

## Cholesterol Myths that May Surprise You



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Life insurance companies know a surprising secret about cholesterol that most doctors never tell patients: When it comes to rating your risk for a fatal heart attack, the *least* important cholesterol number is your level of LDL (bad) cholesterol. In fact, life insurance actuaries don't even look at LDL levels, because large studies show it's the *worst* predictor of heart attack risk.

Instead, life insurance companies use a simple math formula to rate your heart attack risk: They divide your total cholesterol by the level of HDL (good) cholesterol.

“If the ratio is below three, and there's no inflammation in your arteries, you're practically bulletproof against heart attacks and strokes, even if your LDL is high,” reports Amy Doneen, MSN, ARNP, medical director of the Heart Attack & Stroke Prevention Center in Spokane, Washington.

Here's a look at eight common cholesterol myths.

### **Myth: Cholesterol is inherently evil.**

**Fact:** You couldn't survive without cholesterol, since this waxy substance produced by the liver plays many essential roles in our body, from waterproofing cell membranes to helping produce vitamin D, bile acids that help you digest fat, and sex hormones, including testosterone, estrogen, and progesterone.

Cholesterol is ferried through your body by molecular “submarines” called lipoproteins, such as low-density lipoprotein (LDL) and high-density lipoprotein (HDL).

[Video: See How Your Body Produces Cholesterol](#)

### **Myth: Low cholesterol is always a sign of good health.**

**Fact:** Although low levels of LDL cholesterol are usually healthy, [a new study](#) reports that people who develop cancer typically have lower LDL in the years prior to diagnosis than those who don't get cancer.

Researchers compared 201 cancer patients to 402 control patients without cancer, matched by such factors as age, gender, smoking, blood pressure, diabetes, and body mass index. None of the patients had taken statins.

Thirteen earlier randomized clinical trials of statin therapy also found a link between low LDL and cancer, causing medical debate about whether statins raise risk. The new study suggests that an unknown biological mechanism—rather than cholesterol-lowering medication—may be the culprit.

**Myth: High LDL means you could be headed for a heart attack.**

**Fact:** Nearly 75 percent of people hospitalized for a heart attack have LDL (bad) cholesterol levels that fall within current recommended targets, and close to half have “optimal” levels, according to [a national study](#) of about 136,000 people. The researchers also reported that levels of protective HDL (good) cholesterol have dropped in heart attack patients over the last several years, probably due to the rise in obesity, diabetes, and insulin resistance. Only 2 percent of the patients studied had ideal levels of both LDL and HDL.

**Myth: All LDL particles are equally dangerous.**

**Fact:** The size of the particles matters, says Doneen. “Think of beach balls and bullets. Some LDL particles are small and dense, making it easier for them to penetrate the arterial lining and form plaque, while others are big and fluffy, so they tend to bounce off the artery walls.”

People who mostly have small, dense LDL cholesterol are up to three times more likely to have heart attacks than those with big, fluffy particles.

[Find Foods that Lower Cholesterol but Keep Flavor](#)

**Myth: Americans have the world's highest cholesterol levels.**

**Fact:** Contrary to the stereotype that most of us are just a few big Macs away from a heart attack, US men rank 83<sup>rd</sup> in the world in average total cholesterol and US women 81<sup>st</sup>, according to the World Health Organization. For both sexes, the average is 197 mg/dL, slightly below the [borderline high range](#) (200 to 239 mg/dL).

In Columbia, men average a whopping 244 mg/dL—a level that doubles heart-disease risk—while Israeli, Libyan, Norwegian, and Uruguayan women are in a four-way tie for the highest average with 232.

**Myth: Triglycerides trigger heart disease.**

**Fact:** “Triglycerides, a type of blood fat, don’t invade the artery wall and form plaque,” explains Doneen. “However, high triglycerides mark another huge problem: insulin resistance, a pre-diabetic condition that is the root cause of 70 percent of heart attacks.”

High triglycerides are also one of the warning signs of [metabolic syndrome](#), a cluster of abnormalities that multiply risk for coronary artery disease, stroke, and type 2 diabetes. To be diagnosed with metabolic syndrome, you must have three or more of these disorders: high blood pressure, high blood sugar, a large waist, high triglycerides, and low HDL.

**Myth: Eggs clogs up arteries.**

**Fact:** It’s true that eggs are high in dietary cholesterol, with upwards of 200 mg, mainly in the yolk. [Research shows](#), however, that eating three or more eggs a day boosts blood concentrations of *both* good and bad cholesterol.

The LDL particles tend to be the light, fluffy ones that are least likely to enter the arterial wall, while the increased HDL helps keep the arteries clean, suggesting that most people’s bodies handle cholesterol from eggs in a way that’s unlikely to harm the heart. The researchers say that their findings add to growing evidence that eggs are *not* “a dietary evil.”

**Myth: There are no visible symptoms of high cholesterol.**

**Fact:** Some people with high cholesterol develop yellowish-red bumps called xanthomas that can occur on the eyelids, joints, hands, or other parts of the body. People with diabetes or an inherited condition called familial hypercholesterolemia are more likely to have xanthomas.

The best way to tell if your cholesterol is too high is to have it checked every three years, starting at age 20, or more often, if advised by your healthcare provider.



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