

Development of Aloe Vera (*Aloe barbadensis* Mill) Cubes-Incorporated Set Yoghurt

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This study was conducted to investigate the possibility of developing set yoghurt incorporated with treated Aloe Vera cubes and to evaluate the physicochemical, microbial and sensory quality parameters of the product. Aloe Vera cubes treated with sugar syrup were incorporated before the incubation process of yoghurt preparation. Yoghurts prepared with three differently treated Aloe Vera cubes (T₁ - heated Aloe Vera cubes at 60 °C and soaked in sugar syrup for two days, T₂- non-heated Aloe Vera cubes soaked in sugar syrup for two days, T₃ - untreated Aloe Vera cubes) were compared with the control sample arranged in Complete Randomized Design. Products were stored at 4 °C for 21 days and different physicochemical and microbial properties such as pH, moisture, titratable acidity, yeast and mould count were tested at 01, 07, 14 and 21 days of storage. A sensory evaluation was done with 35 untrained panelists to get the consumer attributes. Data were analyzed using one-way Analysis of Variance in Microsoft excel. Results revealed that, pH and titratable acidity were significantly different among the products (p<0.05). The highest yeast and mould counts were presented at the treatment with untreated Aloe Vera cubes (T₃). Sensory analysis suggested that the treatment with heated Aloe Vera cubes at 60 °C and soaked in sugar syrup for two days (T₁) had the best sensory qualities and it complies with the standards of Sri Lanka Standards Institute up to 14 days of storage under 4 °C. The study concludes that, the set yoghurt incorporated with heated Aloe Vera cubes at 60 °C and soaked in sugar syrup for two days had the best qualities and can be stored up to 14 days at 4 °C without any quality deterioration.

Keywords: Aloe vera, Yoghurt, Storage, Sensory analysis