



NuSun

NuSun™ oil is the “new” mid-oleic sunflower oil used in Frito-Lay’s SUNCHIPS® Multigrain Snacks.

- NuSun™ is lower in saturated fat (less than 10%) than linoleic sunflower oil and has higher oleic levels (55-75%)
- NuSun™ oil does not need hydrogenation and allows for the production of stable products without any trans fat
- This oil incorporates a healthy balance of unsaturated fats (mono- and polyunsaturated)

A recent study found that incorporating NuSun™ sunflower oil into a healthy diet significantly reduced total and LDL cholesterol compared to olive oil and the typical American diet.

Source: Balance of Unsaturated Fatty Acids Is Important to a Cholesterol-Lowering Diet: Comparison of Mid-Oleic Sunflower Oil and Olive Oil on Cardiovascular Disease Risk Factors. *Journal of the American Dietetic Association* 2005;105:1080-1086

Did you know that Frito-Lay brand snacks including DORITOS®, TOSTITOS®, CHEETOS®, and FRITOS® are made with 100% corn oil?

What’s so great about corn oil you ask? Corn oil contains more than 85% unsaturated fats. Health experts recommend vegetable oils as part of a healthy diet because of the health benefits of replacing saturated and trans fats with oils higher in unsaturated fats - such as corn oil.

To learn more about how to incorporate healthy oils into your diet visit [www.mypyramid.gov](http://www.mypyramid.gov).

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## Research Supports Health Benefits of Substituting Unsaturated Fat for Saturated and Trans Fat

“Considerable recent research, including controlled feeding and epidemiological studies, has provided pretty good evidence that replacing saturated and trans fats with mono- and poly-unsaturated fats can significantly reduce important health risks. According to some studies, this substitution can potentially reduce the risk of heart disease by up to 30-40 percent.”

Mark B McClellan, MD, PhD  
Commissioner, Food and Drug Administration



Oils and Your Health

FOR MORE INFORMATION:  
visit [www.fritolay.com](http://www.fritolay.com)  
or call 1-800-352-4477  
P.O. Box 660634  
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# Frito-Lay Paves the Way

Frito-Lay has led the industry in research and testing of different cooking oils. In early 2003, Frito-Lay completed a full conversion to non-hydrogenated oils virtually eliminating trans fats from all its savory snacks. Frito-Lay takes pride in using healthy oils like corn oil and NuSun™ sunflower oil to make delicious products. Corn Oil and NuSun™ sunflower oil are low in saturated fat and are high in poly- and monounsaturated fatty acids, which health experts recommend.

## Frito-Lay Uses the Oils You Need

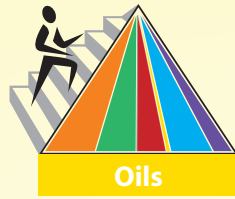
- Linoleic acid (a polyunsaturated fatty acid) is an essential nutrient in the diet.
- The recommendation for n-6 polyunsaturated fatty acids, set forth by the Dietary Reference Intakes is 5-10% of calories.
- The adequate intake for linoleic acid was set at 17g/day for young men and 12 g/day for young women.
- Intakes of PUFA may help reduce total and LDL cholesterol levels and could be beneficial in reducing the risk for diabetes.
- Frito-Lay snacks (DORITOS®, TOSTITOS®, FRITOS®, CHEETOS®, SUNCHIPS®, FRITO LAY MUNCHIES®) provide 3-6 g of linoleic acid per 1 oz serving



A Harvard review study concluded that substituting "good" unsaturated fats for saturated and trans fats is one of the top 3 most effective diet strategies for preventing coronary heart disease.

Journal of the American Medical Association, 2002;288(20):2569-2578

# USDA's Dietary Guidelines 2005 Finding OILS in the Pyramid!



- According to the USDA, liquid oils are the major source of mono- and polyunsaturated fat in the diet.
- Polyunsaturated fats contain essential fatty acids.

