

# Sunflowers provide healthy nutrition

## Tell me about NuSun

NuSun sunflower oil is stable without partial hydrogenation. It outshines other oils for commercial use by providing optimal healthy benefits, great taste, and superior performance, while remaining trans fat free.

NuSun oil is the 'new' mid-oleic sunflower oil. It is lower in saturated fat (less than 10 percent) than linoleic sunflower oil and has higher oleic levels (55-75 percent) with the remainder being linoleic (15-35 percent).

In 1995, members of the National Sunflower Association made the commitment to change the fatty acid structure of sunflower oil to meet the future needs of the food industry. The needs were identified as "oil that had a pleasing taste, stability without needing partial hydrogenation and low saturated fat levels." Sunflower had the natural genetic

characteristics to make this change. The NSA initiative was supported by USDA plant breeders, the industry and sunflower growers. NuSun® sunflower oil became a reality.

Initial testing of the new sunflower-type began in 1996. In 1998, commercial volumes were available. In 2003, NuSun varieties were 55 percent of total oilseed acres planted with future growth expected. In 2005, it is estimated that 70 percent of the oilseed acres were NuSun. In 2007 that number is estimated to be 85 to 90 percent NuSun with the rest equally divided between high oleic and traditional linoleic.

A recently completed human NuSun diet study showed NuSun has heart-healthy benefits of significantly reducing participants' total and LDL cholesterol. An identical olive diet did not show similar improvements.



## Frequently asked questions about sunflowers

### What's the difference between sunflower seed and sunflower kernel?

A sunflower kernel is the 'meat' of sunflower seed. When you buy sunflower kernels, it means the processor has mechanically removed the hull. The kernel is now in a convenient form to be sold raw, roasted for snacking, or used as an ingredient. When you buy sunflower seeds, this means the seed is left intact with the 'meat' of the seed still in the shell. It is normally roasted and seasoned and eaten as a snack by cracking the shell with one's teeth, discarding the hull and eating the delicious morsel within. View our recipes to find fantastic ways in which to incorporate sunflower kernels into your lifestyle.

### Is there any harm in eating the sunflower seed shells or hulls?

The hulls are primarily fiber. Eating a lot of the hulls could conceivably cause one to become impacted. If not chewed properly, the sharp pieces of shell could possibly puncture or attach to the linings of the esophagus or digestive tract. However, the NSA office has not received any reports that would confirm either of these concerns. Visit the Health & Nutrition section of our site to find out more about the nutritional value of the sunflower seed/kernel.

### Do sunflowers really follow the sun?

When the plant is in the bud stage, it tends to track the movement of the sun across the horizon. Once the flower opens into the radiance of yellow petals, it faces east. No one knows why. However, it is likely a defensive response. Facing south or west could result in sun-scalding of seeds during very hot days.

### How many flowers or heads does the sunflower plant have?

The cultivated sunflower has only one flower or head. But the wild cousins found growing in ditches and other areas throughout much of North America have multiple flowers and heads. Multiples of 20 and more heads are common. The 'wilds' are the genetic basis of today's domesticated sunflower.

### When can I harvest my garden sunflowers? How will I know they are ready? How do I roast them?

The heads will be ready to harvest when the back of the head has turned brown. In northern areas, this might be after the first killing freeze. In warmer areas, the plant will dry down naturally. Simply snip the head off the plant and rub the seeds out by hand. If birds or other pests are attacking your sunflower heads, you can cut the heads and hang them in your garage like onions

often are dried. But you need to ensure that the seeds are mature. Look for the back of the head to be a banana yellow to turning brown before you harvest the heads. Remove any other plant debris. See our recipe section for guidance on how to roast sunflower seeds.

### How many commercial types of sunflower are grown?

There are two types grown. The first is Oilseed. This small black seed is very high in oil content and is processed into sunflower oil and meal. It is also the seed of choice of most bird feeders (see our Bird Feeding section). The second type is Non-oilseed (confectionery sunflower). This is a larger black and white striped seed used in a variety of food products from snacks to bread. For more information about confectionery sunflower, visit our Sunflower Seed/Kernel section.

### How much does 1 cup of shelled sunflower kernels weigh?

1 cup = 8 oz (volume) = 4.2 oz (kernel by weight)

### How many calories in an ounce of raw sunflower kernels?

The short answer is 160 calories. But there are so many healthy benefits to the sunflower kernel that we invite you to peruse the Health

& Nutrition area of our web site. There you will find a wealth of information about the nutrient composition of the sunflower kernel as well as fatty acid profiles.

### What is sunflower oil used for?

Linoleic sunflower oil is an excellent cooking oil with a neutral taste. This enhances the taste of food rather than overpowering it. Linoleic sunflower oil is high in linoleic (polyunsaturated) acid, an essential fatty acid. It is the preferred oil in most of Europe, East Europe, Russia, Mexico, countries along the Mediterranean and several South American countries. Visit our Sunflower Oil section for more information.

### What is high oleic sunflower?

High oleic sunflower oil is above 82 percent oleic (monounsaturated) acid. Read more about fatty acid profiles of sunflower oil, a healthy choice for use in your diet.

### Which are the major producing states of sunflower?

The Dakotas, Minnesota, Kansas, Colorado, Nebraska, Texas and California. Our USDA Reports provide the status of oil and non-oil plantings for the top producing states in the country. The tables include information on acres planted, harvested, yield per pound per acre, and production per 1000 pounds for the current and most recent years.

### Which countries are major producers of sunflower?

The largest traditional producer is Russia or the former Soviet Union. Argentina, the combined European Union, China, India, Turkey and South Africa are all significant producers of sunflower. To view the most current and historical data regarding harvest, production, and import data for sunflower seed, oil, and meal throughout the United States and the world, visit the World Supply & Disappearance section.

### Why is Kansas the Sunflower State?

The sunflower plant is native to North America. The wild sunflower is so common in Kansas, it is actually a serious weed problem. These are the multiple headed plants.

### Why is the sunflower such a popular art form?

The sunflower plant has almost 'human-like' characteristics and dimensions. The face of the blooming sunflower can almost speak to you. For this reason, the sunflower was a favorite subject for Europe's greatest artists such as Van Gogh and Picasso. Sales of these paintings can bring millions of dollars today. The sunflower continues to be a favorite art form for designers of fashion to the every-day coffee mug. It has, and continues, to stand the test of time.

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