Study on Preparation of Composite Vegetable Squash of Tomato and Pumpkin

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The study was conducted with an objective to develop best formulation of composite squash of tomato and pumpkin by determining the physico-chemical, microbial and sensory qualities. Different proportion of tomato and pumpkin were used to prepare five formulations of composite vegetable squashes vz: T1 - 100% tomato, T2-100% pumpkin, T3-25% tomato+75% pumpkin, T4- 50% tomato+50% pumpkin and T5- 75% tomato+25% pumpkin. Physico-chemical analysis, sensory evaluation and microbial analysis were conducted to these formulations . Physico-chemical analysis of freshly made formulations of composite vegetable squashes of tomato and pumpkin showed that titrable acidity and ascorbic acid were increased with % of tomato. Total Soluble Solids and Total Sugar were increased with an increased amount of tomato and pumpkin, the pH reduced significantly ($p< 0.05$) with an increase in the concentration of tomato juice. The sensory analysis revealed that there were significant ($p<0.05$) differences for the organoleptic characters between the formulations. According to Duncan's Multiple Range Test, T4 had shown highest value of rankings in colour, taste, aroma, nature and overall acceptability. Microbial studies showed no microbial colonies in all freshly made composite squash formulations. Based on the results of physio-chemical characteristics, sensory attributes and microbial test, the composite squash of tomato and pumpkin with 50% tomato and 50 % pumpkin was selected as best formulation.

Keywords: Formulation, Composite , Physico-chemical, Microbial, Sensory.