

Sensory and physicochemical qualities of palm olein and sesame seed oil blends during frying of banana chips.

ABSTRACT

Palm olein and sesame seed oil were blended at varying ratios; changes in their physicochemical and sensory characteristics were determined. Increasing amounts of SSO (from 10 to 20, 30 and 40%) and decreasing amounts of PO (from 90, 80, 70 and 60%) in the blends, results in increase in the degree of unsaturation. FFA increased from 0.25% (90 PO: 10 SSO) to 0.65%. (60 PO: 40 SSO). Blending altered FA composition of palmitic and linoleic acids, which results in a significant change in trilinolein, dioleoyl-linoleoyl-glycerol, dipalmitoyl-3-linoleoyl glycerol and dipalmitoyl-3-oleoyl glycerol contents. A pleasant nutty flavor was imparted. Melting and crystallization temperatures shifted to lower values from 12.65 to 11.03, 10.44 and 9.74°C and from -6.31 to -6.99, -7.38 and -8.31 °C, respectively. Sensory quality of banana chips fried in the oil blends showed no acceptability differences between them. All blends received high scores for all sensory attributes tested and overall acceptability.

Keyword: Blending; Physicochemical and sensory characteristic; Palm olein and sesame seed oil.