



Cholesterol Facts vs. Myths



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Cholesterol is a very misunderstood molecule.

And though many people might not be aware of it, there has long been a vocal minority of doctors, researchers and health professionals who believe that cholesterol and fat have been wrongly convicted as the primary promoters of heart disease. Along with many of our fellow health professionals, we believe that this emphasis on cholesterol has caused us to take our attention off what we believe to be the true promoters of heart diseases – inflammation, oxidative damage, stress and sugar.

We believe the evidence against cholesterol as a causal factor in heart disease is much weaker than was previously believed, and we make our case in our new book, *The Great Cholesterol Myth*, complete with hundreds of medical references from peer-reviewed journals. We also believe that the statin drugs given to lower cholesterol are being over-prescribed, and are not without significant side effects.

[Cholesterol is needed for life.](#) It's the parent molecule for all the major sex hormones, including estrogen, progesterone and testosterone. It's needed for the immune system, and it's needed for the brain. (In fact, one of the most serious side effects of cholesterol-lowering medication is memory loss.)

As we stated on the show: “Trying to prevent heart disease by lowering cholesterol is like trying to reduce calories by taking the lettuce off your [hamburger].” It's not that the lettuce doesn't have any calories – it's that it's the wrong target.

And cholesterol is the wrong target if you're trying to prevent heart disease.

We fervently believe that neither cholesterol nor fat is the major villain in the American diet – sugar is. We also believe that the case against cholesterol, which was made nearly 30 years ago, was based on faulty evidence. The case needs to be re-opened and the evidence needs to be re-examined.

Belief in the “Great Cholesterol Myth” has caused us to neglect the *real* causes of heart disease while obsessively focused on an innocuous molecule that's essential for life and that we believe has only a minor role in heart disease.

The Great Cholesterol Myth is really a series of related myths that impact everything from our diet to the way we treat heart disease. Here are several of what we believe to be the biggest ones:

Myth: High cholesterol is a good predictor of heart attacks.

Fact: High cholesterol is a terrible predictor of heart attacks.

More than half the people admitted to hospitals with cardiovascular disease have normal cholesterol, and plenty of people with elevated cholesterol have perfectly healthy hearts.

A much better indicator of your overall risk for heart disease is the triglycerides to HDL ratio. If, for example, your triglycerides are 100 and your HDL is 50 your ratio is 2. If, however, your triglycerides are 150 and your HDL is 30, your ratio is 5. A ratio of 2 or under is excellent. A ratio of 4 is considered high, with increased risk.

One [Harvard study](#), published in the journal *Circulation*, showed that the people with the highest ratio of triglycerides to HDL had 16 times the risk of heart attack as those with the lowest ratio of triglycerides to HDL. In fact, the ratio of triglycerides to HDL was the strongest predictor of a heart attack, even more accurate than the LDL/HDL ratio.

Myth: High cholesterol is the cause of heart disease.

Fact: Cholesterol is a fairly insignificant player in heart disease.

Inflammation is the primary cause of heart disease. Here's what happens: Small injuries in the lining of the arteries become inflamed. Small, dense, oxidized (damaged) LDL-B cholesterol particles (among other things) get trapped at the site of the injury;

oxidative damage and inflammation increases, ultimately creating a kind of toxic brew that can turn into plaque. Only oxidized, small-particle LDL cholesterol is a problem, and it's only a problem when there's inflammation.

Myth: Lowering cholesterol with statin drugs will prolong your life.

Fact: There is conflicting data on whether statins have any impact on longevity.

The majority of cholesterol-lowering studies don't show any difference in death rates between patients who take statins and patients who don't. In the [PROSPER study](#), statin use in women with *known heart disease* resulted in a small reduction in mortality from heart disease; however, this was offset by additional deaths from cancer and other mortalities, so the overall net "gain" in terms of lives saved was a big fat zero.

Myth: Statin drugs are perfectly safe.

Fact: Statin drugs have significant side effects, including loss of memory and libido, muscle pain and fatigue.

[University of California San Diego researchers](#) found that the majority of doctors dismissed some important side effects that may have been caused by statins. Approximately 65% of doctors in their study missed some side effects or failed to connect some complaints with the medication. Meanwhile, side effects such as forgetfulness, loss of sex drive, fatigue, and muscle pain and worse continue to be reported.

Myth: Statin drugs are appropriate for men, women, children and the elderly.

Fact: The only group in which statins have been shown to have even a modest effect is in middle-aged men who've already had a heart attack.

A [2004 study](#) in the *Journal of the American Medical Association* by Judith Walsh, MD (4) found that statin drug treatment to reduce cholesterol in women provided no mortality benefit. A [2007 study](#) claims there is no evidence to show that giving statins to women keeps them free of heart disease, and statin drugs have never been tested long term on children.

Myth: Saturated fat is dangerous.

Fact: Recent peer-reviewed studies have shown [no association of saturated fat with heart disease](#).

Two major studies in the last few years concluded that there was no association between saturated fat intake and heart disease. In [one study](#), the researchers wrote, "Intake of saturated fat was *not*

associated with an increased risk of coronary heart disease or stroke, nor was it associated with an increased risk of cardiovascular disease."

Myth: The higher your cholesterol, the shorter your lifespan.

Fact: In the Framingham Study, the people who actually [lived the longest](#) had the highest cholesterol.

One study published in the *Journal of the American Geriatric Society* found that those with cholesterol levels lower than 189 were far *more* likely to die than those with the highest cholesterol levels. "Subjects with low total cholesterol levels are at higher risk of dying even when many related factors have been taken into account," the [researchers wrote](#).

Myth: A high-carbohydrate diet protects you from heart disease.

Fact: Diets that substitute carbohydrates for saturated fat may actually increase the risk for heart disease.

A [study](#) by Dariush Mozaffarian of Harvard found that in postmenopausal women, greater saturated fat intake was associated with less progression of coronary atherosclerosis, while carbohydrate intake was associated with a greater progression. This finding was so surprising that the *American Journal of Clinical Nutrition* published an editorial called "[Saturated Fat Prevents Coronary Artery Disease? An American Paradox](#)." The [Mozaffarian study](#), published in the *American Journal of Clinical Nutrition*, found that replacing saturated fats with high-glycemic index carbs was associated with a 33% increase in heart attack risk.