

Effect of Repeated Use of Frying Media on Free Fatty Acids Content of Oils

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ABSTRACT By using the same frying media for repeated frying, the free fatty acid content increased gradually and showed a significant increase from an average of 0.200% in fresh samples to 0.885% after sixth frying of potato chips. The decomposition of the oil started after the free fatty acid content increased beyond 0.5% level due to the formation of more unsaturated peroxides, which were less stable at higher temperature. The resultant effect was the formation of saturated fatty acids which are not considered good for human health.