

Food For Thought

Promoting Healthy Cholesterol Levels

Maintaining a healthy cholesterol level is often problematic for people consuming Western-style diets. It may surprise you to know that peanuts and peanut butter not only are cholesterol-free but also that eating a small amount every day can help promote healthy cholesterol levels. The structure and composition of peanuts and nuts is predominantly monounsaturated fatty acids, protein, fiber and other bioactive constituents which contribute to their function of lowering blood cholesterol levels.

Peanuts, peanut butter and nuts, like other foods with significant amounts of monounsaturated fat and polyunsaturated fat, can help lower cholesterol when substituted for foods high in saturated fat and consumed as part of a calorie-balanced diet low in saturated fat and cholesterol.

Revised Cholesterol Guidelines

The National Cholesterol Education Program (NCEP) at the U.S. National Institutes of Health released newly revised guidelines in May 2001 for people needing to lower their blood cholesterol levels ⁽¹⁾. The NCEP diet guidelines now allow for up to 35% of daily calories from total fat, raised from 25%, provided most of it is good unsaturated fat.

The guidelines are very clear in encouraging people to lower daily intakes of saturated fat to less than 7% of calories and to limit dietary cholesterol to less than 200 mg a day. They also emphasize reducing triglycerides, a risk factor for heart disease often overlooked in the past. The American Heart Association defines normal triglycerides as less than 200 mg/dL, but some experts recommend staying below 120 or, if there is a history of heart problems, below 90.

National Cholesterol Education Program Optimal Blood Lipoprotein Levels (mg/dL)	
Low-density lipoprotein (LDL) cholesterol	< 100
High-density lipoprotein (HDL) cholesterol	> 40
Total cholesterol	< 200

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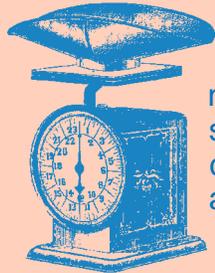
Small Dietary Changes Yield Big Rewards in Managing Blood Cholesterol

When it comes to health, small changes can offer big rewards. Following are some of the dietary factors that help lower blood cholesterol, along with practical tips for everyday living.

1. Eating a healthy diet that is low in saturated fat and cholesterol. Include a variety of fruits, vegetables, grains, low-fat or non-fat dairy products, fish, legumes, poultry and lean meats to boost the total quality of the diet. Complex plant foods like peanuts and nuts are nutrient dense and contain plenty of fiber, antioxidants and phytochemicals that are thought to benefit health. One serving of peanuts (an ounce or a small handful) provides two grams of fiber per serving - that's as much fiber as a slice of whole wheat bread.



Tip for Everyday Living: Fill up on nutritious plant foods such as vegetables, fruits, whole grains, peanuts and nuts and use smaller portions of full fat cheeses and meats.



2. Consuming a calorie-balanced diet. Match energy intake to energy needs and make appropriate changes to achieve weight loss when necessary. The message here is that a calorie is a calorie. If a food is higher in calories, make sure it is higher in nutrients also. Be careful of portion sizes and make the calories you do eat count nutritionally.

Tip for Everyday Living: Pair calorically dense foods with fruits and vegetables. Spread peanut butter on apples slices or dip sliced vegetables in peanut butter.

3. Substituting monounsaturated fats for saturated fats in your diet. The Nurses Health Study ⁽²⁾ at Harvard School of Public Health shows that for every 5% increase in saturated fat, coronary heart disease (CHD) risk is increased by 17%, whereas for every 5% increase in monounsaturated fat, CHD is decreased by 24%. When researchers at Penn State University tested diets that included about two servings daily of peanuts or peanut butter, rich in monounsaturated fats (MUFA), they found that total and low density lipoprotein (LDL) cholesterol was lowered by 11-14%, compared to an average American or Western-style diet (which is a diet higher in saturated fat.) ⁽³⁾



Tip for Everyday Living: Use peanut butter on your waffles or toast instead of butter, and sprinkle seasoned peanuts on salads instead of cheese.

4. Substituting monounsaturated fats for carbohydrates in your diet. Substituting good fats for carbohydrates in the diet can protect against coronary heart disease (CHD) by maintaining good high density lipoprotein (HDL) cholesterol and lowering triglycerides. A study in the *American Journal of Clinical Nutrition* ⁽³⁾ found that a higher MUFA diet with peanuts and peanut butter did just that and therefore lowered cardiovascular disease risk by 21% compared to an average American or Western-style diet (which is a diet higher in saturated fat). The low-fat diet decreased the risk by only 12%.



