Comparison of the frying performance of refined, bleached and deodorized palm olein and coconut oil

ABSTRACT

The frying performance of refined, bleached and deodorized palm olein (RBDPO) and refined, bleached and deodorized coconut oil (RBDCO) was compared in this study. The oils were studied during intermittent frying of potato chips at 180C for 5 h/day for 5 consecutive days. The indices used for assessment of frying performance of the oils were fatty acid composition (FAC), peroxide value (PV), anisidine value (AnV), % free fatty acid (FFA), iodine value (IV), % polar component, polymer content, color, viscosity, smoke point and foaming tendency. The results showed that RBDPO was superior to RBDCO in frying performance in terms of % FFA, iodine value, foaming tendency and smoke point. However, RBDCO performed better than RBDPO with respect to % polar component, polymer content, resistance to oxidation, color and viscosity. Flavor evaluation showed that potato chips fried in RBDPO were preferred by the panelists.

Keyword: Frying performance; Palm olein; Coconut oil; RBDPO; RBDCO