

# Pharmacy Solutions

July 2009

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## Cholesterol is NOT the Cause of Heart Disease

Did you know that there are important facts you haven't been told about cholesterol, heart disease and commonly prescribed cholesterol-reducing drugs?

Facts that — if you only knew them — could make all the difference between a long life with an active and vigorous lifestyle . . . and a remaining lifetime of debilitating chronic disease (or even worse).

**FACT:** Yes, it's true that heart disease is the number one killer in the United States. And men over 40 are particularly vulnerable. But, who else will tell you that 50% of all strokes and heart attacks have absolutely nothing to do with elevated cholesterol levels?

Certainly not the big drug companies. And probably not even your own doctor . . . So why are cholesterol-reducing drugs (or statins, as they're called) becoming as common as aspirin, with commercials running non-stop on primetime TV?

**FACT:** Drugs like Lipitor, Zocor, Pravachol, Crestor and



Mevacor carry serious health risks — destruction of muscle, liver damage, increased risk of cancer, suppression of the immune system, just to name a few. (Drug companies don't want you to remember that statins like Baycol had to be pulled from the market due to multiple deaths.)

How many of the 12 million Americans now taking these drugs for their heart health understand that they are (often dangerously) treating the symptoms and **not the cause** of high cholesterol?

### Cholesterol; Wrongly Accused?

Cholesterol is not the major culprit in heart disease or any disease. If it becomes oxidized it can irritate/inflame tissues in which it is lodged in, such as the endothelium (lining of the arteries). This would be one of numerous causes of chronic inflammation that can injure the lining of arteries. However, many good fats are easily oxidized such as omega-3 fatty acids, but it does not mean that you should avoid it at all costs.

Common sense would indicate that we should avoid the oxidation (rancidity) of cholesterol and fatty acids and not get rid of important life-giving molecules. Using the same conventional medical thinking that is being used for cholesterol would lead one to believe that doctors should reduce the risk of Alzheimer's disease by taking out everybody's brain.

In fact, cholesterol is being transported to tissues as part of an inflammatory response that is there to repair damage.

The fixation on cholesterol as a major cause of heart disease defies the last 15 years of science and deflects from real causes such as the damage (via glycation) that sugars such as glucose and fructose inflict on tissues, including the lining of arteries, causing chronic inflammation and resultant plaque.

Before we can begin to talk about the real cause and effective treatment for heart and blood vessel disease, we must first look at what is known, or should I say what we think we know. The first thing that comes to mind when one hears about heart disease is almost always cholesterol. Cholesterol and heart disease has been almost synonymous for the last half-century. Cholesterol has been portrayed as the Darth Vader to our arteries and our heart.

Feedback is always welcome!

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The latest recommendation given by a so-called panel of "experts" recommends that a person's cholesterol be as low as possible, in fact to a level so low they say it cannot be achieved by diet, exercise, or any known lifestyle modification. Therefore, they say cholesterol-lowering drugs; particularly the so-called "statins" need to be given to anyone at high risk of heart disease. Since heart disease is the number one killer in this country that would include most adults and even many children. The fact that this might add to the \$26 billion in sales of statin drugs last year I'm sure played no role in their recommendations.

Or did it?

### Expert Conflict of Interests

Major consumer groups think so. They found out that eight of the nine "experts" that made the recommendations were on the payroll of pharmaceutical companies that manufacture those drugs. Major scientific organizations have chastised medical journals for allowing the pharmaceutical industry to publish misleading results and half-truths. There is a major push under way to force the pharmaceutical industry (and others) to publish results of all of their studies, and not just the ones that appear positive. The studies that showed negative results would be forced to be published also.

It could be that lowering cholesterol might not be as healthy as we are being told. More and more studies are coming out showing just how unhealthy lowering cholesterol might be, particularly by the use of statin drugs. In particular, statin drugs have been shown to be harmful to muscles causing considerable damage. A common symptom of this damage is muscular aches and pains that many patients experience on cholesterol-lowering drugs, however most do not realize that these drugs are to blame.

Hmm...isn't the heart a muscle?

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### Statin Drugs Actually Increase Heart Disease

Indeed, low cholesterol levels have been shown to worsen patients with congestive heart failure, a life-threatening condition where the heart becomes too weak to effectively pump blood. Statin drugs have been shown to also cause nerve damage and to greatly impair memory. One reason that statin drugs have these various serious side effects is that they work by inhibiting a vital enzyme that manufactures cholesterol in the liver. However, the same enzyme is used to manufacture coenzyme Q10, which is a biochemical needed to transfer energy from food to our cells to be used for the work of staying alive and healthy.



