DEVELOPMENT AND EVALUATION OF QUALITY ATTRIBUTES OF FROZEN CASHEW CURRY

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A ready-to-prepare frozen cashew curry was developed as a convenient alternative to the traditional cashew curry preparation, using commercially available dehydrated cashew, coconut milk, and spices as the major components. Hence, three cashew curry formulations were prepared using different coconut milk-to-water ratios (1:5, 1:2, and 2:1 (v/v)). Initially, cashews were boiled in 100°C water at a ratio of 1:3 (w/v) for 30 min with a part of spices. The best formulation was selected through a sensory evaluation with the 30 student-oriented panel. The most preferable product was vacuum-packed using Nylon/LLDPE pouches and blast frozen at -40°C for 4 h. Final product was stored under freezing conditions (-18±1°C) and subject to the proximate analysis of pH, colour values, and energy value. Further, shelf life of the product was determined under accelerated storage conditions at elevated temperature (4±1°C) and controlled humidity (65%). According to the results, the coconut milk-to-water ratio 2:1 sample showed a higher significant preference (p < 0.05), and it was selected as the best formulation. The moisture content, crude protein, crude fibre, crude fat, ash content, carbohydrate, and pH, values of the product were $46.16\pm0.02\%$, $9.89\pm0.01\%$, $1.8\pm0.03\%$, $44.82\pm0.08\%$, $5.19\pm0.03\%$, 16.89±0.1%, and 6.3±0.05, respectively. The L*, a*, and, b* colour values of the product were 44.6 ± 1.96 , 10.9 ± 0.17 , and 38.5 ± 0.06 , respectively, while the energy value was 510.50±0.02 kcal 100g⁻¹. Further, the accelerated shelf life test results revealed that organoleptic properties (appearance and odour) in the tested sample remained unchanged. No significant deviations (p < 0.05) were shown in the results of pH, and aerobic plate count (<10⁴ cfu g⁻¹). In conclusion, the product is suitable for commercial preparation. According to the accelerated shelf life, the product can be stored under frozen conditions (-18±1°C) for up to 12 months without any quality deterioration.

Keywords: Blast frozen, Cashew curry, Ready-to-prepare, Shelf life