

# DEBUNKING THE CHOLESTEROL MYTH

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I talk to so many well-informed people who are vigilant about their healthy diet, but the one thing that comes up over and over again is the total avoidance of cholesterol and saturated fats. Anyone who pays attention to the news has become absolutely convinced that high cholesterol and saturated fat intake will lead directly to heart disease.

In spite of several research studies that have come out and exonerated cholesterol as the villain in heart disease, the media and mainstream medicine have yet to adopt this fact.

Why? Well statin drugs (cholesterol lowering medications) are one of the top selling medications in the US, and as the drug companies continually seek to lower the cholesterol level guidelines for administration of these drugs, there is no absolutely no motivation to stop this moneymaking practice. The drug companies would like you to stay convinced that you MUST lower your cholesterol in order to live a long and healthy life.

Physicians have been taught for the past four decades that cholesterol is dangerous and that it must be lowered at all costs. The “cholesterol is harmful” hypothesis, although never proven, has come to be accepted as an unquestionable fact by physicians and patients alike. Information about cholesterol actually being beneficial and not harmful tends to fall upon deaf ears.

Physicians have become focused on lowering cholesterol to the lowest possible level that they have lost sight of the primary goal of health care, which is to keep individuals functioning at the highest level possible for as long as possible. Does lowering cholesterol to its lowest possible point help the patient in the long run? The overall health of the patient is often overlooked and ends up declining as a result of the intervention for lowering cholesterol.

Did you know that approximately 75% of the people who suffer heart attacks have cholesterol levels within the ‘normal’ range?

The “cholesterol is harmful” hypothesis is a theory that came about over the past 200 years to explain the atherosclerosis (hardening of the arteries).

An English physician, Caleb Hillier who, way back in 1799, found a gritty, waxy substance in coronary arteries while doing an autopsy, first discovered coronary artery hardening. He discovered that this thick substance was within the arteries themselves.

In 1815 another English physician, Joseph Hodgson, advanced a new theory of atherosclerosis. Hodgson suggested that inflammation was actually the underlying cause of the arterial disease rather than it being a normal part of the aging process. Hodgson’s theory ended up mostly ignored.

In 1841, Carl Von Rokitansk, one of the first pathologists, proposed that deposits observed in the inner layer of arteries were derived from substances circulating in the blood. The primary component of arterial plaque was shown to be from cholesterol.

In 1949 Dr. J.W. Gofman, an American suggested that LDL cholesterol was the cause of this atherosclerotic plaque. The hypothesis gained additional support when autopsies of young soldiers killed in the Korean War revealed that 77.3 % had cholesterol deposits in their coronary arteries.

Following the observation that death rate from heart attacks were much lower in areas where the food supply was low during World War II, a University of Minnesota researcher, Dr. Ansel Keys, conducted studies on dietary fat and heart disease beginning in the 1950s. As a result of his studies Dr. Keys became an advocate of what is now known as the Mediterranean Diet, a diet high in vegetable oils and low in saturated fat.

The “cholesterol is harmful” advocates eagerly endorsed Dr. Keys’ findings, but he did not actually state that he thought cholesterol was the direct cause of heart disease or atherosclerosis. He pointed out that just because cholesterol is present in arterial plaque does not mean that cholesterol is the underlying cause of arterial buildup.

After Dr. Keys’ results came out, dieticians, physicians, and medical researchers all ran to jump on the “cholesterol is harmful” bandwagon. The movement steadily picked up momentum during the 1960s and 1970s.

Despite its popularity, the “cholesterol is harmful” theory remains unproven. Conclusive proof that cholesterol itself is harmful does not exist.

Total cholesterol levels of 250 mg/dL or even 300 mg/dL used to be considered to be within the normal range. As drug

therapy to reduce cholesterol became available the “normal” levels were dropped to 240 mg/dL or less and then to 220 mg/dL, and today 180-200 mg/dL are being pushed by the drug manufacturers.

Before lowering the acceptable levels of cholesterol it would have been wise to ask, “Does the benefit of lowering one’s cholesterol outweigh the risks involved in doing so?”

After 50 years of pursuing the “cholesterol is harmful” hypothesis, very few tangible results have resulted from this hypothesis.

Several studies show benefits of cholesterol, although many physicians and drug companies push on to continue to lower overall cholesterol levels.

People with high cholesterol have been shown to live the longest. This statement seems so incredible that it takes a long time to clear one’s brainwashed mind to fully understand the significance of it. However, the fact that people with high cholesterol live the longest shows clearly in many scientific papers.

Consider the findings of Dr. Harlan Krumholz of the Department of Cardiovascular Medicine at Yale University, who reported in 1994 that elderly people with low cholesterol died twice as often from a heart attack as did elderly people with high cholesterol. In fact, most studies of elderly people have shown that high cholesterol is not a risk factor for coronary heart disease.

While some studies purportedly do so, it is very difficult to demonstrate a cholesterol-lowering benefit in women and in either sex over the age of fifty. Rather than showing that high cholesterol levels are dangerous in people over sixty, studies have repeatedly found that senior citizens with high cholesterol levels tend to live longer than their peers with low cholesterol values. As a group, elderly people with higher levels of cholesterol outlive those with low levels of cholesterol.

Almost twenty studies found that high cholesterol was not a risk factor nor did it predict mortality.

If you consider that more than 90% of all cardiovascular disease is seen in people over the age of 60, and that almost all studies have found that high cholesterol is not a risk factor for women, the means that high cholesterol is only a risk factor for less than 5 % of those who die from a heart attack.

