Thermal stability of oils added with avocado (Persea americana cv. Hass) or olive (Olea europaea cv. Arbequina) leaf extracts during the French potatoes frying

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 Effect of the addition of avocado (Persea americana cv. Hass) or olive (Olea europaea cv. Arbequina) hydroalcoholic leaf extracts (AHE and OHE, respectively) on thermal stability of canola oil (CO) and high oleic sunflower oil (HOSO) during French potatoes frying at 180 °C was studied. The extracts were characterized by the total phenolic content, phenol chromatographic profiles and antioxidant activity. B-type trimer procyanidins were the major phenolic compounds identified in AHE. OHE showed higher phenol content, antioxidant activity regarding AHE. CO + OHE and HOSO + OHE decreased the formation of polar compounds and showed an anti-polymeric effect with respect to oils without extracts, whereas AHE extract showed a prooxidant effect on HOSO. Therefore, OHE showed an antioxidant effect on HOSO and CO under the studied conditions. In addition, all systems (CO + AHE, HOSO + AHE, CO + OHE and HOSO + OHE) increased the retention of tocopherols. These results demonstr