

ABSTRACT

Production of avocado (*Persea americana*) guacamole and determination of select quality attributes

Giselle Alicia Ramtahal

Pulp from avocado (*Persea americana*) was processed into a puree by blending. During blending, local indigenous herbs and spices were added as flavouring ingredients. The resulting guacamole was then stored at 5°C for two weeks. Physical, chemical and microbial analyses were performed on fresh avocado pulp. Physical, chemical, microbial and organoleptic analyses were performed on freshly-prepared guacamole and stored guacamole, until the latter was deemed unfit for human consumption by a semi-trained panel. The results revealed that fresh avocado pulp contains moisture (83.5%), ash (1.3%), protein (1.6%), fat (9.2%), carbohydrate (4.4%), fiber (1.6%), vitamin C (7.8 mg/100g), and a pH of 6.7. Freshly-prepared guacamole contains moisture (83.8%), ash (1.3%), protein (1.6%), fat (9.2%), carbohydrate (4.4%), fiber (1.6%), vitamin C (4.2 mg/100g) and a pH of 6.0. During storage, the moisture content, consistency, total soluble solids and total titratable acidity (as citric acid) increased, but the vitamin C content of guacamole decreased. The colour of the guacamole also darkened during storage as evidenced by a decrease in the “L”, “a” and “b” values. Sensory evaluation indicated that the mean storage period (5°C) for the guacamole was six (6) days. The fresh avocado pulp, the freshly-prepared guacamole and the stored guacamole contained bacteria, yeasts and molds. However, the pathogens *Staphylococcus aureus* and *Salmonella* were absent.

Keywords: Guacamole, avocado, quality, attributes.