

Medical Myths Associated with Cholesterol

Let me tell you right up front this was not an easy chapter to write. First of all, it is filled with a lot of technical terms not used in everyday conversation. Lipoproteins, low density lipids, very low density lipids, triglycerides, and other terms having to do with cholesterol do not generally come up at cocktail parties.

I also had to relearn everything I ever learned about cholesterol before I could write this chapter. Many years ago, I was an advocate of strict, low-fat, low cholesterol diets. I was even on the Pritikin diet, one of the low-fat diets so popular several years ago. This was “B.A.,” or before the Atkins low-carbohydrate fad diet, which is “B.S.B.,” or before the South Beach Diet. But I digress.

Nathaniel Pritikin was a layman who set out to lower his cholesterol levels to rock bottom numbers after he found out he had advanced coronary artery disease. His zealous promotion of his low-fat lifestyle won over many converts, and he became quite famous. Pritikin was able to beat heart disease, but when faced with leukemia, he elected to commit suicide. This tragic

event may have been caused by the very thing that Pritikin promoted...a low-fat diet.

Unbelievable? A low-fat diet may have caused cancer and even suicide? As a reformed low-fat, low cholesterol advocate myself, I can sympathize with your shock and dismay. However, since you purchased this book, you already know from the title that this isn't going to be another "cholesterol is evil" book. In fact, I'm going to attempt to dispel all the medical myths that claim cholesterol and fat are evil villains that should be purged from our diet. It won't be easy because this medical myth has taken a real foothold in the public's mind.

OK. Put your thinking caps on because the next several paragraphs are going to be filled with lipoproteins, LDL's, HDL's, and other assorted scientific jargon.

Cholesterol

Cholesterol is a soft, waxy, fat-like substance manufactured in the human liver. Although cholesterol is called a fat, chemically it is really an alcohol. Cholesterol is found in all animals. Cholesterol and other fats can't dissolve in the blood. They have to be transported to and from the cells by special carrier molecules called lipoproteins. Lipoproteins are compounds that transport fats (triglycerides and cholesterol) through the blood stream. About one-third to one-fourth of blood cholesterol is carried by high density lipoproteins (HDL). HDL carries cholesterol away from the arteries and back to the liver, where most is passed from the body. Low density lipoproteins (LDL) and very low density lipoproteins (VLDL) are considered to be bad because they deliver cholesterol to the cells of the body.

Now, let's stop right here so that I can clarify something.

Lipoproteins are not cholesterol. They are carrier molecules that transport cholesterol. LDL is not bad. It provides an essential bodily function. Only when LDL becomes oxidized from free radical proliferation does LDL become bad.

Cholesterol and fats are the very building blocks that make up each and every cell. Cholesterol is an important fat that helps keep cell membranes permeable. This permeability allows good nutrients to get in and toxic waste products to get out of the cell. Cholesterol is the precursor to vitamin D, which is necessary for numerous biochemical processes, including mineral metabolism. Cholesterol makes the bile salts required for the digestion of fat. Those who suffer from low cholesterol often suffer from bloating, gas, and indigestion.

Cholesterol is used by the body to repair and patch damaged cellular membranes. Scar tissue contains high levels of cholesterol. This is one of the reasons cholesterol is seen in arterial plaques. When an arterial cell is damaged from free radicals, infection, or other inflammatory processes, cholesterol is dispatched to patch the diseased tissue.

Cholesterol is not the cause of atherosclerosis.

Atherosclerosis is a by-product of the damage and repair cycle.

Over eight percent of the brain's solid matter is made up of cholesterol. Lipids (fat) make up 70% of the brain. Fat insulates the brain cells and allows neurotransmitters (hormones) to communicate with one another. Therefore, cholesterol is essential for proper brain function and normalized neurotransmitters (including serotonin, dopamine, and epinephrine). Cholesterol is also essential in maintaining proper hormone production. Testosterone, dehydroepiandrosterone (DHEA), progesterone, estradiol, and cortisol are all made from cholesterol. Low cholesterol has been linked to certain mood disorders, including depression and anxiety. Low cholesterol also increases the risk of heart attack and premature death. Yes, you read this correctly.

Because it is essential to our very survival, the body manufactures cholesterol on a daily basis. Cholesterol is so important that the body manufactures 800 to 1500 mg each day.

MORE MEDICAL MYTHS

1. Eating a low cholesterol diet reduces blood cholesterol.

Fact: *Reducing dietary cholesterol will only trigger the body to make more! Low cholesterol diets are rarely successful in reducing blood cholesterol.*

The idea that a person can substantially reduce their cholesterol levels by reducing the amount of fats (cholesterol) in their diet is a myth. Humans get 15% of their daily cholesterol from eating animal products, dairy, meats, fish, and shellfish. The majority of cholesterol, 85%, is produced by the human body.

