GET HEALTHY!

ARTHRITIS
- lower your toxic load for pain-free joints

HEART DISEASE
- 12 ways to balance your cholesterol

PROSTATE
- 9 herbs to tame your growing problem

Aging Skin
- Botox alternatives that really work

ADIOS PAIN!
- A Yoga fix for carpal tunnel

PLUS
10 DIETARY CHOICES THAT DEFEAT DIABETES

Fall 2006
WWW.NATURALSOLUTIONSMAG.COM
ON SALE THROUGH DECEMBER 12
TAKING cholesterol to heart

Western medicine has launched an armada of drugs to lower bad cholesterol, but given the mixed results achieved so far, maybe we ought to put at least half our energy into building up good cholesterol as well. By Dennis A. Goodman, MD, FACC
Illustrations by Eili-Kaija Huusniemi

The last time Bonnie went for her annual check-up her doctor warned her to watch her cholesterol. At 240, it hovered well above the normal 200-or-lower range, making her a likely candidate for a heart attack. Instead of filling the prescription he handed her for a cholesterol-lowering statin drug, however, Bonnie sought a second opinion and a more comprehensive blood test. The results showed she indeed have high cholesterol, but she also had high “good” cholesterol. While her “bad” and total cholesterol levels needed to come down, this new doctor felt Bonnie could lower them with diet and lifestyle changes and supplements. So she consulted a nutritionist who suggested a diet rich in fruits and vegetables, encouraged her to give up red meat, and recommended a
manageable exercise program. Her new doctor started her on a vitamin and mineral regimen that included antioxidants and vitamin B complex and plant sterols. Within three months Bonnie's blood cholesterol levels began to drop and within six, her total cholesterol registered within the normal range, while the "good" kind remained high, and the "bad" cholesterol had decreased.

Everyone knows high cholesterol increases our risk for heart attacks and strokes and that we need to lower it to keep our hearts and blood vessels healthy. What does that mean—Bonnie has "good" and "bad" cholesterol?

Just asking those questions points to the obvious fact that cholesterol plays a complex role in heart health. For starters, it's a "must-have" substance for survival. Every cell of the body needs this soft, waxy, fat-like substance to help digest fats, strengthen cell membranes, insulate nerves, and make hormones. The liver produces most of it, but the cells lining the small intestine make some too, as do individual cells in the body. While the body creates all it needs—about 1,000 mg a day—we get more from the foods we eat. All foods from animal sources contain cholesterol, with egg yolks and organ meats (like liver and kidney) having the most. Plant-derived foods, on the other hand, never contain cholesterol, even if they are high in fat like avocados and peanut butter.

Like other fats in the body, cholesterol doesn't dissolve in the blood and so it can't reach the cells without the help of special carriers called lipoproteins to transport it—primarily low-density lipoproteins (LDL) and high-density lipoproteins (HDL). Although LDL has earned the nickname "bad" cholesterol and HDL has become known as the "good" cholesterol, each one has an important role to play in good heart health. LDL carries cholesterol through the body and deposits it in the cells. HDL transports any cholesterol the cells don't use to the liver, which eventually processes and eliminates it. This lipoprotein relationship works well as long as the body doesn't have an overabundance of cholesterol and as long as the ratio between LDL and HDL stays within certain parameters.

When the body does have more cholesterol than the cells need, LDL deposits the excess onto the artery walls where it forms plaque that clogs the blood vessels. The result? Atherosclerosis, a type of arteriosclerosis (hardening of the arteries) that can lead to coronary heart disease (CHD) or even a heart attack.

High levels of HDL cholesterol, on the other hand, can actually lower your risk of CHD according to many studies. Less well known is that HDL actually includes two subtypes that offer unique protection for your heart. HDL-3, a smaller form produced by the liver and intestines, scavenges and "scoops up" free cholesterol from the blood vessel walls. The HDL-3 is then chemically modified, forming a new larger-sized and more buoyant subtype called HDL-2, which transports the scavenged cholesterol to the liver for processing and elimination. The HDL then returns to the bloodstream to continue scavenging for more cholesterol. Research suggests that HDL-2, because it moves the cholesterol away from peripheral sites (like the artery walls), provides more heart protection than the HDL-3 form. They also theorize that because of HDL-2's larger size, it holds a greater number of receptor sites, allowing it to carry more cholesterol to the liver.

