

# Pecan Nutrition/Health Information

(Source: TPGA.org web site, data re-produced with permission)

## Pecans Offer Good Nutrition

- 90% of the fats in pecans are unsaturated (about 60% monounsaturated/30% polyunsaturated)
- A serving of pecans (30g) provides about 25 percent more oleic acid than a serving of olive oil (one tablespoon)
- Pecans are cholesterol free
- Pecans are sodium free
- Pecans are fiber-rich
- Pecans are a valuable plant protein source
- Pecans have more than 19 vitamins & minerals
- They are an excellent source of gamma tocopherol, an important type of vitamin E
- They contain concentrated amounts of natural plant sterols, touted for their cholesterol-lowering ability
- Pecans contain a variety of phytochemicals
- Nuts are recommended by the American Heart Association and U.S. Dietary Guidelines as a desirable source of heart-healthy unsaturated fat.

***Pecans can double the cholesterol-lowering effectiveness of a traditional heart-healthy diet,*** according to a study published in The Journal of Nutrition, September 2001. An eight-week study at Loma Linda University found that a 'pecan' diet (which consisted of replacing 20 percent of the calories from the American Heart Association's Step I diet foods with pecans) lowered total cholesterol by 11.5%. The Step I diet lowered total cholesterol by 5.2%. In addition, the pecan diet increased the HDL "good" cholesterol whereas the Step I diet decreased HDL unfavorably. Triglycerides also were significantly lower with the pecan diet. Although the pecan diet contained more fat (39.6%) than the Step I diet (28.3%), participants did not gain weight. Here is the link to the Loma Linda pecan health study:

<http://www.nutrition.org/cgi/content/abstract/131/9/2275>

Nutrient Composition of One Ounce of Pecan Halves (approx. 20 halves)		
Nutrient	Units	1 oz (28.35 g) (20 halves)
Energy (calories)	kcal	195.899
Protein	g	2.600
Total lipid (fat)	g	20.403
Carbohydrate	g	3.929
Fiber, total dietary	g	2.722
Sugars, total	g	1.125
<b>Minerals</b>		
Calcium	mg	19.845
Iron	mg	0.717
Magnesium	mg	34.304
Phosphorus	mg	78.530
Potassium	mg	116.235
Sodium	mg	0.000
Zinc	mg	1.284
Copper	mg	0.340
Manganese	mg	1.276
Selenium	mcg	1.701
<b>Vitamins</b>		
Vitamin C	mg	0.312
Thiamin	mg	0.187
Riboflavin	mg	0.037
Niacin	mg	0.331
Pantothenic acid	mg	0.245
Vitamin B-6	mg	0.060
Folate, total	mcg	6.237
Folic acid	mcg	0.000
Vitamin B-12	mcg	0.000
Vitamin A, IU	IU	21.830
Vitamin E	mg, ATE	1.148
Tocopherol, alpha	mg	0.397
Tocopherol, beta	mg	0.111
Tocopherol, gamma	mg	6.929
Tocopherol, delta	mg	0.133
<b>Lipids</b>		
Fatty acids, total saturated	g	1.752
Fatty acids, total monounsaturated	g	11.567
Fatty acids, total polyunsaturated	g	6.128
Cholesterol	mg	0.000
Phytosterols	mg	28.917
Beta-sitosterol	mg	25.232

***Pecans raise Vitamin E levels and may support prostate and intestinal health.*** Further analysis of the participants in the above study revealed that a pecan-enriched diet significantly raised blood levels of gamma tocopherol compared to the Step I diet. This is due to the high amounts of naturally occurring gamma tocopherol (a unique form of vitamin E) in the pecans. Gamma tocopherol is an important antioxidant nutrient and studies have shown that it may benefit intestinal health and have a protective effect against prostate cancer. This research was presented at the April 2001 Experimental Biology meeting and published in the FASEB Journal.  
<http://www.fasebj.org/>)

***Pecans increase fiber and nutrient intake.*** Researchers at Texas A&M University found that a heart-healthy diet containing pecans can help control specific biomarkers of heart disease risk as effectively as the AHA Step I diet. They also found that the pecan-rich diet significantly increased participants' levels of dietary fiber, thiamin, magnesium, copper and manganese and actually changed copper and magnesium intakes from inadequate (on the AHA diet) to adequate (on the pecan diet). All of the participants had already been eating a relatively low-fat diet. For this study, they were placed on either the Step I diet or a higher-fat pecan-based diet. This information was presented at a May 2001 American Heart Association Conference on Arteriosclerosis, Thrombosis and Vascular Biology.

***Pecans: a concentrated source of natural plant sterols.*** Researchers at the University of Georgia have determined that plant sterols are found naturally in pecans in concentrated amounts. 90 percent of those pecan sterols are in the form of beta-sitosterol, which has been cited as a food component that competes with the absorption of cholesterol in the body and thus has the ability to lower blood cholesterol levels.

***Adding pecans to your diet can lower "bad" cholesterol.*** A study at New Mexico State University (NMSU) has found that pecans offer something even more important than great taste and versatility - a positive impact on health. The research, conducted by NMSU's Wanda Morgan, Ph.D., shows that adding pecans to a self-selected diet lowers LDL or "bad" cholesterol levels by six percent; total cholesterol levels were lower as well. This encouraging news about the positive impact of pecans on heart health was published in the March 2000 issue of Journal of the American Dietetic Association (<http://www.eatright.org/journal/>). In this study, nineteen men and women with normal blood lipid levels were divided into two groups, one of which served as the "control" group, and ate its regular diet for eight weeks. Subjects in the "test" (pecan-eaters) group, however, supplemented their diets with three-fourths of a cup of pecans every day. Even though the test group ate more total fat, monounsaturated fat and polyunsaturated fat each day than those who did not eat pecans, test subjects lowered their levels of bad and total cholesterol - and did not gain weight. "The research shows that we don't have to be afraid of the fat in pecans," says Dr. Morgan. "Pecans can be a part of a balanced and varied diet." More information on "Pecans and Good Health" and a review of pecan and nut health research is available at the National Pecan Shellers web page:

<http://www.ilovepecans.org/nutritioninfo.html>