

THE DIFFERENCES BETWEEN LINOLEIC AND HIGH-OLEIC SUNFLOWER OIL

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ABSTRACT

Linoleic type sunflower oil is mostly preferred oil in Turkey for different purposes, such as salads, meals, frying etc. However, in recent years, oleic acid type sunflower oil is more suitable and healthy for both frying and biodiesel has begun to spread, particularly in US, France and Spain. High oleic sunflower production should be expanded and encouraged due to many advantages. In the last few years, Trakya Birlik which is the biggest oil growers cooperative encourages to high oleic sunflower production in Turkey. Linoleic sunflower varieties are generally grown and processed industrially in Turkey. Linoleic acid reduces to the saturation and facilitates to the digestion and passes the blood. The greater amount of linoleic acid in the oil increases the oil quality. However, high linoleic acid content in sunflower oil affects to the industrial value. Linoleic sunflower oil usually use in salads, meals, margarines and shortenings. High oleic sunflower oil is used in generally spray oil in crackers, dried fruits, bakery products, frying, deep oil frying, roast process, salads and sauces, food supplements specialized for elders and child and as a mixture oil in margarine and mayonnaise. Except food industry, high oleic sunflower oil uses for cosmetic-paint industry and biodiesel production. The farming of oleic type sunflower is increasing and getting more important because the usage and consumer preference of oleic type sunflower oil are also increasing. While the US prefers to farm mid-oleic types contain maximum 80% oleic acid, Europe prefers to high oleic types contain more than 80%. Recently, hybrid seeds are used for sunflower farming and breeding programs have begun to high oleic seeds. However, it is still widely used linoleic sunflower for industrial purposes. Fatty acid composition not only affects to the industrial quality but also nutritional value is also affected at the same time. Fatty acid composition affects to the taste and chemical quality of oil. The phenolics in sunflower oil have effective role on taste aroma, oxidation level and rate.

Keywords: High oleic sunflower, linoleic acid, mid-oleic sunflower.