



Healthy for Life Newsletter

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Physicians have known for years that those patients who have a high HDL or good cholesterol have a significantly decreased risk of developing coronary artery disease. The dilemma has been finding ways to improve someone's HDL that is below normal. Lowering the total and LDL or bad cholesterol has been much easier to accomplish, since we now have a host of statin drugs from which to choose. Pfizer pharmaceutical has just slammed the brakes on a 15,000 patient trial involving an experimental drug that had previously been shown to raise this HDL or good cholesterol. A preliminary report involving this drug, called torcetrapib, demonstrated that this drug had a dark side. Reviewers of this clinical trial showed that there were 60% more deaths in the group taking torcetrapib with Lipitor, than the group that was just receiving the Lipitor. Pfizer was left with no choice but to put a halt on this very large clinical trial. This has now led cardiologists and pharmaceutical companies concerned about the safety of other drugs that are being studied, which also raise HDL. Ways to exploit HDL and avoid its pitfalls are among the hottest questions in heart research today.

HDL Cholesterol

Very few free fatty acids can be found in our blood stream. Have you ever tried to mix oil or fat in water? It does not work well. This is also true for fat that is in our blood. Almost all fat is carried around in transport vehicles called lipoproteins. Low-density lipoproteins (LDL) are the transport vehicles that carry these fats from the liver to the other cells of the body. High-density lipoprotein (HDL) picks up excess cholesterol and

triglycerides that are in our blood stream and carries them to the liver. The liver is then able to metabolize the triglycerides and cholesterol further and either sends them out to other cells for their use or, in the case of cholesterol, can also excrete it in the bile.

Many of you have heard that HDL cholesterol is good and that LDL cholesterol is bad. However, both HDL and LDL cholesterol are simply transport vehicles for both triglycerides and cholesterol and both are necessary to move fat around the body. All of our cells have specialized receptors for LDL on their cell walls so that the LDL can dock on the cell and unload its cargo (fat). This is the method that enables the cells to get the fat they need to function and survive. However, when the docks are full, excess triglycerides and cholesterol continue to circulate as LDL in the blood stream until their contents are either taken up by the fat cells or by the HDL cholesterol and transported back to the liver. HDL cholesterol is essentially a blood-borne dump truck that carries blood fats out of our arteries back to the liver for disposal.

This is why HDL is considered the good cholesterol because it is always trying to clean up this excess fat from our meals or from LDL cholesterol and removing it from the bloodstream. LDL cholesterol is considered the bad cholesterol because this is the type of cholesterol that we find in the plaques in our arteries. High levels of LDL cholesterol are associated with an increased risk of developing hardening of the arteries. High levels of HDL cholesterol have been associated with a decreased risk of cardiovascular disease. The corollary to this finding is the fact that a low level of HDL cholesterol, which is seen in insulin resistance, is associated with a significantly higher risk of heart disease.

HDL Cholesterol in Insulin Resistance

Patients with the metabolic syndrome who are individuals who have become less sensitive to his or her own insulin have what physicians refer to as a subclass pattern B lipid profile (dyslipidemia). This is characterized by a high triglyceride level, low HDL cholesterol, and increased VLDL cholesterol. VLDL cholesterol is the very small, dense LDL particle, which researchers have recently found to be easily “oxidized” and are much more atherogenic (causes hardening of the arteries) than even the LDL (bad cholesterol). This is why most physicians are now measuring their patient’s VLDL during routine blood work.

Disappointing for medical practitioners is the fact that this type B lipid pattern has not seen marked improvement over the years even with the traditional low-fat diet or “statin” drugs like Zocor, Lipitor, or Mevacor. This is the main reason that the pharmaceutical industry is so focused in trying to find drugs that will raise HDL cholesterol. In fact, when the recommended high-carbohydrate, low-fat diet is consumed in an attempt to lower LDL cholesterol, it has been shown that this B pattern caused by insulin resistance actually becomes worse. In other words, the higher the intake of high-glycemic foods in our diet, the lower the HDL-cholesterol becomes and the higher the triglycerides and VLDL cholesterol become. This all makes sense when you understand that the high-glycemic diet is what leads to insulin resistance in the first place.

Offering a trial of exercise and a low-fat diet has been the accepted first step in treating elevated cholesterol levels. But one of the greatest frustrations in the medical community is how ineffective this diet has been in lowering cholesterol. If a doctor is fortunate, his or her patient may drop total cholesterol and LDL cholesterol by five percent via these changes; however, the HDL either does not increase and in most cases actually decreases. Slowly we are realizing that the high-carb foods (high-glycemic foods), which generally accompany low-fat diets; actually decrease the level of good HDL

cholesterol and nothing seems more difficult than trying to raise the HDL or good cholesterol.

