

**DEVELOPMENT AND QUALITY EVALUATION OF FOOD SPREAD
FROM PUMPKIN (*Cucurbita maxima*)**

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Industrial usage of pumpkin (*Cucurbita maxima*) is minimum and it has a high postharvest loss. However, pumpkin puree is rich in dietary fibre, vital vitamins and antioxidants. This study was aimed to develop a food spread from pumpkin with the incorporation of spices (pepper, cinnamon, nutmeg, and mustard) and peanut cream. Four recipes were prepared by changing the percentages of pumpkin puree (T₁=35%, T₂=45%, T₃=60%, T₄=70%) with constant spices levels. Sensory evaluation was conducted using 30 semi-trained panellists adopting Friedman test to select the best recipe. The selected recipe (T₃) was re-produced and stored at ambient and refrigerated (8-10°C) conditions and checked for proximate composition at the initial stage. Quality parameters [titratable acidity (TA), pH, total soluble solids (TSS)] and microbial count of the product were assessed in two-weeks intervals for stored samples. The final product contained 55.64 ± 0.34% moisture, 25.10 ± 0.62% fat, 9.34 ± 0.82% ash, 5.73 ± 0.61% fibre and 3.3 ± 0.12% protein on wet basis. Initial TA, pH and TSS of the product were recorded as 1.50% ± 0.1, 5.98 ± 0.02 and 70 °Brix, respectively. After one month of storage, TA and pH of the refrigerated sample were 2.10% ± 0.15 and 5.40 ± 0.07 respectively and they were 4.70% ± 0.1 and 4.75 ± 0.02 respectively in the sample stored at room temperature. However, TSS remained constant in both storage conditions. Total plate count (TPC) and yeast and mould count (YMC) were 6.141 × 10² and 2.884 × 10³ CFUg⁻¹ respectively in the sample stored at the refrigerated condition for one month. However, samples stored at room temperature for 3 weeks contained TPC and YMC of 1.890 × 10⁵ and 1.671 × 10⁵ CFUg⁻¹ which exceed the maximum allowable levels. This study revealed that pumpkin could be used in 60% (w/w) in preparation of food spread and the developed product could be preserved at the refrigerated condition for a period of one month without significant quality deterioration.

Keywords: Food spread, Pumpkin, Quality evaluation, Spices