



Image: Missouri Northern Pecan Growers, LLC

Why Pecans?

Pecans: Rich in Flavor and Nutrition!

As you consider healthy food choices for your family, why not "go nuts?"

Nuts offer a range of excellent health benefits and will add flavor, crunch and appeal to every diet. Most tree nuts are a delicious source of unsaturated fatty acids, protein, fiber and antioxidant vitamins like vitamin E.

Pecans are one of the most nutritious members of the tree nut family. Not only are they a good source of protein, fiber and heart-healthy fats, pecans are rich in ellagic acid, which may prevent certain cancers. They have also been linked to fewer heart attacks in several large studies.

Pecans make it special

There's something special about the rich, buttery flavor of pecans. They taste great by themselves as a nutritious snack and can be incorporated into a variety

of recipes.

Try toasted pecans in cereal, on salads or over ice cream. They add a light, delicious crunch to pancake batter, muffins and cookies. For meat dishes, there's nothing like the taste and texture of roasted pecans on top!

Go nuts for your heart!

We've all heard that nuts are filled with fat and off limits for dieters.

However, a great deal of recent research links nut consumption to several key health benefits. The Food and Drug

Administration, for example, recently

approved claims that eating 1.5 ounces of nuts daily may reduce the risk of heart disease when they're part of a diet low in cholesterol and saturated fat.



Image: www.mopecans.com

"Everyone knows pecans taste great, but scientific research is helping to uncover the incredible health benefits they offer as well."



- Environmental Nutrition; 11/1/2000

While saturated fat tends to raise blood cholesterol, the polyunsaturated and monounsaturated fats are



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considered heart-healthy because they help lower blood cholesterol. Monounsaturated fats are particularly beneficial because the lower the “bad” LDL cholesterol and triglycerides while not lowering the “good” HDL cholesterol.

Pecans are a good source of phytochemicals, compounds found in plants that seem to decrease the risk of cancer and heart disease. Research indicates an especially promising link between nut consumption and prostate cancer. (Source: Food Processing, 11/1/2000) And, like all plant foods, pecans contain no cholesterol! The phytosterols found in pecans are believed to actually lower cholesterol by inhibiting the absorption of dietary cholesterol that is naturally made in the liver.

Nut consumption is also linked to a decreased risk of heart disease in several studies. The Adventist Health Study, (35,000 participants), and the Nurses’ Health Study (86,000 participants), both concluded a lower risk of

Nutrient composition of 1 ounce (approx. 20 halves) pecans:

(source: USDA; www.nal.usda.gov/fnic/foodcomp)

Protein:	2.6 grams
Fat:	20.4 grams total
Monounsaturated fat:	11 grams
Polyunsaturated fat:	6.1 grams
Carbohydrate	3.9 grams
Fiber	2.7 grams
Phytosterols	29.0 mg
Cholesterol	0 grams
Potassium	98 mg
Zinc	1.4 mg
Folate	10 mcg
Vitamin E	0.8 mg
Calories:	195

the Nurses’ Health Study, the findings were quite significant—**35% fewer heart attacks were reported among women who consumed a serving of nuts five times per week.**

(Source: Food Processing, 11/1/2000)

Essential minerals, like magnesium, copper, selenium and potassium also make nuts a good choice. For reducing high blood pressure, the DASH Diet recommends four to five servings per week of nuts, seeds and beans.

(This eating plan is from the Dietary Approaches to Stop Hypertension study, a large study of dietary patterns conducted at four major medical centers.)

The truth about pecans and fat

Though pecans may show a higher fat content than some snacks, they contain the “good” fat -- unsaturated. These polyunsaturated and monounsaturated fats can reduce levels of lipoprotein, the “bad” form of cholesterol. Diets high in monounsaturated fatty acids lower both plasma cholesterol and triglycerides. In fact, nearly 90% of the fats (oils) in pecans are of the heart-healthy, unsaturated variety!

Pecans: Loaded with healthy benefits!



