



Fresno Family Practice
CENTER

Proper Management of Elevated Cholesterol

How low can you go?

Although it is by no means the only major risk factor, elevated serum cholesterol is clearly associated with a high risk of heart disease. Heart disease is the #1 killer in America today and the #1 killer of all peoples in the world. **For 50% of the people with heart disease, the first symptom that they have it is sudden death.** This is a bit too late to do anything about your cholesterol by that time. That is why it is so important to monitor your cholesterol levels. Most doctors suggest that total cholesterol levels should stay under 200 mg/dl. Cholesterol levels lower than 200 are not without risk, however; as one study revealed that **one-half** of the people arriving at Emergency Rooms with an acute myocardial infarction (heart attack) had levels below 200. As levels fall below 200, heart disease risk continues to decline.

Medical laboratories now subdivide total cholesterol measurement into several components, including LDL cholesterol – the “bad cholesterol” (which is directly linked to heart disease) and HDL cholesterol (the so-called “good” cholesterol). The relative amount of HDL to LDL is more important than total cholesterol. In addition, VLDL “the ugly” cholesterol should also be kept low (below 40).

Some people have been found to have high triglycerides combined with a low HDL. This used to be called, “Syndrome X” but is now just known as *Dysmetabolic Syndrome*. This syndrome is linked with heart disease and insulin resistance and it needs to be aggressively treated. This is not treated the same way that high LDL is treated.

Recently, new guidelines came out with the values for HDL and LDL listed for various groups and subdivided by sex, age, and the levels were listed as good, borderline, moderate and high risk. These, frankly, got to be too much to remember and actually what we thought to be ludicrous. One caveat that they did state was that ALL diabetics (who have a 50% increase in risk of heart attacks over those without diabetes) should have an LDL below 80. Since there is no downside and only benefit if your LDL is below 80 (whether diabetic or not), we have decided to simplify the whole picture and set our target goals for all of our patients to the following: HDL \geq 45, LDL \leq 80, and triglycerides \leq 150.

If you have been diagnosed with high cholesterol levels, once you begin therapy (any kind), you should

have your levels checked every three months until stable with diet (then every 6 months) or every three months when on a cholesterol-lowering drug known as a “statin” AND your liver enzymes should also be checked along with your cholesterol periodically. We do that all here in our office and it takes approximately 15 minutes for both tests to be run. If you choose an herbal treatment, you will need to have your cholesterol checked every three months until stable, then every six months thereafter.

Conventional treatment options

People with high cholesterol are commonly advised to reduce their consumption of dietary cholesterol and saturated fats. They also must lose any excess weight. In addition, cholesterol-lowering medications, such as bile acid sequestrants (e.g., cholestevlam [**Welchol**®]) and HMG-CoA Reductase Inhibitors, i.e., “statins”, (e.g., atorvastatin [**Lipitor**®], pravastatin [**Pravachol**®], and simvastatin [**Zocor**®]) are often prescribed. For women who have gone through menopause, conventional treatment may also include hormone replacement therapy.

The most common treatment for Dysmetabolic Syndrome is niacin in high doses. For this purpose, this practice uses a time-release form of short-acting niacin known as **Niaspan**®. **Niaspan** at doses of at least 1500 mg in the evening is what is needed to bring the triglycerides down and the HDL up. Unfortunately, high dose niacin has one side effect that is not dangerous to the person but it is uncomfortable...hot flashes. This is known as the “niacin flush” and is caused by the large amount of niacin entering the blood stream rapidly. This causes histamine release, particularly in the face and head, thus making the face flush, feel hot, and the feeling of “ants” crawling on your scalp. Fortunately, there is a treatment for this that will blunt that side effect or get rid of it entirely. This is plain, buffered aspirin (not the expensive enteric-coated).

Just recently, I was taught a new dosing regimen for **Niaspan**. You are to take the aspirin (325 mg) just before dinner, eat your dinner, and then take the **Niaspan** after you have eaten.

The pre-dosing of the aspirin gets into the blood to help reduce the histamine release and the food that you have eaten will slow down the absorption of the **Niaspan** but not prevent it from being fully absorbed. The serum niacin levels rise slowly and this also blunts the flushing side effects of niacin. *If you should still get a “breakthrough” flushing, you can chew one children’s chewable aspirin and that will stop the flush in about 10 minutes.*