And as an additional comfort to those with high overall cholesterol, six of the studies found that total mortality was inversely associated with either total or LDL cholesterol, or both. This means that it is actually much better to have high than to have low cholesterol if you want to live to be very old.

Many studies have found that low cholesterol is in certain respects worse than high cholesterol. For instance, in 19 large studies of more than 68,000 deaths, reviewed by Professor David R. Jacobs and his co-workers from the Division of Epidemiology at the University of Minnesota, low cholesterol predicted an increased risk of dying from gastrointestinal and respiratory diseases.

In 1976, one of the most promising theories about the cause of atherosclerosis was the Response-to-Injury Hypothesis, presented by Russell Ross, a professor of pathology, and John Glomset, a professor of biochemistry and medicine at the Medical School, University of Washington in Seattle. They suggested that atherosclerosis is the consequence of an inflammatory process, where the first step is a localized injury to the thin layer of cells lining the inside of the arteries, the intima. The injury causes inflammation and the raised plaques that form are simply healing lesions.

This is not a new theory. In 1911, two American pathologists from the Pathological Laboratories, University of Pittsburgh, Pennsylvania, Oskar Klotz and M.F. Manning, published a summary of their studies of the human arteries and concluded the same findings.

Researchers have proposed many potential causes of vascular injury, including mechanical stress, exposure to tobacco fumes, high LDL cholesterol, oxidized cholesterol, homocysteine, high blood sugar, iron overload, copper deficiency, deficiencies of vitamins A and D, consumption of trans fatty acids, microorganisms and many more.

In an article published in November 2005, Japanese researcher H. Okuyama concluded, “. . . reducing the intake of saturated fatty acids and cholesterol and increasing that of polyunsaturated fatty acid are ineffective in reducing total cholesterol in the long run, but rather increase mortality rates from coronary heart disease and all causes . . . high total cholesterol is not positively associated with high coronary heart disease mortality rates among general populations (those without any other risk factor such as smoking, obesity, diabetes, etc.) over 40-50 years of age. More importantly, higher total cholesterol values are associated with lower cancer and all mortality rates among these populations . . . Although the effectiveness of statins in preventing coronary heart disease has been accepted in Western countries, little benefit seems to result from [any] efforts to limit dietary cholesterol intake or to lower TC [total cholesterol] values to less than approximately 260 mg/dl among the general population and the elderly . . . [And, these measures actually] create major risk factors for CHD, cancers, and shorter longevity. Based on the data reviewed here, it is urgent to change the direction of current cholesterol-related medication for

the prevention of CHD, cancer, and all-cause mortality.”

These findings were based upon an exhaustive review of the available data:

- - High cholesterol levels are not directly associated with heart attacks in people over 40 to 50 years of age.
- - High cholesterol levels are associated with lower cancer and premature death rates.
- - There is little benefit in lowering cholesterol levels below 260 mg/dL in elderly people.
- - Efforts to lower cholesterol increase the risk of developing cancer and shorten life span.

The Honolulu Heart Program also revealed a sharp increase in death rates from hemorrhagic stroke, cancer, liver disease, chronic obstructive lung disease (emphysema), and deaths from unknown causes when cholesterol levels dropped below 190 mg/dL. The investigators theorized that lowering cholesterol would not have any substantial impact on total mortality over fifteen years because premature deaths would increase in those individuals with starting cholesterol levels less than 225 mg/dL (approximately 60% of the population).

Researchers at Texas A&M University have also discovered that low cholesterol levels affect muscles and reduce any gains in strength while exercising. These findings were recently published in the *Journal of Gerontology*.

The team studied 55 men and women ages 60-69, who were healthy non-smokers and were able to perform exercise testing and training.

At the conclusion of the study, the researchers found that there was a direct association between dietary cholesterol intake and strength. In general, those with higher cholesterol intake and higher cholesterol levels also had the highest muscle strength gain.

“Our findings show...that cholesterol may play a key role in muscle repair and rebuilding. If this is true, then what does this say about heart disease and the overall health of the heart—as the heart, too is a muscle. Lack of muscle function in the elderly predisposes them to infections, lessened cardiac function, mobility and balance—all which affect the health, quality and length of life.

Studies have shown that the level of HDL cholesterol is actually the most important ingredient to good health, and that regardless of the overall cholesterol level, as long as the HDL is high enough in relationship to the overall cholesterol numbers. HDL is the component in cholesterol that actually cleans up the plaque in arteries, so obviously striving to keep that number high is key. How to raise HDL?

- - Increase your intake of omega 3 rich foods such as [grass fed meats](#), [wild caught fatty fish](#), organic [free range chickens](#) and eggs, [grass fed dairy](#), [nuts](#) and [olive oil](#).
- - Reduce your intake of grains, sugar and starchy foods. Reducing starchy grains in the diet, lowers the triglyceride levels—one of the key factors in heart disease.
- - Exercise your heart frequently by doing activities that elevate the heart rate to about 80% of its maximum, especially doing exercises that involve intervals.
- - Increase your intake of B vitamins. B vitamins are known to lower levels of homocysteine, a key inflammatory component in heart disease.
- - Of course, STOP smoking - smoking skews cholesterol levels, raises inflammation in the blood vessels and increases chances of having arterial plaque.
- - Avoid sugar and keep blood sugar at a stable level. High blood sugar levels increase inflammation in the blood vessels, and increase the risk of developing diabetes, another risk factor in heart disease.
- - Lose weight—following the above suggestions will whittle away your middle and increase your overall health in the long run.

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