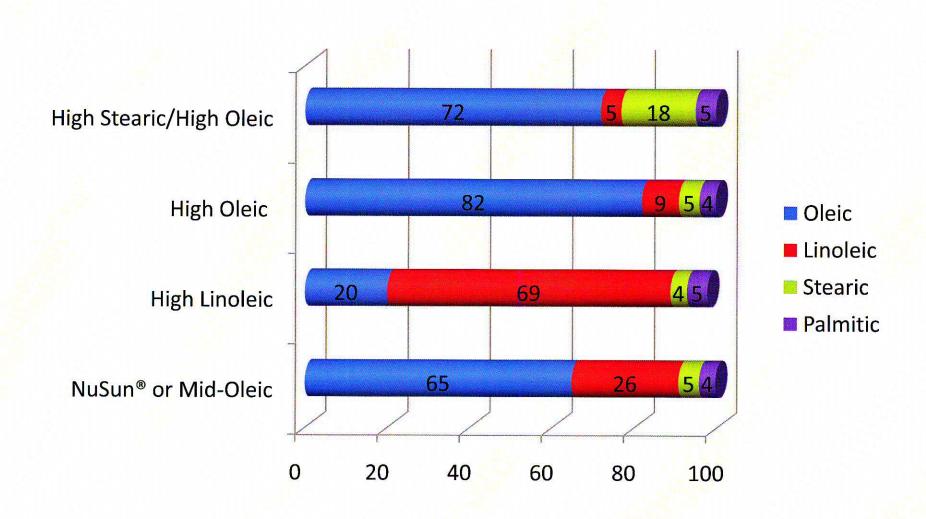
Sunflower Oil Fatty Acid Profile



Types of Sunflower Oil Available

1. High Linoleic:

This is the traditional type of sunflower oil that has been produced for many years. It is now produced in small volumes in the North America because of its limitations in fried foods. A typical fatty acid ratio is: 68% linoleic acid, 21% oleic acid and 11% combined saturates

2. NuSun® or Mid-Oleic:

This was developed through traditional breeding methods and is now the largest volume of sunflower oil produced in the U.S. and Canada. This is now the 'standard' sunflower oil in North America. The oil is available in large volumes and is price competitive with other naturally stable oils. It has good shelf life and is a preferred frying oil with excellent stability and neutral taste profile. A typical fatty acid ratio is: 65 % oleic acid, 26 % linoleic acid and 9 % combined saturates.

3. High Oleic:

This was also developed through traditional breeding methods. The initial patent on the seed and oil have expired. This crop is generally contract grown to insure identity preservation through the marketing system. There are now a number of firms producing high oleic sunflower oil. Oleic levels generally start at 82 percent and go higher. There are some hybrids that produce an oleic level of 90 percent. The advantage of high oleic sunflower oil is added stability and a neutral taste profile. A typical profile is: 82 % oleic, 9 % linoleic and 9 % combined saturates.

4. High Stearic/High Oleic:

This is the newest member of the sunflower oil family. This development is also accomplished through traditional breeding methods. The hybrid seed is under patent and the oil produced from the seed is called NutrisunTM. The advantage is functionality as a replacement for partially hydrogenated oils or tropical oils with a higher saturate level. Applications include baking, margarines, ice cream, chocolate and more that need a'solid' oil. Production was initiated this year in the U.S. A fatty acid profile is: 18 % stearic acid, 72 % oleic acid, 5 % linoleic acid and 5 % other saturates.

Other attributes:

Sunflower oil has only a trace of linolenic (18:3) acid
There is no GMO or transgenic sunflower
All sunflower oils are naturally high in vitamin E
Organic (limited quantities) and natural sunflower oil is available in most types
All types of sunflower are produced from the same beautiful flowered plant