The American Heart Association (AHA) recognizes both LDL and HDL as strong and independent factors that can impact heart health. While high levels of LDL are associated with increased risks of cardiovascular disease (potentially leading to heart attack or stroke), high HDL
can positively impact heart health. In fact, studies have shown that for every 1 percent increase in HDL there is a corresponding 2 percent decrease in cardiovascular risk. For example, raising HDL from 36 to 40 translates to a 20 percent reduction in risk for men and 30 percent for women. AHA and the National Cholesterol Education Program have recommended that you keep your HDL levels above 40 (above 60 is optimal), your LDL levels between 100 and 159 (preferably lower than 130), and your total cholesterol under 200.

**What you can do**

Conventional physicians prescribe several medications for people with elevated triglyceride and cholesterol levels. Unfortunately, some of the most effective—the statins (trade names such as Lipitor or Mevacor)—have potentially dangerous side effects associated with their use—such as liver problems, rare muscle pain and weakness, nausea, and digestive problems. Natural medicine has thankfully found other options. Some doctors may suggest taking red rice yeast, a natural low-dose statin that also inhibits an enzyme in the liver from producing cholesterol. But bear in mind that if you take red rice yeast, you may experience the same side effects and drug interactions as you would with other statins. Alternatively, you can raise your HDL and lower your triglycerides safely using heart-healthy vitamins and minerals, and lower your LDL with pantethine and plant sterols.

**What you need to take**

**Vitamin C.** An antioxidant clinically associated with increased HDL and HDL-2 cholesterol levels, vitamin C also reduces arterial stiffness and inhibits platelet aggregation—two factors known to promote atherosclerosis.

**Vitamin E.** Another powerful antioxidant, it protects against the formation of atherosclerotic plaques, and reduces total cholesterol levels.

**Niacin.** This B-3 vitamin lowers total cholesterol, LDL cholesterol, and triglyceride levels, while raising HDL cholesterol. Studies show it increases HDL-2 levels (the best cholesterol).

**Vitamin B12.** Reduces homocysteine levels. Elevated concentrations of this amino acid in the blood may increase the risk for heart disease by damaging the lining of the blood vessels and enhancing blood clotting.

**Coenzyme Q10 (CoQ10).** A fat-soluble nutrient present in the mitochondria of virtually all cells, CoQ10 is an essential factor for cellular energy production and is a powerful free radical

---

**Lifestyle changes: Diet**

- **Eat five or more** daily servings of a variety of fruits and vegetables.
- **Eat six or more** daily servings of grain products, including whole grains.
- **Include fat-free** and low-fat milk products, fish, legumes (beans), skinless poultry, and lean meats.
- **Choose fats and oils** with two grams or less saturated fat per tablespoon, such as canola oil and olive oil.
- **Balance the number** of calories you eat with the number you use each day. To find that number, multiply the number of pounds you weigh now by 15 calories. This represents the average number of calories used in one day if you’re moderately active. If you get very little exercise, multiply your weight by 13 instead of 15. Less-active people burn fewer calories.
- **Maintain a level** of physical activity that keeps you fit and matches the number of calories you eat. Walk or do other activities for at least 30 minutes on most days.

To lose weight, do enough activity to burn more calories than you eat every day.

- **Limit your intake** of foods high in calories or low in nutrition; especially limit foods like soft drinks and candy that have a lot of sugars.
- **Limit your intake** of foods high in saturated fat, trans fat, and/or cholesterol, such as whole milk products, fatty meats, tropical oils, partially hydrogenated vegetable oils, and egg yolks. Instead choose foods low in saturated fat, trans fat, and cholesterol from the first four points above.

- **Eat less than** 6 g of salt (sodium chloride) per day (2,400 mgs of sodium).
- **Have no more** than one alcoholic drink per day if you’re a woman and no more than two if you’re a man. “One drink” means a beverage that contains no more than a half ounce of pure alcohol. Examples include 12 oz of beer, 4 oz of wine, 1½ oz of 80-proof spirits, or 1 oz of 100-proof spirits.
scavenger. Clinical research has demonstrated that CoQ10 provides protection for the inner lining of the arteries by inhibiting LDL oxidation and increasing good cholesterol levels.

