

# Why Labs are Important – featured article by Barry Bacon

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Checking certain labs such as cholesterol and blood sugar testing are important for monitoring your progress in Get Fit Colville. These are important markers of disease, and they are markers that tell you whether the lifestyle changes that you have put into place are adequate in reaching your goals.

Let's talk about labs and what they mean. Cholesterol and the related fats in the blood include total cholesterol, triglycerides, hdl cholesterol, and ldl cholesterol. Normal total cholesterol is less than 180. Cholesterol is a fairly stable measure of an important marker of risk for vascular disease, including stroke and heart attack. Keeping the cholesterol at the target level is important to reduce the risk of these diseases. Triglycerides are fats in the blood that are more a reflection of what you just eaten. Triglycerides tend to fluctuate up and down a bit more than cholesterol does, that is, cholesterol tends to be more stable from day to day. The target for triglycerides is less than 150.

More importantly, hdl cholesterol is the good stuff. Having a high hdl helps to reduce the risk of disease, that is, it is protective against disease. The target for men is to keep the hdl above 40, and for women, keep the hdl above 50. Ldl cholesterol is the bad stuff, and should be kept low. Ldl cholesterol target is less than 100, or if you are diabetic or have heart disease, less than 70. When the ldl cholesterol is in this range, atherosclerosis (cholesterol buildup in the blood vessels) stabilizes, and some cardiologists believe, actually begins to reverse and clear from the vessel walls.

These markers of disease are some of the most important measures of what your risk is for developing the serious complications from the diseases that kill the majority of Americans. By keeping these markers at their target levels, you can extend your life, improve your odds for avoiding these diseases, and keep your body healthy. For many of us, lifestyle changes, including diet and exercise, are powerful means for reaching these goals.

Blood sugar levels are important as well, since diabetes or glucose intolerance often accompany vascular disease risk. Normal fasting blood sugar level is less than 105. Type 2 diabetes is a metabolic disease which often starts as we gain weight and become sedentary (hence the epidemic in the U.S. and elsewhere in the world). Type 2 diabetes shows itself often first as high blood pressure, then altered triglycerides, increased ldl cholesterol and decreased hdl, then increased insulin levels, altered blood sugar metabolism, and finally full blown diabetes. This is another reason why monitoring blood pressure and cholesterol levels are important. It may mean that diabetes is coming, and it's time to get serious about getting those numbers down.

I think it is a good idea to check the lipids and blood sugar at the beginning of a lifestyle program like GetFitColville and after a few months of your program because it will tell you how much your particular program is working, and whether you are on the right track for your body. A glycohemoglobin can also be checked as part of this program, which measures your average blood sugar over a 3 month period (normal glycohemoglobin is less than 6.5). Northeast Washington Medical Group has a special lab offer for participants in the GetFitColville program: \$14 for a lipid panel, \$5 for a blood sugar, and \$8 for a glycohemoglobin. That is a good deal. If

you really want to see where these metabolic markers of disease risk are at for you, take advantage of this discount, then check them again later. Bring a copy to one of our educational seminars, and I'll be happy to go over them with you, or take them to your doctor and discuss ways of reaching the goals.

-Barry Bacon, MD