

Nutritional Power of SUNFLOWER OIL



VOLUME 1.3

NuSun™ sunflower oil outshines other oils for commercial use by providing optimal health benefits, great taste, and superior cooking performance, while remaining trans fat-free.

The phrase “healthy fat” is no longer an oxymoron – research has shown that we do indeed need fat, or oil, in our diet to be healthful. It is important to know that even among healthy unsaturated oils, differences abound in taste, health benefits, and cooking performance.

NuSun™ Sunflower Oil vs. Commonly Used Commercial Oils

	% Saturated Fatty Acid	% Linolenic Acid (Poly, Omega-3, C18:3)	% Linoleic Acid (Poly, Omega-6, C18:2)	% Oleic Acid (Mono, C18:1)	Requires Hydrogenation for Most Commercial Uses	Smoke Point	Taste
NuSun™ Sunflower Oil*	9	trace	26	65	No	450	Clean
Corn Oil	12.7	0.7	58	24.2	No	410	Clean
Soybean Oil	14.4	6.8	51	22.8	Yes	450	Clean
Canola Oil	7.1	9.3	20.3	56.1	Yes	435	Clean
Cottonseed Oil	25.7	0.2	51.5	17.8	No	450	Clean
Olive Oil	13.5	0.6	7.9	72.5	No	280	Distinct

*Source: USDA Nutrient Database, Release 14 (*NSA data from industry sources, 2002).*

Oils used in the home and oils used commercially require significantly different properties. Perhaps most importantly, commercial oils need to withstand intense heat and frying for longer periods of time. In order to increase stability, many healthy oils must be hydrogenated for commercial use, a process that adds unhealthy trans fats.

- While canola oil and soybean oil have a healthful profile for home use, they are almost always hydrogenated when used commercially because the omega-3 fatty acids they contain render the oil unstable under intense heating and frying conditions.

- Traditionally, oils higher in saturated fat or oils that are fully or partially hydrogenated were used commercially to provide stability, taste, and shelf-life, but not for health benefits. For example, cottonseed oil is naturally stable, even for commercial use, but it is high in saturated fat (25-27 percent of total fat).

- Olive oil is healthful because of its high monounsaturated fat profile, very similar to NuSun's™ fat profile, and is relatively stable because it is low in omega-3 fatty acids. On the other hand, olive oil smokes at a lower temperature and can impart a distinctive flavor to foods.

References:

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4. Letter Report on Dietary Reference Intakes for Trans Fatty Acids. Drawn from the Report on Dietary Reference Intakes for Energy, Carbohydrate, Fiber, Fat, Fatty Acids, Cholesterol, Protein, and Amino Acids. Food and Nutrition Board/Institute of Medicine, July 11, 2002. www.iom.edu/fnb
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7. Lichtenstein AH, Ausman LA, et al. Comparison of different forms of hydrogenated fats on serum lipid levels in moderately hypercholesterolemic female and male subjects. *NEJM.* 1999; 340:1933-1940.
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New on the market, **NuSun™** is an oil that can be used commercially and provides health benefits. It does not require hydrogenation and is naturally trans fat free. **NuSun™** sunflower oil was developed by standard breeding techniques and is therefore a non-transgenic cooking oil. **NuSun™** sunflower oil works extremely well in commercial cooking and frying with a smoke point of 450°F and a clean light taste. In addition, the natural stability of **NuSun™** sunflower oil enhances product shelf-life and fry-life.

Health Benefits of Unsaturated Fats and Oils

Emerging nutrition science has warranted attention to the type of fat as well as the total amount of fat in our diets. The bottom line is that some fats are healthier choices than other fats.

There is scientific consensus that saturated fat and trans fat are harmful to your health because they increase total cholesterol and the so-called "bad" low-density lipoprotein (LDL) cholesterol, two well-known risk factors for heart disease.⁽¹⁾ Recent research has shown that monounsaturated fatty acids (MUFA), when used to replace saturated fat in the diet, decrease total and LDL cholesterol similar to a low-fat, high-carbohydrate diet.⁽²⁻³⁾ Using MUFA in the diet has the added benefits of decreasing triglycerides and maintaining "good" high-density lipoprotein (HDL) cholesterol. This contrasts with a low-fat, high-carbohydrate diet, which tends to increase triglycerides and decrease HDL cholesterol.

Dietary Recommendations for Fat

A new report from the National Academy of Sciences' (NAS) Institute of Medicine (IOM) recommends that Americans consume as few trans fatty acids as possible while still consuming a nutritionally adequate diet.⁽⁴⁾ The newly released report concludes that trans fatty acid intake, like saturated fat intake, is associated with elevated total and "bad" low density lipoprotein (LDL) cholesterol and, therefore, increased risk of coronary heart disease (CHD).⁽⁵⁻⁷⁾

The National Cholesterol Education Program (NCEP) at the U.S. National Institutes of Health (NIH) has new recommendations for dietary fat as well.⁽⁸⁾ The NCEP diet guidelines changed in 2001 to allow up to 35 percent of calories from fat, provided the fat is mostly unsaturated. In addition, the American Heart Association now recommends that 10 to 15 percent of total calories come from monounsaturated oils. Polyunsaturated oils should account for 8 to 10 percent of total calories, and saturated fat should account for about 7 percent of total calories. The U.S. Dietary Guidelines 2000 also put more of an emphasis on type of fat instead of total fat in the diet.

Now a commercial oil that is both low in saturated fat and trans fat-free is readily available. **NuSun™** sunflower oil fits this healthy fat profile, as it is predominantly monounsaturated and low in saturated fat, and stands up to commercial frying and product shelf-life requirements.

For more information on NuSun™ sunflower oil or sunflower seeds, contact:



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