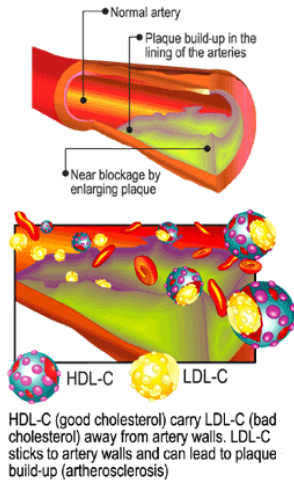
Statin drugs are known to inhibit our very important production of coenzyme Q10. Importantly, while many cardiologists insist that lowering cholesterol is correlated with a reduction in the risk of heart attacks; few can say that there is a reduction in the risk of mortality (death). That has been much harder to show. In other words it has never been conclusively shown that lowering cholesterol saves lives. In fact, several large studies have shown that lowering cholesterol into the range currently recommended is correlated with an increased risk of dying, especially of cancer.

### No Such Thing as Good and Bad Cholesterol

Because the correlation of total cholesterol with heart disease is so weak, many years ago a stronger correlation was sought. It was found that there is so-called "good cholesterol" called HDL, and that the so-called "bad cholesterol" was LDL. HDL stands for high-density lipoprotein, and LDL stands for low-density lipoprotein. Notice please that LDL and HDL are lipoproteins -- fats combined with proteins. There is only one cholesterol. There is no such thing as a good or a bad cholesterol. Cholesterol is just cholesterol. It combines with other fats and proteins to be carried through the bloodstream, since fat and our watery blood do not mix very well.

Fatty substances therefore must be shuttled to and from our tissues and cells using proteins. LDL and HDL are forms of proteins and are far from being just cholesterol. In fact we now know there are many types of these fat and protein particles.

LDL particles come in many sizes and large LDL particles are not a problem. Only the so-called small dense LDL particles can potentially be a problem, because they can squeeze through the lining of the arteries and if they oxidize, otherwise known as turning rancid, they can cause damage and inflammation. Thus, you might say that there is "good LDL" and "bad LDL." Also, some HDL particles are better than others. Knowing just your total cholesterol tells you very little. Even knowing your LDL and HDL levels do not tell you very much.



### Cholesterol is the Hero, not the Villain

It was determined many years ago that the majority of cholesterol in your bloodstream comes from what your liver is manufacturing and distributing. The amount of cholesterol that one eats plays little role in determining your cholesterol levels. It is also known that HDL shuttles cholesterol away from tissues, and away from your arteries, back to your liver. That is why HDL is called the "good cholesterol;" because it is supposedly taking cholesterol away from your arteries. But let's think about that.

- Why does your liver make sure that you have plenty of cholesterol?
- Why is HDL taking cholesterol back to your liver?
- Why not take it right to your kidneys, or your intestines to get rid of it?

It is taking it back to your liver so that your liver can recycle it; put it back into other particles to be taken to tissues and cells that need it. Your body is trying to make and conserve the cholesterol for the precise reason that it is so important, indeed vital, for health.

One function of cholesterol is to keep your cell membranes from falling apart. As such, you might consider cholesterol your cells "superglue." It is a necessary ingredient in any sort of cellular repair. The coronary disease associated with heart attacks is now known to be caused from damage to the lining of those arteries. That damage causes inflammation. The coronary disease that causes heart attacks is now considered to be caused mostly from chronic inflammation.

### So Why Take Cholesterol-Lowering Drugs?

The pharmaceutical companies thought that you might ask that. They went back to the drawing board. They did more "research" and found (coincidentally) that statin drugs had anti-inflammatory effects. Therefore we're currently being told to stay on our cholesterol-lowering drugs because now they work by reducing inflammation and perhaps not even by reducing cholesterol, and in fact perhaps in spite of it. Aspirin reduces inflammation for a lot less money. So does vitamin E, and fish oil, and dietary changes without the dangers of drugs and having many other benefits instead.

## Cholesterol Risk Quiz

Are you at risk? Test your knowledge!

1. **Too much LDL cholesterol (low-density lipoprotein cholesterol—also called the bad cholesterol), can lead to plaque buildup on artery walls.**  

A. True
B. False
2. **A total cholesterol level of less than 200mg/dL is desirable.**  

A. True
B. False
3. **Headaches and weight gain are common symptoms of high cholesterol.**  

A. True
B. False
4. **Saturated and trans fats are the most unhealthy fats.**  

A. True
B. False
5. **High cholesterol is always treated with medication.**  

A. True
B. False
6. **Cholesterol is found in foods obtained from animals including meat, dairy and eggs.**  

A. True
B. False
7. **Fiber helps lower cholesterol.**  

A. True
B. False
8. **Children don't get high cholesterol.**  

A. True
B. False

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Quiz Answers: 1. A, 2. A (between 200-239mg/dL is considered borderline high) 3. B (high cholesterol has no symptoms) 4. A, 5. B (cholesterol can be treated with diet, exercise & weight loss also) 6. A, 7. A, 8. B (high cholesterol can begin in childhood)