

Traditionally healthy diets serve as a model for fitting the "good" unsaturated fat found in sunflower seeds and NuSun™ sunflower oil into American diets to provide great taste and improve health.

The Role of Oils in Traditionally Healthy Diets

Eating for optimal health appears to be more complicated than ever, especially with regard to dietary fat. Scientific evidence from traditional cultural eating patterns supports consuming "good" types of fat as part of an overall healthy diet. Long-term studies show us that people from certain regions of the world have lower risks of developing heart disease. This is thought to be, in part, a result of consuming a higher fat diet, full of "good" unsaturated fat. The traditional dietary and lifestyle patterns within the particular regions also contribute to the overall health of the population.

"Good" Fat in NuSun™ Sunflower Oil Plays Fundamental Role in All Healthy Diets

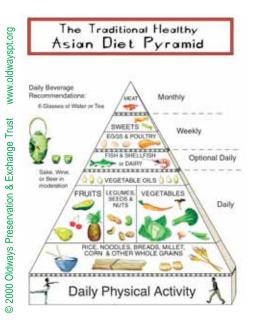
There are many different traditionally healthy cultural diets, including the Mediterranean Diet, the Asian Diet, and the Latin American Diet (1). These traditionally healthy cultural diets have several things in common, such as the emphasis on plenty of grain products, fruits, and vegetables. In addition, many cultures consume largely plant-based diets. Many cultural diets also distinguish between healthy fats from plantbased sources, such as vegetable oils, sunflower seeds, nuts, and olives, versus cholesterol-raising fats from animal sources.

Clinical studies from as early as the 1950's have shown that saturated fat raises total cholesterol and "bad" LDL cholesterol (2). More recently, trans fat has been shown to decrease "good" HDL cholesterol as well as increase total cholesterol and "bad" LDL cholesterol. Therefore, both saturated fat and trans fat should be minimized in the diet (3). Unsaturated fat, however, is the "good" type of fat, according to scientific consensus. A recent Harvard review study concluded that substituting "good" unsaturated fats for saturated and trans fats is one of the top three most effective diet strategies for preventing coronary heart disease (4). NuSun[™] sunflower oil is a versatile, mostly unsaturated oil that can replace "bad" saturated fat and trans fat in commercial cooking.

The Seven-Countries Study was one of the first studies to find low rates of death from heart disease in the Mediterranean region despite high consumption of dietary fat. Sources of fat in the traditional Mediterranean diet included intake of mostly "good" unsaturated fat from olive oil, seeds, nuts, and fish (5).

People in Asia have also been found to have a low risk of heart disease. These findings may be attributable to traditional Asian cuisine, which features legumes, soybeans and soybean oil, nuts, and seeds as major sources of both "good" fat and protein. A recent study compared Japanese-Americans





living in Hawaii to Japanese people living in Japan and found those in Japan had lower dietary saturated fat intake, lower total fat intake, lower blood lipids, and lower incidence of high blood pressure. According to the researchers, both diet and lifestyle factors may account for the lower incidence of heart disease in Japan (6).

NuSun[™] Sunflower Oil is Superior to Other Traditionally Healthy Oils & Can Be the Basis for Healthy Diets in America

Unlike many traditional cultural eating patterns, many of the foods that

Americans are accustomed to consuming are commercially prepared. This means that the type of oil manufacturers use to fry or to bake products is important to the overall diet of many Americans.

For commercial applications, NuSun™ sunflower oil is superior to other traditionally healthy oils, such as olive oil or soybean oil. In fact, NuSun[™] has the potential to transform the diets of many Americans into healthier eating patterns without affecting food flavors or textures.

The optimal fatty acid profile of NuSun[™] contributes to its versatility for commercial application. It has a naturally high smoke point of 450°F and does not require hydrogenation to remain stable at high temperatures. In contrast, other healthy oils thought to be part of healthy cultural eating patterns, such as olive oil in Mediterranean cooking and soybean oil in Asian cuisine, tend to be less versatile for commercial use. For example, olive oil has a low smoke point of 280°F. and soybean oil requires hydrogenation to remain stable at high temperatures, which forms harmful trans fats.

NuSun[™] sunflower oil, however, combines optimal health benefits with superior cooking performance, fitting in well with many cultural eating patterns as well as commercial kitchens.

NuSun[™] Sunflower Oil Can **Enhance Food Products**

- NuSun[™] sunflower oil does not add trans fats to commercially fried or baked goods and allows manufacturers to label products with zero grams trans fat per serving according to the proposed Food and Drug Administration trans fat labeling requirements.
- NuSun[™] sunflower oil contains 66% of the RDA for vitamin E per one-tablespoon serving and can increase foods' vitamin E content.
- NuSun[™] sunflower oil has a healthful balance of unsaturated fats, both mono- and polyunsaturated, is low in saturated fat, and contains no trans fat.

References:

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NuSun[™] Sunflower Oil* vs. Oils Used in Traditionally Healthy Cultures

	NuSun™ Sunflower Oi	I Olive Oil	Soybean Oil	
% Saturated Fat	9	13.5	14.9	
% Polyunsaturated Fat	26	10.0	37.5	
% Monounsaturated Fat	<i>65</i>	72.3	42.5	
Requires Hydrogenation	No	No	Yes	
Source: USDA Nutrient Database, R	elease 16, July 2003.	uly 2003. (*NSA data from industry sources, 2002.)		