Since the levels of HDL cholesterol are a powerful predictor of the risk of developing coronary heart disease, one must challenge the wisdom of lowering cholesterol at the expense of also lowering HDL cholesterol. This is one of the main reasons physicians do not give diet and exercise much of a chance when they see elevated cholesterol levels in their patients but rather go right to their cholesterol-lowering drugs. However, when I began promoting the healthy lifestyles presented in my Healthy for Life Program located at www.releasingfat.com my patients who had elevated cholesterol levels and I began witnessing amazing results. Randy is a perfect example.

Randy’s Story

Randy visited my office for a basic routine physical. He had concerns about his risk for developing heart disease, since so many of his family members had died from heart attacks. Other physicians had put him on various “statin” drugs to lower his cholesterol but he always developed severe muscle pain and weakness as an adverse side effect. He had also tried low-fat diets with absolutely no success. Randy wanted to see if there was any advice I could offer on decreasing his risk of developing heart disease.

I was fairly amazed when I reviewed his chemistry and lipid profile. His total cholesterol was 338 (normal is less than 200) and his LDL cholesterol was 233 (normal is now considered less than 100, although I feel that the old normal level of 130 is more appropriate). However, more concerning to me was the fact that his triglyceride level was 287 and his HDL was 48. This gave him a Triglyceride/HDL ratio of nearly 6. The medical literature shows that any ratio greater than two or three is indirect evidence of elevated levels of insulin in the blood stream and thus insulin resistance. Therefore, Randy not only had a cholesterol problem but also had evidence of insulin resistance. This was further documented

by the fact that his VLDL was elevated to 57 (normal range is 0 to 40).

I explained to my patient the underlying problem of his type B lipid profile and started him on the Healthy for Life Program. He was very motivated since the side effects of the drugs had been terrible and his bloodwork showed little improvement. Randy followed my instructions closely. When I repeated his blood work 12 weeks later, I was amazed that his total cholesterol had dropped from 338 to 209 and his LDL cholesterol had dropped from 233 to 146. What was even more exciting was that his triglyceride level had dropped from 287 down to 79 and his HDL cholesterol had remained 48. It has been my experience that it takes my patients at least 9 to 12 months on the Healthy for Life Program to begin seeing an elevation in their HDL cholesterol. In fact, within a year on the Healthy for Life Program, Randy's HDL had increased to 67 as his triglycerides remained around 80. This now gave Randy a triglyceride/HDL ratio of only 1.18. This meant that Randy was no longer showing any sign of insulin resistance and even his VLDL level had dropped from 57 to a normal level of 16. I personally had never seen this dramatic improvement in a lipid profile with lifestyle changes alone. However, since my initial experience with Randy I've found this happens all the time. Why did we get such impressive results in cholesterol levels, including his HDL cholesterol with this approach?

While labeling fat as the enemy and significantly decreasing our consumption of fat—all fats—we've eliminated good fats (Omega 3's) too. In the Healthy for Life Program the intake of saturated fat is reduced while participants actually increase their intake of the healthier essential fats and monosaturated fats, *which actually help to lower* cholesterol levels and raise HDL cholesterol. The addition of low-glycemic carbohydrates allows one to eat in such a way that the blood sugar never spikes. This along with a modest exercise program and cellular nutrition allows underlying insulin resistance to be corrected. Not only does total cholesterol

decrease along with LDL cholesterol but dramatic decreases in triglyceride and VLDL cholesterol levels will also take place as the HDL cholesterol is allowed to slowly increase—Naturally without the risk of an adverse drug reaction.

Conclusion—the Answer is in Our Lifestyles

The reason that we are seeing so many individuals with low HDL cholesterol is because of the tremendous prevalence of insulin resistance in our society. I become very concerned when any of male patients have an HDL cholesterol less than 40 (1.04 mmol/L) or my ladies have an HDL cholesterol less than 50 (1.29 mmol/L). I become even more concerned when their triglyceride/HDL cholesterol ratio is greater than 2 or 3. This generally means that they have developed full-blown metabolic syndrome, which increases their risk of developing a cardiovascular disease by nearly 20-fold. I am sure that the pharmaceutical companies will go back to the drawing boards and try to develop a safer drug, which will increase the HDL cholesterol. However, for those of you already have a low HDL cholesterol and are not receiving any answers from your doctors should consider checking out my Healthy for Life Program at www.releasingfat.com. When you combine a healthy diet that encourages you to eat those good carbs, good fats, and good proteins, along with a modest consistent exercise program, and high-quality nutritional supplements, you give yourself the absolute best chance of improving insulin sensitivity while at the same time raising your HDL cholesterol naturally.