Our bodies have a self-regulating cholesterol meter that monitors our daily cholesterol production. If you reduce the amount of cholesterol you ingest, your body will simply adjust by manufacturing more. Only a small percentage of people find they can actually reduce their cholesterol levels with low-fat dieting alone.

2. Eating fat causes high cholesterol.

What about eating Filet Mignon, eggs, butter, and other foods high in cholesterol? Will eating these foods raise cholesterol levels?

I know this will be difficult to swallow (pun intended) for those of you on the American Heart Association's low-fat, low cholesterol diet, but the answer is no. In fact, you'll actually lower your cholesterol levels. I will explain this later in another chapter, but for now, let me share this basic biochemical fact: Dietary fat does not turn into fat. Instead, unused carbohydrates turn into fat.

3. High cholesterol causes CAD.

This, too, is a myth. "I just don't believe this," you say. Well, let's look at a few studies.

By 1998, there were a total of 30 different studies involving more than 150,000 people which looked at the relationship of

dietary fat and the risk of heart disease. These studies showed there was no difference in the risk of CAD in those who ate animal fats and those who did not.¹

Interestingly, the fat intake for many countries has actually increased over the years. Meanwhile, incidence of heart disease in some of these countries has decreased.

For example, take a look at Greece, the birthplace of the Mediterranean Diet. Comparing the amount of fat intake from the years 1961 through 1963 to that of 1983 through 1985 shows that the people of Greece increased their consumption of saturated fats by 65%, yet their incidence of heart disease only increased by 13%.

To quote Ancel Keys of the Mediterranean Diet fame, from a paper in 1956:

“In the adult man the serum cholesterol level is essentially independent of the cholesterol intake over the whole range of human diets.”

Meaning, it didn't matter what they ate; high cholesterol, low cholesterol, low-fat, or high-fat foods.

And more recently, Dr. Keys had this to say about the connection between cholesterol in the diet and cholesterol in the blood:

“There's no connection whatsoever between cholesterol in food and cholesterol in blood. And we've known that all along. Cholesterol in the diet doesn't matter at all unless you happen to be a chicken or a rabbit.”²

Dr. Keys says it so eloquently.

In 1976, a study was performed by a team of researchers from the University of Michigan headed by Dr. Allen Nichols. Experienced dieticians meticulously screened over 2,000 individuals and analyzed over 3,000 American food items to make their scientific calculations. There was no difference in the amount of saturated fat and blood cholesterol.³

For those who love to read through technical reports, or just need more proof that eating fatty cholesterol-laden foods does not cause an increase in cholesterol levels, please refer to the appendix for more cited studies. However, I think most of you have gotten the point. Eating fat or cholesterol does not increase blood cholesterol levels.

Doesn't everyone believe cholesterol causes atherosclerosis or clogging of the arteries? Well, not everyone believes that cholesterol causes arteriosclerosis. In fact, some of the brightest scientists, PhD's, and medical doctors do not believe cholesterol causes atherosclerosis. Even I have finally come around and realize that what these brave medical mavericks have staunchly suggested, namely that cholesterol has nothing to do with increasing the risk of heart disease, is true.

Actually, low cholesterol levels may cause heart attacks, but not high cholesterol.

Read what the *The Journal of Cardiology* had to say on this matter: "Low cholesterol increases the risk of a heart attack."⁴

These individual scholars aren't a bunch quacks. These people are well respected, highly educated researchers who have been published in some of the most prestigious medical journals of our time including *The British Medical Journal*, *The Lancet*, and even in the blue blooded *New England Journal of Medicine*. From *The Lancet* comes this nugget of information:

"Our data accord with previous findings of increased mortality in elderly people with low serum cholesterol, and show that long-term persistence of low cholesterol concentration actually increases the risk of death. Thus, the earlier that patients start to have lower cholesterol concentrations, the greater the risk of death."⁵

Low cholesterol causes increased risk of premature death in the elderly!

No one has ever died from high cholesterol. In fact, blood cholesterol has nothing to do with atherosclerosis or and increased risk of death. But low cholesterol does increase the risk of

premature death. Study after study has shown that there is no relationship between blood cholesterol levels and the degree of atherosclerosis in the vessels. If a high cholesterol diet promotes atherosclerosis, then those eating such a diet should demonstrate more atherosclerotic plaques than those on a low cholesterol diet.

Research conducted at the Department of Forensic Medicine of New York University in 1936 found absolutely no correlation between the amount of cholesterol in the blood and the degree of atherosclerosis.⁶

Almost thirty years later, researchers sampled the blood of over 800 war veterans and came to the conclusion that there was no connection between the degree of atherosclerosis and blood cholesterol levels. Those with low cholesterol levels had as much plaque as those with high blood cholesterol. They did find that those who had low cholesterol were just as atherosclerotic when they died as those who had had high cholesterol.

