

Raising HDL Levels

While it has been known for a number of years that high HDL cholesterol levels (the "good" cholesterol) seem to confer some degree of protection from heart disease, until relatively recently almost all the attention in the "cholesterol wars" has been focused on lowering total cholesterol and LDL cholesterol levels (the "bad" cholesterol.)

It was not until the last few years that low HDL cholesterol levels have been recognized as an *independent* risk factor for heart disease. That is, even if their total cholesterol and LDL cholesterol levels are normal, people with reduced levels of HDL have an increased risk of early coronary artery disease. (HDL levels, to be considered "normal," should be at least 35 - 40 mg/DL.)¹

Why is HDL cholesterol protective? It appears that it's not the cholesterol itself that is good, it's the "vehicle." The HDL molecule is a complex molecule consisting of protein, lipids, and cholesterol. The HDL molecule, it appears, "scours" the walls of blood vessels, and cleans out excess cholesterol. If this is the case, the cholesterol being carried by HDL (that is, the "good" HDL cholesterol) is actually "bad" cholesterol that has just been removed from blood vessels, and is being transported back to the liver for further processing.

Even recognizing the fact that low HDL cholesterol levels are bad, doctors still tend to emphasize that their patients must reduce the bad cholesterol, and tend to neglect helping them raise the good cholesterol. This is a shame, since many people with normal or near normal total cholesterol levels have reduced HDL levels - and are therefore still at increased risk for heart disease.

Who needs to increase their HDL levels?

Anyone whose HDL level is below 40 mg/DL should consider taking steps to increase their HDL. This is the case even if total cholesterol and LDL cholesterol levels are within the normal range.

What measures can be used to increase HDL levels?

Aerobic exercise. Many people don't like to hear it, but regular aerobic exercise (any exercise, such as walking, jogging or bike riding, that raises your heart rate for 20 - 30 minutes at a time) increases the HDL levels.

Lose weight. Obesity results not only in increased LDL cholesterol, but also in reduced HDL cholesterol. If you are overweight, reducing your weight should increase your HDL levels.

Stop smoking. If you smoke, giving up tobacco will result in an increase in HDL levels. (This is the only advantage I can think of that smokers have over non-smokers - it gives them something else to do that will raise their HDL.)

Cut out the trans fatty acids. *Trans* fatty acids are currently present in many of your favorite prepared foods - anything in which the nutrition label reads "partially hydrogenated vegetable oils" - so eliminating them from the diet is not a trivial task. But *trans* fatty acids not only increase LDL cholesterol levels, they also reduce HDL cholesterol levels. Removing them from your diet will almost certainly result in a measurable increase in HDL levels.

Alcohol. With apologies to the American Heart Association, which discourages doctors from telling their patients about the advantages of alcohol: one or two drinks per day can significantly increase HDL levels. More than one or two drinks per day, one hastens to add, can lead to substantial health problems including heart failure - and there are individuals who will develop such problems even when limiting their alcohol intake to one or two drinks per day.

Increase the monounsaturated fats in your diet. Monounsaturated fats such as canola oil, avocado oil or olive oil and in the fats found in peanut butter can increase HDL cholesterol levels without increasing the total cholesterol.

Add soluble fiber to your diet. Soluble fibers are found in oats, fruits, vegetables, and legumes, and result in both a reduction in LDL cholesterol and an increase HDL cholesterol. For best results, at least two servings a day should be used.

What about a low-fat diet?

While Americans traditionally have ingested too much fat in the diet, and while limiting total fat in the diet is useful not only for cholesterol control but also for weight reduction, evidence is emerging that too little fat in the diet can be dangerous. A diet in which fat has all but been eliminated can result in a deficit in the essential fatty acids - certain fatty acids that are essential to life, but which the body cannot manufacture itself. Furthermore, ultra-low-fat diets have been reported to result in a significant reduction in HDL cholesterol in some individuals.

The best advice regarding fat in the diet appears to be this: 1) reduce the fat intake to 30 - 35% of the total calories in the diet - but probably no lower than 25% of total calories; 2) try to eliminate saturated fats and *Trans* fats from the diet, and substitute monounsaturated and polyunsaturated fats instead. (That is, eliminate animal and dairy fat, and substitute unprocessed vegetable fats.) Such a diet will avoid the problems seen with an ultra-low-fat diet, and should help raise HDL cholesterol levels.

What about drugs for raising HDL cholesterol?

drug therapy for raising HDL cholesterol levels has, so far, been less successful than for reducing LDL cholesterol. Statins, in particular, are often quite poor at increasing

HDL levels. And while some newer statins do reliably increase HDL, these drugs might not be optimal for people whose LDL cholesterol and total cholesterol levels are normal in the face of low HDL cholesterol levels.

Of the drugs used to treat cholesterol, niacin appears to be the most effective at raising HDL levels. Niacin is one of the B vitamins. The amount of niacin needed for increasing HDL levels are so high, however, that it is classified as a drug when used for this purpose, and should be taken only under a doctor's supervision.

Now that HDL levels are attracting more and more attention, we can expect drug companies to develop new drugs aimed specifically at increasing HDL.