



Total Cholesterol

The National Cholesterol Education Program (NCEP) Adult Treatment Panel Guidelines report total cholesterol levels below 200 mg/dL are desirable, those between 200 and 239 mg/dL are borderline high, and those equal or greater than 240 mg/dL are high. Interpretation of these values is based on a 12 hour fasting period prior to sample collection. Recent medication, diet and other conditions may influence your results. Excessive cholesterol is a risk factor for heart disease, stroke and type 2 diabetes.

HDL or "good cholesterol" carries excess cholesterol away from your arteries. The higher the HDL, the better. An HDL of 60 mg/dL or higher is beneficial and considered protective against heart disease. HDL levels less than 40 mg/dL are considered a risk factor for heart disease.

HDL

LDL or "bad cholesterol" contributes to the buildup of fatty plaque in your arteries. NCEP recommends that your LDL cholesterol is below 100 mg/dL. Values between 130 and 159 mg/dL are considered borderline high, between 160 and 190 mg/dL are high and values of 190 mg/dL and over are very high.

Triglycerides

Triglycerides are another contributing cause of plaque buildup, which can cause artery blockage and heart disease. Triglycerides circulate in your blood, but when you have excess levels, they are stored in the body's fat cells. Triglyceride levels below 150 mg/dL are normal, between 150 and 199 mg/dL are borderline high, between 200 and 499 mg/dL are high and 500 mg/dL and over are very high.

Glucose

The American Diabetes Association reports that a fasting glucose level less than 100 mg/dL is normal, between 100 and 125 mg/dL indicates pre-diabetes and a value 126 mg/dL or higher indicates high diabetes risk. A single glucose result by itself is not a diagnosis of diabetes. Obesity, family history, ethnicity, age, blood pressure and cholesterol are also risk factors that should be considered in assessing your overall diabetes risk.

PSA (Prostate Specific Antigen)

A PSA level less than 4.0 ng/mL is considered normal. A level 4.0 ng/mL or higher is considered elevated. While an elevated PSA result is not an automatic indicator of prostate disease, a low number, all by itself, does not necessarily rule out a problem. An elevated PSA level may also be caused by non-cancerous prostate conditions such as prostatis (inflammation of the prostate) or benign prostatic hyperplasia (enlargement of the prostate). These conditions may cause pain in the groin, painful urination, difficulty urinating and other related symptoms; however, treatment options are available. Only your physician, comparing your PSA result with that of a digital rectal exam and previous PSA results, can make an accurate assessment of your current prostate health.

TSH (Thyroid Stimulating Hormone)

A TSH result between 0.45 and 4.5 mIU/L is considered normal. A result greater than 4.5 mIU/L could be an indication of an underactive thyroid (hypothyroidism), while a result less than 0.45 mIU/L could indicate an overactive thyroid (hyperthyroidism). If either out-of-range condition is present, your physician may order further testing to determine the cause and what course of treatment is appropriate.



Reading Your Results -*Titers*

Hepatitis A Antibody, IgM & IgG

Antibodies to hepatitis A (IgM and IgG) appear early in the course of the illness. Detection of Hepatitis A IgM antibody is an excellent test for diagnosing Acute hepatitis A infection. Titers of IgG peak after 1 month of the infection and may be present for years. Detection of Hepatitis A IgG antibody indicates noninfectivity, previous exposure, and immunity.

Hepatitis B Surface Antigen

The appearance of Hepatitis B surface antigen (HBsAg) is the first evidence of infection and persists throughout the clinical illness. The detection of HBsAg establishes infection with Hepatitis B virus and implies infectivity.

Hepatitis B Surface Antibody

Hepatitis B surface antibody (Anti-HBs) appears in most individuals after successful vaccination against hepatitis B and after clearance of Hepatitis B surface antigen arising from the acute phase of an infection.

Hepatitis C Virus Antibody

The source of Hepatitis C infections has been attributed in the past to blood transfusions, intravenous drug use, body piercing with contaminated needles and in many patients, the source is unknown. Diagnosis of hepatitis C is based on enzyme immunoassay testing of blood samples that detects antibodies to Hepatitis C virus. Absence of the antibody to Hepatitis C virus indicates noninfectivity state.

Varicella Zoster IgG Antibody

The presence of IgG antibody to Varicella Zoster can be detected in blood tests usually several weeks after recovery from the acute infection. Detection of adequate levels of IgG antibodies to VZV indicate immunity or past infection to the virus.

Rubella (German Measles), Rubeola (Measles) and Mumps IgG Antibody

Detection of adequate levels of IgG antibodies to Rubella, Rubeola and Mumps indicates immunity, past infection or vaccination. In the United States, it is recommended that children receive their first vaccine dose of MMR (measles, mumps, rubella) at 12-15 months and a second at age 4-6 years prior to entry into school. Students beyond high school and medical staff starting employment must have the above vaccination schedule documented or must have serologic evidence of immunity.

Vitamin D3

Vitamin D3 deficiency is a condition in which the blood-levels of Vitamin D3 (usually tested for in the 25hydroxyvitamin D3 form) are chronically low for an extended period of time. The condition is alarmingly common. People who live in cold, northern, mountainous regions, and those with darker-than-average skin are among the most at-risk groups, although anyone can become deficient if sufficient sunlight is not absorbed and if the individual is not obtaining enough of the nutrient through foods and supplements. Vitamin D3 offers a number of different health benefits in addition to helping stave off certain diseases. Cholecalciferol has been shown to help reduce inflammation, which helps to relieve pain. This is true of arthritis sufferers as well as other forms of chronic pain.

D3 has been shown to help alleviate symptoms of depression and chronic fatigue. It also helps to improve the overall health of the skin, hair and nails, and provides a much needed boost for the immune system.





Hemoglobin A1C

The A1C test is a common blood test used to diagnose type 1 and type 2 diabetes and then to gauge how well you are managing your diabetes. The A1C test goes by many other names, including glycated hemoglobin, glycosylated hemoglobin, hemoglobin A1C and HbA1c.

The A1C test result reflects your average blood sugar level for the past two to three months. Specifically, the A1c test measures what percentage of your hemoglobin – a protein in red blood cells that carries oxygen – is coated with sugar (glycated). The higher your blood sugar levels, the more hemoglobin you'll have with sugar attached. An A1C level of 6.5 percent or higher on two separate tests indicates that you have diabetes.

C-reactive Protein (CRP)

C-reactive protein (CRP) is a protein that can be measured in your blood. It appears in higher amounts when there's swelling (inflammation) somewhere in your body. Your doctor may check your C-reactive protein level after surgery or treatment for infections or other medical conditions. A C-reactive protein test can also be used to evaluate your risk of developing coronary artery disease, a condition in which the arteries of your heart are narrowed. Coronary artery disease can eventually lead to a heart attack. Your C-reactive protein level can be checked with a simple blood test. Some researchers think that by treating people with high C-reactive protein levels, it's less likely they might have a heart attack or stroke.