In other words, there was no difference between those with low or high cholesterol levels.⁷

The Framingham Study Revisited

The Framingham study was begun in 1948 and was conducted over a fourteen year period. The study measured the cholesterol levels of 2,282 men and 2,845 women. The authors of this study found that the higher a person's cholesterol level, the greater their risk of heart disease. This study has been held as the gold standard for proving the "cholesterol causes CAD" theory. However, there is a growing list of medical scientists who are now questioning the methods and results of this and other studies that have advocated the "high cholesterol causes CAD" theory.

A follow-up study to the now infamous Framingham study shows that our rush to squelch total cholesterol levels may have been in error. To cite the Framingham authors: "For each 1 mg/dl drop of cholesterol there was an 11% increase in coronary and total mortality."

Another prestigious medical journal, *The Lancet*, reported in 1994 that most individuals with coronary artery disease have normal cholesterol levels!⁸

It's not that the research doesn't show up in the medical journals. It does. It's just often ignored. Perhaps the pharmaceutical companies' aggressive ad campaigns that fill both medical journals and the media at large have something to do with it. There is quite a bit of vested interest in perpetuating the cholesterol myth, considering that cholesterol lowering statin medications account for 6.5% of all drug sales in the United States, or 12.5 billion dollars. That's \$12,500,000,000!

Other studies have shown that cholesterol numbers, especially total cholesterol levels, may not be as important as we have been led to believe. It appears that total cholesterol is not a very reliable marker for predicting the risk of a heart attack in men above age 65.

In the 30 year follow-up of the Framingham population for instance, high cholesterol was not predictive at all after the age of 47, and those whose cholesterol went down had the highest risk of having a heart attack!⁹

Yes, you read that right—straight from a medical journal. Anyone over the age of 47 who is taking cholesterol lowering drugs should reconsider.

You will live longer with high cholesterol.

Individuals with high cholesterol live the longest. I know this statement is politically incorrect. However, scientific studies clearly show that people with high cholesterol live the longest. Consider the finding of Dr. Harlan Krumholz of the Department of Cardiovascular Medicine at Yale University, who reported in 1994 that old people with low cholesterol died twice as often from a heart attack as did old people with high cholesterol.¹⁰

And remember Nathaniel Pritikin? The following is research that links low cholesterol to depression and suicide. Low cholesterol levels have also been linked to an increased risk of cancer.

- Several studies show that among older adults, those with lowered cholesterol are more likely to suffer from depression.¹¹
- Those with low cholesterol are three times more likely to suffer from depression as normal adults.¹²
- The *British Medical Journal* published research showing that the lower the cholesterol, the more severe the depression.¹³
- Low cholesterol levels are also linked to an increased risk of committing suicide. One study, reported in the *British Medical Journal*, showed that of the 300 people who had committed suicide, all had low cholesterol levels.¹⁴
- And here is another reason to avoid statin drugs like the plague. Men whose cholesterol levels are lowered through the use of prescription medications double their chances of committing suicide.¹⁵

For Women Only

The *Journal of the American Medical Association* reports that there is no evidence linking high cholesterol levels in women with heart disease.¹⁶

Cholesterol levels are meaningless in women!

If you are female, the next time your doctor suggests you begin taking cholesterol lowering drugs, please remind him of the medical studies that show total cholesterol levels for women are meaningless.

I'll repeat this again. Total cholesterol levels for women have been shown to be meaningless! There are only a couple of studies that suggest cholesterol levels have any relevancy for women and CAD. The rest of the studies show no increased risk between cholesterol levels and CAD in women.¹⁷

And Dr. Thomas Newman of the University of California at San Francisco, who has written extensively on cholesterol and heart disease, reports that cholesterol medications are less beneficial to women and may even increase their risk of death.¹⁸

Please talk to your doctor about getting off your cholesterol-lowering medicine. It may save your life!

What are we to make of this? I wrote earlier that I was going to share information that would be controversial. There is a great deal riding on these medical myths. As a result, they are being safeguarded and aggressively defended by mainstream medicine. The whole cholesterol theory has spawned billions of dollars in testing, office visits, pharmaceutical sales, and low-fat foods. But by lowering cholesterol through Spartan, low-fat diets and fat-lowering drugs, are we any better off health-wise? From the studies presented above, the answer is no. Hopefully you will not feel guilty about eating meat, real butter, and eggs once again.

A Windfall for Drug Companies

Recent guidelines have lowered the acceptable limits for cholesterol. Experts predict that the effect of following the guidelines will mean that prescriptions for statins and other lipid-lowering drugs will triple from 12 million now to 36 million. Pfizer (Lipitor) and the other drug companies who are pushing similar lipid-lowering (“me too” drugs) must be salivating. But should those with high cholesterol rush to get their statin prescriptions filled? These medications, which are being touted as the greatest thing since sliced bread, have numerous side effects, including death. Death is a pretty big side effect, don’t you think? Maybe folks should think twice before filling their statin prescription.

For those of you who need more studies to sift through before abandoning your statin drug, please see the appendix.