**Policosanol.** A unique mixture of essential alcohols derived from sugar cane, including octacosanol, tetracosanol, hexacosanol, and triacosanol, policosanol improves cholesterol levels by reducing the amount produced by the body and increasing the amount eliminated from the body. Additionally, it provides protection for arteries and blood vessels by inhibiting platelet aggregation.

**Plant fats, called sterols, have a chemical structure similar to cholesterol.** As a result, they can act as stand-ins for cholesterol and block its absorption.

**Fish Oils.** Oily, cold-water fish oils provide the omega-3 fats EPA and DHA, which promote cardiovascular health, increase beneficial HDL levels, and reduce triglyceride levels. DHA and EPA also support normal heart rhythm, reduce inflammation, and may reduce plaque in the arteries.

**Hawthorn Berry Extract.** This powerful tonic herb supports muscle strength in the heart, helping to maintain healthy heart rhythm. It is often used to control high blood pressure and relieve mild or stable angina (chest pain).

**Garlic Bulb.** A powerful antioxidant that possesses wide-ranging cardiovascular health benefits, garlic is traditionally used to reduce both cholesterol and blood pressure levels. Clinically shown to raise good cholesterol levels, particularly HDL-2 cholesterol, garlic also inhibits LDL oxidation and platelet aggregation.

**N-Acetyl-L-Cysteine (NAC).** A derivative of the amino acid cysteine, NAC helps boost levels of glutathione, one of the body’s most powerful cellular antioxidants, and increases good cholesterol levels.

**Alpha Lipoic Acid (ALA).** An antioxidant and vital cofactor necessary for the production of cellular energy, ALA helps recycle other important antioxidants, including vitamins C and E, CoQ10, and glutathione. ALA also helps control cholesterol and high blood pressure levels and maintains healthy blood flow and heart contraction.

**Soy Isoflavones.** Studies show that a soy protein-enriched diet significantly decreases LDL and triglyceride levels and increases HDL cholesterol levels.

**Grape seed extract.** This nutrient may block the effects of certain enzymes involved in processing cholesterol and other fats. It is also a well-known antioxidant that may help protect blood vessels from damage by free radicals.

**Vitamin B to the Rescue**

Pantethine, a form of pantothenic acid (also known as vitamin B5) found in small amounts in foods such as liver, salmon, and yeast, appears to lower cholesterol by inhibiting several enzymes and coenzymes responsible for its production. Pantethine blocks the activity of one coenzyme in particular, HMG-CoA, by about 50 percent, which results in significantly lower cholesterol production. But, that’s not all. To compensate for the lowered cholesterol production, the liver pulls LDL out of the bloodstream. The end result? Studies have shown that on average, pantethine can lower total cholesterol levels by 16 percent, LDL cholesterol levels by 14 percent, and serum triglycerides by 38 percent, and that it can raise HDL cholesterol by 10 percent.

**Plant “Fats” May Help, Too**

Found in nuts, vegetable oils, corn, and rice, plant fats, called sterols, have a chemical structure that’s similar to cholesterol. As a result, plant sterols can act as stand-ins for cholesterol and block its absorption. The liver receives about 800 mg of cholesterol every day from the food we eat through receptor sites in the intestines—special channels shaped exactly like cholesterol molecules. The cholesterol enters these channels and then moves into the bloodstream. Because plant sterols look like cholesterol, they fit perfectly into these channels and effectively block them. With no other place to go, the cholesterol remains in the intestines and eventually gets excreted.

If we eat enough plant sterols, we can greatly reduce the amount of cholesterol transported from the intestinal tract to the liver. And, as with pantethine, this cholesterol reduction causes the liver to pull LDL cholesterol out of the blood, reducing both total and LDL cholesterol levels.
Healthy Picks

Managing your cholesterol and overall heart health can feel daunting, even when you know the types of foods and nutrients you need to eat. Choosing proprietary blends of nutrients may ease your confusion. Our favorites include the following:

Enzymatic Therapies HDL Booster (120 tabs for $40)
Developed by Dennis A. Goodman, MD, this heart-healthy blend includes vitamins and minerals such as vitamins C, E, B6, B12, niacin, folic acid, magnesium, and selenium; amino acids; antioxidants like CoQ10, alpha lipoic acid, NAC, and policosanol; and extracts of hawthorn, garlic, grape seed, and soy isoflavones. A small 2002 study showed a 23 percent increase in HDL for high-risk groups after six months (the HDL-2 by 50 percent); a decrease in triglyceride levels by almost 40 percent; and a decrease in homocysteine levels as well. You could see results in as little as three months.