Tip for Everyday Living: *Snack on peanuts instead of a high carbohydrate snack like pretzels, and spread peanut butter on your bagel instead of cream cheese.*



5. Eating an ounce of peanuts five or more times per week. Large population studies, such as the Harvard Nurses Health Study ⁽⁴⁾ and the Seventh Day Adventists Study ⁽⁵⁾, show that frequent consumption of nuts decreases the risk of CHD. Nuts are defined as almonds, brazil nuts, cashews, hazelnuts, macadamia nuts, pecans, pistachios, walnuts and peanuts. While peanuts are in fact legumes, they are used and consumed like nuts and are therefore placed into the nut category. U.S. Department of Agriculture data show that about two thirds of all "nuts" eaten in the United States are peanuts and peanut butter, indicating that the nuts consumed in these studies were largely peanuts and peanut butter.⁽⁶⁾

Tip for Everyday Living: *Find creative ways to include a small amount of peanuts, nuts or peanut butter into your diet everyday. Make a snack mix with seasoned peanuts and whole grain cereal. Stir some peanut butter into your morning oatmeal.*

“On-the-Go” Snacks

Are you looking for on-the-go snacks? Here are some delicious snacks that are rich in mono- and poly-unsaturated fats and low in saturated fat and cholesterol:

-  Pick up a packet of seasoned or regular peanuts at the check out.
-  Spread some peanut butter on a whole wheat tortilla or whole wheat pita bread, roll and go!
-  Crunchy PB&B- Slice a banana length-wise, spread one tablespoon crunchy peanut butter inside and close. Wrap in aluminum foil and keep in the fridge or freezer until you're on-the-go.



Peanut and Nut Research Review

A review of nut articles ⁽⁷⁾ by Dr. Penny Kris-Etherton, PhD, RD, of Penn State University, shows that there is strong epidemiological data that shows an association between consuming nuts and protection against coronary heart disease. The review looked at five large population studies and 11 clinical studies. It appears that the most improvement comes with adding small amounts to your diet—an ounce of peanuts or two tablespoons of peanut butter—five or more times a week.

A growing database of clinical studies indicates that part of the cardioprotective effect may be due to the fatty acid composition of nuts when they replace food sources of saturated fatty acids, as well as carbohydrates, in the diet. Other nutrients that may play a role include protein, fiber, vitamin E, folic acid, magnesium, copper and zinc. The authors conclude that it is appropriate to recommend including peanuts and nuts in heart-healthy diets and emphasize that dietary guidance may be needed to help people plan a calorie-balanced, cholesterol-lowering diet with peanuts, nuts and peanut butter.



References:

1. National Institutes of Health News Release: NCEP Issues Major New Cholesterol Guidelines (2001, May 15). Retrieved May 18, 2001, from the World Wide Web: <http://www.nih.gov/news>
2. Hu, F.B.; Stampfer, M.J.; Manson, J.E.; Rimm, E.; Colditz, G.A.; Rosner, B.A.; Hennekens, C.H.; Willett, W.C. Dietary Fat Intake and the Risk of Coronary Heart Disease in Women. *New England Journal of Medicine*. 1997;337:1491-9.
3. Kris-Etherton P.M. et al. High-Monounsaturated Fatty Acid Diets Lower Both Plasma Cholesterol and Triacylglycerol Concentrations. *American Journal of Clinical Nutrition*. 1999;70:1009-15.
4. Hu, F.B.; Stampfer, M.J.; Manson, J.E.; Rimm, E.; Colditz, G.A.; Rosner, B.A.; Speizer, F.E.; Hennekens, C.H.; Willett, W.C. Frequent Nut Consumption and Risk of Coronary Heart Disease in Women: Prospective Cohort Study. *British Medical Journal*. 1998;317:1341-5.
5. Fraser, G.; Sabate, J.; Beeson, L.W.; Strahan, M.T. A Possible Effect of Nut Consumption on Risk of Coronary Heart Disease. *Archives of Internal Medicine*. 1992; 152:1416-24.
6. USDCenter for Nutrition Policy and Promotion. (2000, December). Nutrition Insights: The Role of Nuts in a Healthy Diet. Washington, DC. Retrieved January 30, 2001, from the World Wide Web: <http://www.usda.gov/cnpp>
7. Kris-Etherton, P.M. et al. The Effects of Nuts on Coronary Heart Disease Risk. *Nutrition Reviews*. 2001;59(4):103-11.

The Peanut Institute is a non-profit organization that supports nutrition research and develops educational programs to encourage healthful lifestyles.



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