6 tsp/day\*

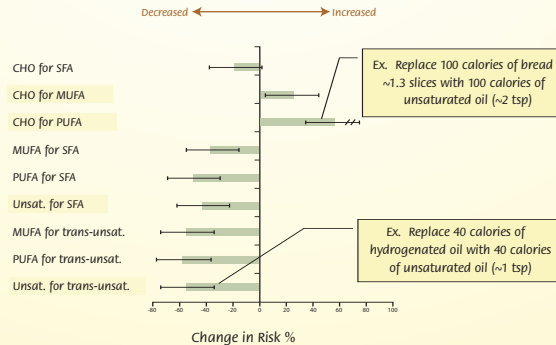
\*Average Daily Allowance for adults.  
www.mypyramid.gov

- Substituting unsaturated fats for saturated and trans fats can significantly lower total and LDL-cholesterol levels.
- These oils are also a major source of vitamin E in the American diet.

Fats That Lower Cholesterol	Sources (at room temperature)	Examples
Polyunsaturated fats	Liquid Plant oils	Corn, sunflower, safflower, sesame, and soybean oils; nuts and seeds
Monounsaturated fats	Plant oils	Olive, canola and peanut oils

## Small Changes Make a Big Difference

### Risk for Coronary Heart Disease

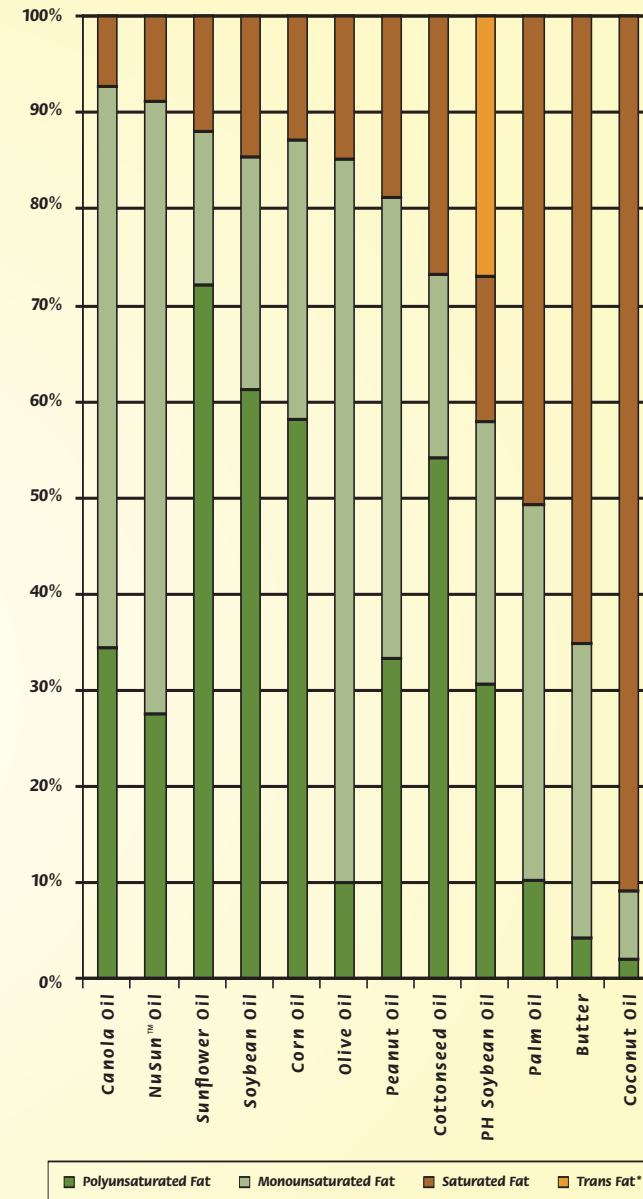


Hu et al., N Engl J Med, 1997

- Replacing the calories from carbohydrate (CHO) with calories from unsaturated fats reduces the risk of developing CHD.
- Replacing the same amount of calories from saturated or trans fats with unsaturated fats reduces the risk of developing CHD.

# Fats and Oils

(In descending order by PUFA & MUFA content)



\* Trans fat content may range from 15% - 45% depending upon the application

