

## عنوان مقاله:

Evaluating the Performance of Peroxide and Conjugated Diene Values in Monitoring Quality of Used Frying Oils

## محل انتشار:

مجله علوم و فناوری کشاورزی، دوره 11، شماره 2 (سال: 1388)

تعداد صفحات اصل مقاله: 7

## نویسندگان:

R. Farhoosh - *Food Science and Technology Department, Faculty of Agriculture, Ferdowsi University of Mashhad, P. O. Box: 91775-1163, Mashhad, Islamic Republic of Iran*

S. M. R. Moosavi - *Food Science and Technology Department, Faculty of Agriculture, Ferdowsi University of Mashhad, P. O. Box: 91775-1163, Mashhad, Islamic Republic of Iran*

## خلاصه مقاله:

Frying oils showed an increase in Peroxide Value (PV) at the initial stages of the frying process followed by a decrease, and there was no correlation between PV and Total Polar Compounds (TPC) in the same set of frying oils. All the frying oils had PVs lower than ۴.۴۲ meq O<sub>2</sub> kg<sup>-1</sup> oil during the frying process and, consequently, none of them was above the limit of ۱۰ meq O<sub>2</sub> kg<sup>-1</sup> oil for edible oils. The variations of Conjugated Diene Value (CDV) presented a pattern different from that of PV. CDV had a good linear relationship with TPC during initial stages of the frying process and then reached a plateau ( $R^2 = 0.9838$ ). The plateau occurred beyond the TPC of ۲۴-۲۷% for the frying oils, and there was an obvious increasing trend before the range mentioned. The contents found for con-jugated dienes of the frying oils during the frying process ranged from ۵ to ۴۲ mmol L<sup>-1</sup>. Assuming that the limit of acceptance for TPC is ۲۴%, this roughly corresponded to ۲۹ mmol L<sup>-1</sup> for CDV

## کلمات کلیدی:

Carbonyl value, Conjugated diene value, Deterioration, Frying oil, Peroxide value, Total polar compounds

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1827122>