- Shown to lower LDL (bad cholesterol) levels
- Contain 19 vitamins and essential minerals, including vitamin A, magnesium, potassium, B complex vitamins and phosphorus
- An excellent protein alternative to meat
- Contain 25% more cholesterol-lowering oleic acid than a tablespoon of olive oil
- Sodium free
- Cholesterol free
- A good source of zinc, shown to boost immunity
- Shown to reduce the risk of heart disease

(source: The Pecan Store)

heart attacks and heart disease for people who ate an ounce or more of nuts at least five times per week. In

Pecans are also satisfying, due to their fiber content and light crunch.

Substitute a handful of pecans instead of chips or pretzels next time you feel the urge for a snack. They’ll stick with you longer, and you’re likely to consume less calories throughout the day. Research shows that nut eaters tend to be thinner than those who don’t eat nuts-- probably because nuts help curb the appetite.

Pecans... a tasty source of zinc!

Zinc is a key nutrient for proper growth and a strong immunity. Most sources of zinc are of animal origin, but a one-ounce serving of pecans has more zinc than a 3.5 ounce serving of skinless chicken.

(Source: www.greenvalleypecan.com)

Counting Carbs? Choose pecans!

Pecans are a naturally low carbohydrate food that will add variety and nutrition to your low-carb diet. A handful of pecans (one ounce) contains only 4 grams of carbohydrates! Whether in a meal or as a snack, the nutrients and disease-fighting properties of pecans are a great choice for your low carbohydrate lifestyle.

(source: National Pecan Shellers Association)

Researchers at New Mexico State University found that adding pecans to an average self-selected diet lowered “bad” LDL cholesterol levels by 6% in study subjects.

(Findings reported in Journal of the American Dietetic Association, 3/2000)



Indulging in dessert? Try the buttery crunch of pecans on ice cream, pies or cakes for a boost of nutrients.

Image: Green Valley Pecans

Pecans and the Mediterranean diet

Researchers at Brigham and Women's Hospital and the Harvard School of Public Health have found that people following a Mediterranean-style weight loss diet were able to keep weight off for a longer period of time than those following a traditional low-fat diet. This moderate fat diet, based on the diets of southern Europe and the Mediterranean, allows for a greater variety of foods that are con-

sidered very appetizing compared to stricter, blander diets. Participants substituted nuts

and olive oil for saturated fats, like butter. The main fats included in the Mediterranean diet are unsaturated, or "healthy fat" that is associated with lowering cholesterol. Researchers also found the diet had a blood-thinning effect and may be a good option for sustainable weight loss.

(source: M. Hemmelgarn)

Pecans lower cholesterol levels

Researchers at Loma Linda University found that a diet containing pecans not only lowered total and LDL ("bad") cholesterol significantly more than the American Heart Association (AHA) diet, but also helped to maintain desirable levels of HDL ("good") cholesterol. Investigators measured participants' cholesterol levels while on the Step 1 diet, recommended by the AHA for individuals with elevated cholesterol levels, then compared cholesterol levels after 20 percent of their calories were replaced with pecans. Compared to participants' baseline cholesterol levels, the pecan-containing diet lowered cholesterol levels by more than twice as much as the Step 1 diet—a similar effect as cholesterol-lowering medications.

(Source: Journal of Nutrition, 09/2001)

Preparing and storing pecans:

Adding pecans to your favorite recipes is easy. Select clean, unshelled nuts free from splits, cracks and holes. Nuts in the shell should be heavy for their size, indicating a fresh, meaty kernel. Nutmeats that rattle in their shell are usually stale.

Crisp and plump nutmeats indicate high quality; limp or shriveled nutmeats indicate poor quality. Unless you plan to use nutmeats as a garnish, they do not need to be uniform in size. Suppliers often sell cracked nuts in the shell in plastic bags. Remove cracked nuts from plastic bags immediately and spread them out on trays in an airy location until you can shell

Nuts and longevity:

Pecans contain protective ingredients linked to longer life.



