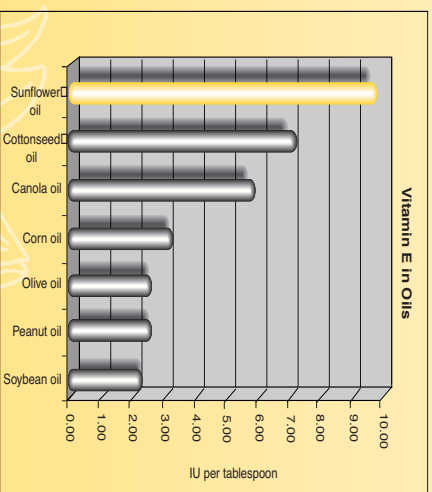


Vitamin E...

Sunflower is the Best Source

Vitamin E in the form of alpha-tocopherol occurs naturally in sunflower oil. In fact, sunflower oil is the highest of the leading oils in alpha-tocopherol content (45mg/100g). Vitamin E is a required nutrient that functions as an antioxidant and is associated with decreasing the risk of heart disease and cancer as well as bolstering immune function.



How Much Fat?

You can translate 30% of calories from fat to a target number of grams of fat by multiplying the number of calories you consume a day by 30%, and dividing this number by 9 (the number of calories per gram of fat) to get the number of grams of fat.

$$\text{(CALORIES X .30) / 9 = GRAMS OF FAT}$$

The result of this calculation for six daily calorie levels is listed below.

DAILY CALORIES	GRAMS OF FAT	GRAMS OF SATURATED FAT*
1200	40g	13g
1500	50g	17g
1800	60g	20g
2100	70g	23g
2400	80g	27g
2700	90g	30g

*Rounded to the nearest whole gram.

Stay Active

Physical activity allows us to balance the calories we eat with the calories we use. This energy balance is key in maintaining good health. Each mile we walk or run uses approximately 100 calories. Thirty minutes of exercise three or four times a week is recommended to improve fitness and health.

Activity	Duration	Calories/30 Minutes
Walking	(15 minutes/mile) (20 minutes/mile)	180 120
Running	(9 minutes/mile) (11 minutes/mile)	370 260
Tennis		220
Cycling	(9.4 mph) (5.5 mph)	190 120
Swimming	(fast crawl) (slow crawl)	300 250

Calorie expenditures are estimated for 140 lb. individual. Actual expenditures vary with body weight, fitness level, etc.



Sunflower Oil

*A healthy
way to eat!*



National
Sunflower
ASSOCIATION

4023 State Street • Bismarck, ND 58503
701-328-5100 • FAX: 328-5101
www.sunflowerusa.com

Eat Less Saturated Fat

Eating less fat, especially saturated fat, is the most important change you can make to decrease your risk of heart disease (according to the U.S. Surgeon General's Report). Sunflower oil is naturally low in saturated fat.

Know Your Cholesterol Level

It is important to know your cholesterol level since too much cholesterol circulating in the blood increases the risk for heart disease. Experts agree that a cholesterol level less than 200 mg/dl is recommended for adults.

DESIRABLE
LESS THAN 200 MG/DL
BORDERLINE-HIGH
BETWEEN 200 TO 239 MG/DL
HIGH
ABOVE 240 MG/DL

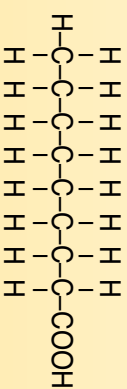
If your cholesterol level is above 200 mg/dl, you should see your physician and change your diet as a first step to decreasing your blood cholesterol level. The American Heart Association recommends a diet with 30% or less calories from fat (current average is 37%) with less than 10% from saturated fat. Replace saturated fat with monounsaturated fat or polyunsaturated fats, such as those found in sunflower oil.

SATURATED... MONOUNSATURATED... POLYUNSATURATED

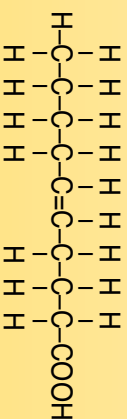
What Does It Mean?

Understanding the terminology will help you learn differences in types of fat. Saturated, monounsaturated and polyunsaturated are chemical terms. They refer to the structure of the molecules of carbon, hydrogen and oxygen.

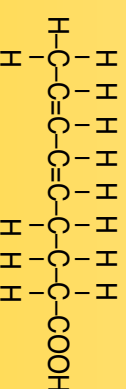
SATURATED: Saturated refers to a molecule that is filled with hydrogen atoms. It is saturated like a sponge and will not accept any more hydrogen. This is a diagram of saturated fat – note that there are no empty spaces. Saturated fats are solid at room temperature.



MONOUNSATURATED: When openings are created by a double bond between two carbons, the fat is not saturated. If there is only one double bond (indicated by "="), the fat is monounsaturated (as pictured below). Monounsaturated fat is liquid at room temperature, but may solidify slightly in the refrigerator.



POLYUNSATURATED: A fat with two or more double bonds is called polyunsaturated. This means there are four or more vacant spots that are not filled with hydrogen atoms and it looks like the structure below. Polyunsaturated fats are liquid at room temperature and in the refrigerator:



Fats in foods are a mixture of all three kinds – saturated, monounsaturated and polyunsaturated. The fat profiles of different fats and oils are shown in the chart (right). Refer to the nutrition label for the amount of total fat and saturated fat in foods.

Three Kinds of Sunflower Oil

Sunflower oil is grown with three different fat profiles as shown in the chart. Linoleic sunflower oil is high in polyunsaturated fat; high-oleic sunflower oil is high in monounsaturated fat; and a new variety called NuSun has about 65% monounsaturated fat and 26% polyunsaturated fat. All sunflower oil is low in saturated fat, provides essential fatty acids and is a great source of vitamin E.

NuSun oil has the added benefit of not requiring hydrogenation for use as a frying oil. This eliminates the production of trans-fatty acids. Trans-fatty acids may increase blood cholesterol levels while monounsaturated and polyunsaturated fats decrease blood cholesterol levels.

Sunflower Oil is High in Essential Fatty Acids

The polyunsaturated fat in sunflower oil is also an essential fatty acid (linoleic acid). This means we need to get linoleic acid from food, like required vitamins and minerals, because our bodies need it but can't make it. About 5-10% of calorie intake is considered adequate intakes of essential fatty acids.

Sunflower Oil... A Healthier Way to Eat!

Fatty Acid Profiles of Oil

