the study it was found that misti dahi with 0.5% added peel gave better acceptability in terms of sensory qualities. So, 0.5% added peel dahi sample was taken for storage studies. Misti dahi was stored in three temperatures viz. refrigerated temperature (7°C), room temperature (25°C) and incubated temperature (37°C) for 8 days. During storage, samples were analyzed for getting the organolaptic qualities, pH value, water activity, syneresis, color and textural properties. Organolaptic properties, water activity and pH value decreased and syneresis increased in dahi stored at all temperatures. The pH value of fortified misti dahi decrease from 5.16 to 4.99 at 7°C storage temperature, 5.10- 3.93 at 25°C and 4.89-3.89 at 37°C. Storage conditions did not cause any changes in color values. Textural properties like firmness increased at 7°C storage temperature but at 25°C and 37°C temperature storage firmness decreased. Other textural properties like stickiness, consistency and adhesiveness increased. Orange peel powder can be successfully added to misti dahi to increase its functionality.

Key words: misti dahi, orange peel, dietary fiber, syneresis, sensory properties.