Cholesterol and Your Health by Pamela Levin

You may have thought that cholesterol is dangerous and that consumption of cholesterol in your diet increases your risk of cardiovascular disease and even cancer. Therefore, you may assume that to improve your health and decrease your chances of getting heart disease, stroke or cancer that you need to reduce your intake of cholesterol, which, in turn, will lower your blood cholesterol levels and bring you out of the danger zone. Is this true? To answer this question means understanding first what cholesterol is, and then what it does in the body.

What Is Cholesterol? Cholesterol is sterol: a waxy lipid (meaning fat) compound that is found in animal tissues. It performs a variety of essential functions in your body. For example, it facilitates both the absorption and the transportation of fatty acids. It is also a fundamental building block for a variety of your hormones. These include both your adrenal hormones (cortisol, cortisone and aldosterone) and your sex hormones (progesterone, estrogens and testosterone). Additionally, it plays a role in the function of your brain, your immune system and your heart health.

Cholesterol's Reputation. If cholesterol is so essential to your health, how did it develop the reputation of being the devil in molecular form? This shady reputation came about because it was seen that people who had heart disease or strokes also had high cholesterol levels. So it was thought that cholesterol levels themselves were the problem. But actually the body raises cholesterol levels in response to a problem. In other words, high cholesterol levels are the body's attempt to keep itself healthy. The body raises these levels to deal with inflammation. When the insides of the arteries and veins are inflamed, for example, the body sends cholesterol in to attempt to patch the areas of inflammation. It's actually the inflammation that's the problem, and not the cholesterol itself.

Blood Cholesterol Levels: What's "Normal"? Cholesterol levels are measured in milligrams (mg) of cholesterol per deciliter (dL) of blood Current standards define desirable total cholesterol levels as less than 200 mg/dL, with 200-239 mg/dL defined as borderline high and 240 mg/dL and above high. For low density lipoprotein cholesterol levels, less than 100 mg/dL is considered optimal, 100-129 mg/dL near optimal or above optimal, 130-159 mg/dL borderline high, 160-189 mg/dL high and 190 mg/dL and above very high.

It is worth noting that these standards were defined after initial studies which were conducted on only on men. It remains to be seen whether the cholesterol levels defined as normal for the male body are actually best for a woman. Men's hormone requirements are much different than women's. Also, women's bodies have a different biochemistry and metabolism than men, including hormonal production needs and responses, a fact that may seem obvious, but which has not been recognized in many "scientific" studies, particularly earlier ones.

When Cholesterol Intake is too Low. Cholesterol is so essential to your well-being, that if you do not provide enough in your diet for your body's requirements, your body will make it. In other words, if your diet contains too little cholesterol, your bodily synthesis of cholesterol will go into high gear to produce enough. This is why you can reduce your dietary cholesterol and find that your blood cholesterol levels remain unchanged, that they've gone higher or even skyrocketed.

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One study, conducted on both women and men who were elderly demonstrated the dangers of cholesterol being too low. The results indicated that low blood cholesterol levels are related both to the inability to perform daily functions.... and higher mortality rates from other diseases, especially stroke."ⁱ People who lived the longest actually had the highest cholesterol levels *unless* they had a blood sugar metabolism problem.

If Your Cholesterol Levels Are High. The current standard of medical practice requires physicians to prescribe cholesterol lowering drugs, a policy which has made statins the top selling drug in the world. This policy also makes drugs a first resort rather than a last one. However, these drugs have numerous side effects. Also, the drugs that exist today only lower cholesterol, which is not the problem.

If your blood cholesterol levels are too high, where do you start? The answer has to do with cholesterol's role in inflammation. High cholesterol levels indicate it is likely you have an inflammatory process going on in your body. In that case, it's not dietary cholesterol you need to avoid. Instead, you need to get to the bottom of what's causing that inflammation.

One of the biggest causes of high blood cholesterol is those pesky refined carbohydrates. They set up inflammation in your arteries, and then the cholesterol comes rushing in to "stick" to the inflamed arterial walls to strengthen them and try to repair the damage. Your blood cholesterol levels are actually raised, not because you ate too much cholesterol, but because the inside of your arteries is inflamed. In other words, cholesterol is coming to repair damage caused by inflammation, and it's the inflammation in the arteries that's the culprit in causing arterial damage, and not the cholesterol itself. Some other causes of inflammation include food intolerances, heavy metal toxicity, chemical toxicity, infection (including sub-clinical ones) and generalized toxic overload.

You also need to make certain you're getting enough essential fatty acids, especially omega-3s. Omega-3s are found in vegetable oils such as flax seeds, chia seeds, wheat germ, soybean oil, walnuts, pumpkin, and canola oil, red and black currant seeds as well as fish oil.

Exercise also helps lower cholesterol. Most recommendations are for $\frac{1}{2}$ hour of aerobic exercise a day, staying within what your body can tolerate and slowly building up.

Looking at the facts points to three conclusions to the cholesterol controversy:

(1).You need essential fatty acid building blocks in the form of sterols, which are made from cholesterol which is made from dietary fat;

(2.) The key to good health where fats are concerned is not no fat or low fat, but balance, which includes consumption of foods containing cholesterol; and (3). To reduce your chances of suffering from heart disease, stroke and cancer, you need to get to the root of what's causing the inflammation in your body. A qualified health practitioner can help you in this discovery and offer recommendations for dealing with it effectively.

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Sources For a thorough treatment of this subject, see <u>Know Your Fats, The Complete Primer</u> <u>for Understanding the Nutrition of Fats, Oils, and Cholesterol</u> by Mary G. Enig, Ph. D., Bethesda Press, Silver Spring, Md., 2000.

Dr. Phillip Maffetone, 'More Dangers of Low Fat Diets' Originally published as "Health Capsules", <u>The</u> <u>International College of Applied Kinesiology</u>, Shawnee Mission, Kansas. Available at: <u>http://www.icakusa.com/healthcaps/food/lowfatdanger.html</u>.

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Pamela Levin, R.N. is a local health practitioner specializing in clinical nutrition. She wrote <u>Perfect Bones, A Six Point Plan to Promote Healthy Bones</u> to detail the process she used for herself and now her clients to rebalance the body and regain bone health. Published by Celestial Arts, it is available locally and at Amazon.com, <u>www.perfectbones.com</u> and the Mendocino County Library. She can be reached at (707) 462-2217