- Arginine: amino acid needed to make nitric oxide; helps relax constricted blood vessels and eases blood flow
- Phytochemicals contain antioxidant vitamins: Vitamin E, flavonoids, plant stanols, ellagic acid and phenols, which protect against oxidative damage to cells
- Vitamins and minerals: folic acid, magnesium and potassium
- Fiber: Nuts help achieve the goal of 25-35 grams daily (Source: M. Hemmelgarn)

and store them properly. If left in plastic bags, cracked nuts are susceptible to mold growth. Return or discard any nuts showing mold growth.

For year-round use, store nuts as soon as they are thoroughly dry. Rich in oil, nuts will quickly become rancid or stale if not stored properly.

Although unshelled nuts take up more room, they have a much longer shelf life than shelled nuts. Store unshelled nuts in airtight containers in a cool,

dry, dark location, below 70 degrees to ensure good quality for about four months. For long-term storage, package unshelled or shelled nuts in moisture/vapor proof containers and store in the refrigerator or freezer—the lower the storage temperature, the longer the shelf life. One pound of unshelled nuts yields 2 1/4 cups pecan halves. (Source: www.mopekans.com)

Whole, shelled nutmeats remain fresh longer than nuts in pieces—so chop nuts just before you plan to use them. Unsalted nuts keep longer than salted nutmeats.

Nothing like northern pecans!

When it comes to premium taste and quality, there's nothing like northern-grown (Kansas, Missouri or Illinois) pecans. In fact, northern pecans are smaller and sweeter than the jumbo-sized hybrid nuts grown in the southern United States. This richer, more buttery flavor found in northern pecans is due to the higher content of monounsaturated and polyunsaturated oils. Chefs across Missouri, and even New York-based food writers, have commented on the difference in flavor from Missouri-grown pecans. (Source: Knight Ridder/Tribune News Service, 12/1/2003)

As consumer demand for pecans increases, The University of Missouri Center for Agroforestry (UMCA) is conducting research to determine grafted cultivars for pecans that will produce the highest quality, most consistent nut crops and allow Missouri farmers to take an active role in this

Toasting pecans is easy!



Simply place a single layer on a baking sheet and bake at 300 degrees for approximately 10 minutes. Stir often. Toasted pecans will be light brown and crisp.

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market.

For more information on pecans, or growing pecans in an agroforestry practice, contact the University of Missouri Center for Agroforestry at (573) 884-2874; or visit www.centerforagroforestry.org.

The University of Missouri Center for Agroforestry (UMCA), established in 1998, is an interdisciplinary research, teaching and technology transfer program. The Center is recognized as the leading institution for biophysical, economic and social research related to temperate agroforestry and its benefits to landowners and the environment. Agroforestry practices benefit Missouri by increasing and diversifying products, markets, and farm income; improving soil quality; and reducing erosion, nonpoint source pollution and damage due to flooding. In addition, agroforestry practices enhance land and aquatic habitats for fish and wildlife and improve biodiversity.

Portions of this information provided by Melinda Hemmelgarn, M.S., R.D. Missouri Dept. of Health and Senior Services, Division of Community Health, Section for Nutritional Health and Services

Easy ways to enjoy the sweet, buttery crunch of Missouri pecans:

- Mix into a vegetable or fruit salad
- Serve over ice cream or yogurt.
- Sprinkle on poultry or fish for baking.
- Mix into pancakes and muffins.
- Toss chopped pecans onto a pizza before baking.
- Mix toasted pecan halves with popcorn
- Mix pecans into bread crumbs for baking chicken breasts
- Sprinkle on a bagel after spreading with cream cheese



The University of Missouri Center for Agroforestry is working to develop grafted pecan tree cultivars for Missouri farmers.

