



Effect of adding aromatic oils as an anti-oxidant to frying oil to improve the quality of deep fried fast food products

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Abstract:

The fast food industry has been expanding rapidly over the past years. It has become a part of our culture. It is not a surprise that fast food has become a way of life in Egypt. Every day about a quarter of the adult population visits the fast food restaurant. It has become so easy for people to consume fast food because society has made it feel alright to do.

Fast-food is often very high in both calories and fat. In the main time, oxidation of lipids, which occurs during raw material storage, processing, heat treatment and further storage of final products, is one of the main reasons for changing in fats characteristics and produce harmful effects in human body that increase the risk of cardiovascular diseases and cancers etc. In order to protect fats from such changes and reduce it, synthetic antioxidants are added. But many researches have proved the side effects of these synthetic chemicals. So it is important to replace these artificial antioxidants with natural one to protect human health. Aromatic oils such as (Thyme, Cinnamon, and Clove) have antioxidant activities which can use for protect lipids from oxidation. Therefore, the principal goal of this research is to study the effect of adding some aromatic oils i.e. the oils of (Thyme, Cinnamon, and Clove) to fried oil to improve the quality of deep fried fast food products. The major constituents of essential oils

were identified; Radical-scavenging activity, determined by the DPPH diphenyl-1-picrylhydrazyl test, of aromatic oils at concentrations of (200,750,1500 and 2000) ppm during a thermal treatment of 180 ° c for 30 minutes. GC-MS analysis

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