



Cholesterol and Your Heart

BY EDWARD YOON, M.D.

We all have heard about the link between cholesterol and heart disease. High cholesterol promotes the formation of fatty plaque deposits in arteries, which is the fundamental cause of heart attacks and strokes. However, people have different types of cholesterol abnormalities, some of which are treated differently from others. The good news? We now have many options to safely lower cholesterol and prevent heart disease.

What is Cholesterol?

Cholesterol is a molecule that is essential to life. Specifically, it is a large, complex molecule, a basic building block for cell membranes and hormones that is found all through the animal kingdom, including worms and insects. The problem in America is that we all have too much access to cholesterol, rather than too little. The cholesterol in a two-egg omelet is enough for an entire body's daily supply of cell building.

Many people do not realize that genes play a strong role in our cholesterol metabolism. So although diet definitely contributes to inflated cholesterol, some people simply have different internal metabolism, resulting in widely different levels of cholesterol. In fact, much of the original scientific work that proved cholesterol's relationship to heart disease was based on families who had specific genetic variations that lead to very high cholesterol levels. Some of these folks lacked specific genes, had very high cholesterol levels, and were known to have heart attacks as teenagers.

With a lipid test that measures the different types of cholesterol, we can identify how a person metabolizes cholesterol. The typical lipid test measures several types or "fractions" of cholesterol. The fraction that is most powerfully associated with heart attacks is "LDL" or low-density lipoprotein cholesterol. These are the cholesterol parti-

cles that float in the bloodstream, depositing yellow plaque into artery walls.

"HDL" or high-density lipoprotein is the "good" cholesterol. It acts like a garbage truck, hauling away the cholesterol from your artery. Some lucky folks are born with very high HDL, and these people rarely have heart attacks.

The Role of Diet

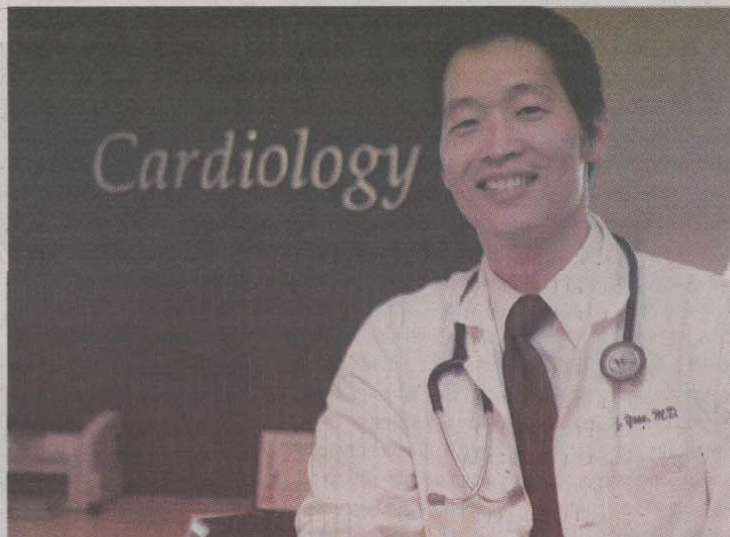
Saturated fat is a major culprit in raising cholesterol levels. In America, saturated fat mostly comes from meat and animal products such as milk, butter, cheese and eggs. Many people can significantly reduce their cholesterol levels—and may not need medicines—by simply keeping close watch on their saturated fat intake, losing weight and eating more vegetables and fruits.

Here are some practical tips that can drop your cholesterol today:

Diet—When eating meat, limit it to 4 ounces. A good estimate of 4 ounces is that the portion should fit neatly within the palm of your hand—fingers not included. Choose chicken, turkey or fish instead of beef or pork, and you will seriously cut your saturated fat intake, especially if you remove the chicken skin and avoid deep frying. Use olive oil and grapeseed oil instead of butter. Egg Beater-type products are eggs that have the cholesterol (egg yolk) removed but still cook just as well as regular eggs.

A glass of wine each day can raise HDL cholesterol—but it's important to remember that it's one glass, not one bottle, per day. Other alcoholic drinks such as beer and even mixed drinks also appear to protect against heart attack, but again, moderation is the key.

Exercise—Whole body aerobic exercise can raise your good cholesterol and help reduce your risk of a heart attack, in addition to warding off diabetes, cancer and high blood pressure.



Edward Yoon, M.D. is a board-certified cardiovascular disease specialist with Sutter Regional Medical Foundation and on staff at Sutter Solano Medical Center.

Medications

Medicines to treat cholesterol are now the most widely prescribed medicines in the world. This is because many people, even on an excellent diet, have high LDL cholesterol. Again, genes are partly to blame.

"Statins" are the most commonly used medicines to treat high cholesterol, and there are many available. The reasons why statins rule the roost? After more than 20 years of research, statins have been shown to prevent heart attacks and strokes. Some are more powerful than others at reducing LDL. Some are generic and some are not. Which statin is best for you is partly determined by whether you have already had a heart attack or stroke, or have other conditions that may predispose to vascular disease.

People who should not be on statin medications include those who feel all-over muscle aches while taking them, or have significant liver disease. A basic blood test and

following up with your doctor will ensure that the statins are not causing any problems. Fortunately, the sheer number of patients who have taken statins for many years without any problems has been the best proof of statin safety. All told, only about 6 to 8 percent of people may have to stop their statin use due to side effects.

Heart Lecture on March 3

Learn more about heart disease prevention strategies, risk factors and treatments at a heart lecture on Tuesday, March 3 at 6:30 p.m. at the SRMF Care Center located at 2700 Low Court in Fairfield. In addition to light refreshments, giveaways and free American Heart Association cookbooks to the first 20 attendees (one per family), a question-and-answer session will follow the lecture. The public is invited to attend, but seating is limited. To reserve a spot or for more information, please call 707-428-2747.