

Physico-chemical study of edible and composite edible oil

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■ **ABSTRACT** : Edible oil, being obtained from vegetable sources, is primarily composed of fatty acids and used for cooking, medicinal and cosmetic purposes. It is estimated that about 90 per cent of vegetable oils are used for edible purposes. The sunflower oil used as based oil for replacement. The sunflower oil was replaced by (40-85), mustard, soybean and groundnut are each (5-20%). During the storage of individual and blended oil, pH, density and specific gravity value was decreased with increasing the storage period and types of storage condition. During the storage of individual and blended oil, free fatty acid was increase with increasing the storage period and types of storage condition. During the storage of individual and blended oil, iodine value was decrease with decreasing the storage period and types of storage condition. Peroxide value was increased with increasing the storage period and types of storage condition. Edible oils processing poses challenges due to its high content of polyunsaturated fatty acids and bioactive compounds. The oils refining objective is to remove completely all the minor compounds which are present in the crude oil: free fatty acids, peroxides, phospholipides, pigments, water, heavy metals and all the insoluble impurities which affect both the commercial quality and the shelf-life.

■ **KEY WORDS** : Edible oil, Free fatty acid, Peroxide value, Iodine value, pH

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