Selected information and images from:

- Missouri Northern Pecan Growers Association, LLC (www.mopecans.com)
- The Green Valley Pecan Company (www.pecanstore.com)
- www.ILovePecans.com



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Old Fashioned Pecan Pie



3 eggs beaten
1/2 cup margarine, melted
3/4 cup sugar
1 teaspoon vanilla
1/2 cup white Karo syrup
1/4 teaspoon salt
1/2 cup dark Karo syrup
1 unbaked pie shell
1 cup Missouri Pecans

recipe:

www.mopecans.com

Pecan Tassies

Tassie Shells

1-8 oz. package for cream cheese
1/2 cup margarine, soften at room temp.
1 cup sifted flour

Tassie Filling

1 cup Missouri Pecans
2 eggs, beaten
1 cup brown sugar (firmly packed)
1 teaspoon vanilla
1 tablespoon margarine

recipe: www.mopecans.com

Apricot-Pineapple Salad

1 20 oz. can pineapple, crushed
1 cup water
1/2 cup sugar
1 6 oz. package Apricot gelatin
1 8 oz. package cream cheese
1 Cup pecans
1 12 oz. tub whipped topping

recipe: www.pecanstore.com

Basil-Pecan Pesto

2 large garlic cloves
2 cups packed fresh basil leaves (wash, and blot dry with paper towels)
2/3 cup olive oil
1/2 cup pecans, toasted golden brown and cooled
1/3 cup freshly grated Parmesan cheese

recipe: Melinda Hemmelgarn

Banana Pecan Cornmeal Pancakes

1 very ripe medium banana
1/2 cup whole wheat pastry flour (or all-purpose flour)
1 tablespoon baking powder
dash salt
1/3 cup yellow cornmeal
3/4 cup skim milk
1 large egg
1/2 cup pecan pieces
vegetable oil for brushing griddle

recipe: Melinda Hemmelgarn

Magnificent Meatballs

2 lbs. ground beef
1/2 cup onion, finely chopped
1 clove garlic, minced
1/2 cup corn flakes, crushed
1 tsp salt
1 cup milk
1/2 cup pecan pieces, finely chopped
2 Tbsp. vegetable oil
1.5 tsp. curry powder
1 Tbsp flour
1.5 cups apple juice
1/4 cup flaked coconut

recipe: pecans.com

Pecan Tassies

Blend softened cream cheese and margarine. Mix flour and chill for at least one hour. Shape into 24 or more little balls and place in small muffin tins. Press around cup with finger to shape.

Old Fashioned Pecan Pie

Mix eggs, sugar, syrups, vanilla, salt and margarine together. Spread pecans on bottom of pie shell. Pour in filling. Bake at 350° for 30 minutes or until filling sets. A knife inserted in the middle should come out clean.

Basil-Pecan Pesto

Place garlic in food processor and process until well minced. Add remaining ingredients and process til smooth. Serve over hot whole wheat pasta for a main dish, or serve as an appetizer to spread on a warm baguette. Store leftover pesto covered, in the refrigerator, for up to one week. Makes about 1 1/4 cups.

Apricot-Pineapple Salad

Cut cream cheese in small pieces and allow to soften. Meanwhile, bring pineapple, water and sugar to a boil. Add gelatin. Let cool. Add softened cream cheese and Pecans. Refrigerate until mixture starts to congeal. Remove from the refrigerator and fold in whipped topping. Pour into a mold and chill.

Magnificent Meatballs

Blend meat, 1/2 cup onion, garlic, corn flakes, one teaspoon salt, milk, and pecans together. Shape into about 60 balls. Set aside.

Heat oil in a large skillet. Add meatballs. Brown well on all sides and remove from skillet. Drain off all but one Tbsp. of the pan drippings. Add remaining onion. Cook until tender. Stir in curry powder, flour, remaining salt, and apple juice. Mix until well-blended. Cook, stirring constantly, until thick and smooth. Return meat balls to gravy. Cover. Simmer for 5 minutes. Serve topped with coconut.

Banana Pecan Cornmeal Pancakes

Combine all ingredients except pecans and vegetable oil in food processor. Transfer batter to a bowl and stir in pecan pieces.

Heat griddle over medium heat and brush with oil. Working in batches, drop scant 1/4 cup measures of batter onto griddle to form pancakes about 4 inches in diameter. Cook until bubbles appear on surface and undersides are golden brown, about 1 minute. Flip pancakes with a metal spatula and cook until undersides are golden brown and pancakes are cooked through, about 1 minute. Makes about 10 pancakes. Serve with warm maple syrup.