Frying Performance of Palm Based Solid Shortening
Muhammad Nor Omar, Miskandar Mat Sahri and Nor Aini Idris
Malaysian Palm Oil Board, Kuala Lumpur, Malaysia

The frying experiment was carried out using a Frymaster open fryer. The palm-based solid shortening and an imported shortening were used to fry French fries for 3.5 min at 180 °C. An intermittent frying experiment was performed for 8 hr per day over 5 consecutive days. 14 batches of the French fries, with every batch weighing between 0.3 kg, were fried daily with an interval of 30 minutes between batches. The frying oil sample was taken daily after the oil was filtered. The oil sample was purged with N₂ and stored in a freezer prior to analysis.

After 5 days of frying, the palm-based solid shortening gave the total polar content (TPC) and the total polymeric material (TPM) of 11.6 and 1.46% respectively, whilst the imported shortening contained TPC and TPM of 17.4 and 1.99% respectively. It was found that the frying quality of the palm-based solid frying shortening was better than the imported shortening in terms of total polar content.