Nature Made Cholest-Off (120 tablets for about $30)
This blend of phytosterols and -stanoles also includes magnesium and calcium carbonate. The National Cholesterol Education Program recommends that you take two grams of plant sterols and stanoles daily to reduce high cholesterol levels. People generally get approximately 250 to 300 mg from food, so supplementing with a product such as Cholest-Off makes sense. More than 100 studies show plant sterols/stanoles reduce LDL anywhere from 4 percent to 24 percent. Nature Made's blend has studies associated with it showing up to a 23 percent LDL reduction. You could see results in as little as 30 days.

Sytrinol blend (cost varies)
Sytrinol has among its ingredients a combination of bioflavinoids found in citrus fruits, including tangeretin and nobiletin, two of the most potent for heart health. It also uses powerful antioxidants called tocotrienols extracted from the fruit of the palm tree to decrease inflammation associated with heart disease and balance cholesterol production in the liver. This particular blend has clinical trials associated with it showing that Sytrinol improved total cholesterol numbers up to 30 percent; decreased LDL numbers by up to 27 percent, triglyceride levels to 34 percent; and improved the LDL-HDL ratio by up to 30 percent. Licensed and marketed by SourceOne Global Partners, Sytrinol is found in products by companies like Solgar, Nature's Way and Vitamin Shoppe.

Everyone's concern
Recent studies have shown that reducing bad and raising good cholesterol in people without heart disease greatly reduces their risk for ever developing CHD, including heart attacks and atherosclerosis. This is true for people with high total cholesterol levels and those with average numbers. Because of the potential side effects, physicians today generally avoid prescribing statin drugs to people without actual heart disease or high cholesterol levels. Rather, they recommend dietary and lifestyle changes first. However, in some instances these changes fail to alter undesirable cholesterol profiles enough, making supplementation necessary. Fortunately, several products on the market (see "Healthy Picks" above) can effectively help people with heart disease, dangerous cholesterol levels, high triglyceride levels, and high homocysteine levels, as well as those of us just
Other Risk Factors

High Blood Pressure can cause problems. Many people confuse high blood pressure with high cholesterol or believe one causes the other. They are, in fact, independent risk factors for heart disease and stroke, along with high triglyceride levels. It is true that when your cholesterol level rises, your arteries thicken, making it easier for lipids to enter the arterial walls, but high cholesterol doesn't cause a spike in blood pressure.

Triglycerides are fats used as fuel by the body and as an energy source for metabolism. Triglyceride levels fluctuate easily, changing after every meal. Increased levels are almost always a sign of too much carbohydrate and sugar intake. Present in high amounts, triglycerides make the blood more sluggish and less capable of transporting oxygen, particularly through the smallest blood vessels. These fats are another risk factor for heart disease.

Homocysteine is an amino acid found in the blood. Elevated concentrations of it in the blood (plasma) may increase the risk for heart disease by damaging the lining of the blood vessels and enhancing blood clotting. Folic acid and other B vitamins can help lower homocysteine levels.

Men . . . Do you have any of these symptoms?

- Frequent urination
- Waking several times at night to urinate
- Difficulty initiating urination
- A weak urinary stream
- Hesitancy
- Urgency
- Sexual dysfunction and decreased libido

If so . . . Then chances are . . . You are suffering from an enlarged prostate

Prostate Miracle®

A highly effective Natural treatment For an enlarged Prostate

- 95% Effective in clinical studies
- NO Side Effects or Drug interactions
- 3,000 Times stronger than Saw Palmetto
- Each caplet contains 300mg of Beta Sitosterol
- Money Back Guarantee

1.877.965.2140
www.Prostate-Miracle.com
www.NaturesHealthSupply.com

Dennis A. Goodman, MD, FACC, is the former chief of cardiology and is currently senior cardiologist in the Scripps Integrative Medicine Department at Scripps Memorial Hospital, La Jolla, California.