

Lab Test Descriptions

Your health professional may discuss the value or necessity of certain lab tests during the course of treatment. The following are lab tests we can order for you, or that you can request of your primary care physician. We also offer tests specific to food allergies.

COMPLETE BLOOD COUNT (CBC)

WBC White blood cells are the body's primary defense against disease. White blood cells help fight infection.

RBC Red blood cells are responsible for carrying oxygen and carbon dioxide to all cells. Iron deficiency will lower RBC.

Hemoglobin A chemical compound inside red cells that transports oxygen through the blood stream to all cells of the body. Oxygen is needed for healthy organs. Hemoglobin gives the red color to blood.

Hematocrit Measures the amount of space red blood cells take up in the blood. It is reported as a percentage.

Lymphocytes The results of this and basophils, eosinophils, monocytes and neutrophils deal with white blood cell function. Important to the body's defense against infection. Also important in the assessment of nutritional status.

Monocytes The results of this and basophils, eosinophils, lymphocytes, and neutrophils deal with white blood cell function. Important to the body's defense against infection. Also important in the assessment of nutritional status.

MCH Mean Corpuscular hemoglobin is one way to measure the average hemoglobin concentration within red blood cells, which varies from normal with different diseases.

MCHC Mean Corpuscular hemoglobin concentration.

MCV Mean Corpuscular volume measures red blood cell volume.

Monocytes Important in the assessment of nutritional status.

Neutrophils The results of this and basophils, eosinophils, lymphocytes, and monocytes deal with white blood cell function. Important to the body's defense against infection. Also important in the assessment of nutritional status.

Platelets Blood cell particles involved with the forming of blood clots.

RDW Red cell distribution width (RDW) is a calculation of the variation in the size of your RBCs. In some anemias, such as pernicious anemia, the amount of variation (anisocytosis) in RBC size (along with variation in shape – poikilocytosis) causes an increase in the RDW. (This result does not appear in some lab results.)

THYROID PROFILE WITH TSH

The thyroid gland synthesizes, stores and releases hormones. The hormones secreted are iodine containing amino acids, thyroxine (T4) and triiodo-thyronine (T3). The thyroid hormones influence a diversity of metabolic processes. These tests help to evaluate thyroid hormones that control the body's metabolic rate.

Total T-4 (Thyroxine)

T-3 Uptake

Free-Thyroxine Index (FTI) T-7

TSH

LIVER PROFILE

Alanine aminotransferase (ALT or SGPT) An enzyme found primarily in the liver. Abnormalities may represent liver disease.

Albumin Serum One of the major proteins in the blood and a reflection of the general state of nutrition.

Albumin/Globulin Ratio Calculated by dividing the albumin by the globulin.

Alkaline phosphatase A body protein important in diagnosing proper bone and liver functions.

Aspartate aminotransferase (AST or SGOT) An enzyme found in skeletal and heart muscle, liver and other organs. Abnormalities may represent liver disease.

Bilirubin–Total A chemical involved with liver functions. High concentrations may result in jaundice.

Globulin–Total A major group of proteins in the blood comprising the infection fighting antibodies.

Lactate Dehydrogenase (LDH) An enzyme found mostly in the heart, muscles, liver, kidney, brain, and red blood cells. When an organ of the body is damaged, LDH is released in greater quantity into the blood stream.

Protein–Total Together with albumin, it is a measure of the state of nutrition in the body.

GGT Also known as: Gamma-glutamyl transpeptidase, GGTP Formal name Gamma-glutamyl transferase helps to detect liver and bile duct injury. Some doctors use it in all people they suspect of having liver disease, others use it only to help explain the cause of other changes or if they suspect alcohol abuse.

LIPID PROFILE

Cholesterol–Total A sterol in the blood. Knowing your cholesterol may be as important as knowing your blood pressure. Elevated cholesterol is associated with an increasing risk of coronary heart disease.

HDL Cholesterol High-density lipoproteins are believed to take cholesterol away from cells and transport it back to the liver for processing or removal. They have become known as the “good” cholesterol as persons with high levels of HDL may have less heart disease. Low HDL could be the result of smoking and lack of exercise.

LDL Cholesterol Low-density lipoproteins contain the greatest percentage of cholesterol and may be responsible for depositing cholesterol on the artery walls. For that reason, they could be known as the “bad” cholesterol.

Cholesterol/HDL Ratio Calculated by dividing the total cholesterol by the HDL cholesterol. Ratio used by physicians in determining your relative risk for developing cardiovascular heart disease.

Triglycerides A fat in the blood responsible for providing energy to the cells of the body. Triglycerides should be less than 400 mg/dl even in a non-fasting state.



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KIDNEY PANEL

Urea Nitrogen (BUN) A by-product of protein metabolism eliminated through the kidneys. BUN is an indicator of kidney function. Creatinine, Serum An indicator of kidney function.

Uric acid Another by-product of protein metabolism eliminated through the kidneys. Uric acid is an indicator of kidney function.

Bun/Creatinine Ratio Calculated by dividing the BUN by the Creatinine.

MINERALS AND BONE

Iron–Total An abnormally low test result may indicate iron deficiency anemia.

Calcium A mineral essential for development and maintenance of healthy bones and teeth. It is important also for the normal function of muscles, nerves and blood clotting.

Phosphorus Together with calcium, it is essential for healthy development of bones and teeth. Associated with hormone imbalance, bone disease and kidney disease. It is found mainly in bones and teeth. NOTE: a temporary drop in phosphorus level can be seen after a meal.

FLUIDS AND ELECTROLYTES

Chloride–Serum Similar to sodium, it helps to maintain the body's electrolyte balance.

Potassium Helps to control the nerves and muscles.

Sodium–Serum One of the major salts in the body fluid; sodium is important in the body's water balance and the electrical activity of nerves and muscles.

Carbon Dioxide Ordered as part of an electrolyte panel. The electrolyte panel is used to detect, evaluate, and monitor electrolyte imbalances. (This result may not appear in some lab reports.)

DIABETES

Fasting Glucose Blood sugar level, the most direct single test to uncover diabetes, may be used not only to identify diabetes, but also to evaluate how one controls the disease.