

Introduction of the potential to develop pumpkin (*Cucurbita maxima*) based food products

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Abstract

Pumpkin is one of the food items recommended by dieticians for controlling cholesterol and reducing weights. Although the surplus production is available in the market, the demand for the product is low. A study was conducted to develop pumpkin based food products to face the said problem, to increase palatability of pumpkin and to improve vegetable consumption among Sri Lankans. Two pumpkin drinks; smoothie and ready to serve drink (RTS) and puree were produced. Pumpkin smoothie was prepared by adding two milk types; Soy milk and cow milk and yoghurt to the pumpkin pulp. Ready to serve drink of pumpkin was prepared by pumpkin pulp, water, sugar and citric acid in different combinations. Pumpkin puree was directly extracted pulp of the pumpkin. The organoleptic properties of the smoothie and drink including color, taste, odor, texture and overall acceptability were assessed by 15 member semi trained panelists, through five point hedonic scale and analyzed using Kruskal-Wallis One-Way ANOVA Test. Parameters of physiochemical properties such as TSS, °Brix, pH, % Acidity and microbiological examination of bacterial counts, yeast and mold were measured for storage period of 2 months. RTS, Smoothie and puree showed 8%, 11% and 4% total soluble solids, acidity of all products were <0.1% and pH were 4.1, 5.6 and 4.05 respectively showed SLS recommended results with significant sensory attributes. Microbiological analysis was also revealed that products were safe for consumption for two months period of storage life. The production cost of 1 l of pumpkin smoothie, ready to serve drink and puree did not exceed Rs. 100.00, 50.00 and 80.00 respectively even at the end of the season. Therefore, pumpkin smoothie, ready to serve drink and puree have great potential to be popularized among the health concerned consumers.

Key Words: Food products, Organoleptic properties, Pumpkin