

Lipid Panel

The lipid panel includes Triglycerides, Cholesterol, LDL and HDL Cholesterol.

Triglycerides (Trig) are one of the blood fats that can be associated with heart disease, diabetes, kidney and liver disease. If you have elevated values after a 12 hour fast, you should discuss these results with your physician.

Cholesterol (Chol) is a blood fat that is used as a building block for the body's cells and hormone production. Increased levels have been shown to increase your risk of heart disease and stroke.

LDL Cholesterol or Low Density Cholesterol is another substance that carries cholesterol in the blood. LDL is considered undesirable because it can deposit cholesterol in the walls of the blood vessels and can contribute to atherosclerosis. LDL Cholesterol is often termed "bad cholesterol".

HDL or High Density Cholesterol is the "good cholesterol". Higher values are associated with lower risk of heart disease. Vigorous exercise can help increase the blood levels of HDL.

Lipid Level Interpretation

Desirable

Total Cholesterol: less than 200 mg/dl
LDL Cholesterol: less than 100 mg/dl
HDL Cholesterol: greater than 40 mg/dl
Triglyceride: less than 150 mg/dl

Borderline

Total Cholesterol: 200-239 mg/dl
LDL Cholesterol: 130-180 mg/dl mg/dl
HDL Cholesterol: not applicable
Triglyceride: 150-199 mg/dl

Higher Risk

Total Cholesterol: 240 mg/dl or higher
LDL Cholesterol: 160 mg/dl or higher
HDL Cholesterol: less than 40 mg/dl
Triglyceride: 200-499 mg/dl

What to do next?

Your blood lipids are just one part of your complete heart evaluation. It is important to discuss any borderline or high-risk result with your physician.

Thyroid-Stimulating Hormone (TSH)

TSH measures the amount of thyroid-stimulating hormone in the blood. This is a hormone that is secreted by the pituitary gland in response to thyroid function. If the thyroid is not active enough, the body will secrete more TSH to stimulate the thyroid to produce hormones T3 and T4. If the thyroid is too active, the TSH level will fall in order to slow down thyroid activity.

25-Hydroxy Vitamin D2/D3

Vitamin D helps to regulate levels of calcium and phosphorus in your blood. Vitamin D is vital for the growth and health of bone; without it, bones will be soft and unable to repair themselves. Vitamin D has also been shown to influence the growth and differentiation of many other tissues and to help regulate the immune system. These other functions have implicated vitamin D in other disorders, such as autoimmunity and cancer

UCL Testing Locations

Mercy Medical Center-Dubuque

250 Mercy Drive
Dubuque, Iowa 52001
563-589-9615
Ground Floor North Wing
Hours: Mon-Fri 6am-6pm
Sat-Sun 6am-2:30pm

UnityPoint Health-Finley Hospital

350 Grandview Drive
Dubuque, Iowa 52001
563-589-2431
Second Floor
Hours: Mon-Fri 6am-6pm
Sat-Sun 6am-2:30pm

UCL-Mercy Dyersville

Mercy Medical Center
1111 Third Street SW
Dyersville, Iowa 52040
563-875-2953
Hours: Monday-Friday 6:30am-5pm

UCL-West Draw Site

4170 Pennsylvania Avenue
Dubuque Iowa, 52002
563-588-0561
Hours: Monday-Friday 6:45am-12 noon

Medical Associates-Maquoketa

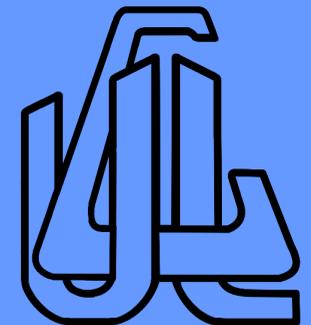
918 West Platt St
Maquoketa, Iowa 52060
563-652-5145 x301
Hours: Monday-Friday 8:00am-4:30
Saturday 8:00am-11:30

Guide to Interpretation of Lab Tests

Your Partner in Your Health



United Clinical
Laboratories, Inc.



www.uclaccess.com

Your Labs



The following information is provided to you as an aid in understanding your blood test results. It is not possible to diagnose or treat any disease or problem based on your blood tests alone. Its function is to help you learn more about your body and spot problems in the early stages.

Final interpretation of test results should be made by your physician.

Test values that fall outside the “normal range” are highlighted and may or may not indicate a problem. Many results that fall slightly outside the normal range are not significant. If you ate before having your blood test, certain tests may be affected (for example: Triglycerides and Glucose). Medications may also affect certain test results. Let your doctor know if you are taking any prescription or nonprescription (over-the-counter) drugs.

Please be aware that not all of the tests described in the brochure are inclusive of all tests that may be offered.

For additional information on your tests please visit: www.labtestsonline.org

Basic Metabolic Panel

The Basic Metabolic Panel includes BUN, Calcium, Chloride, Creatinine with GFR, Glucose, Potassium, Sodium and Total CO₂. **BUN** (Blood Urea Nitrogen) is also a waste product filtered by the kidney. An elevated BUN can be related to a high protein diet, heavy exercise, infections, dehydration or kidney disease.

Glucose is a measure of sugar in your blood. Glucose levels, hemoglobin A1c values and clinical history are all needed for your physician to make a diagnosis of diabetes. Elevated glucose levels can be seen in many conditions and should be evaluated by your physician.

Electrolytes (sodium (Na), potassium (K+), chloride (Cl) and total carbon dioxide (tCO₂)) are important for normal functioning of most cells and tissues of the body. Abnormal electrolytes can be associated with drug therapy for hypertension.

Calcium is important for bone formation and cell function. Significantly elevated or decreased calcium values should be evaluated by your physician. A normal calcium does not exclude osteoporosis.

Creatinine (Creat) is a waste product. The amount present is not affected by the amount of protein you eat. High levels are significant and usually require medical attention.

GFR (Glomerular Filtration Rate) is a calculated estimate of how well your kidneys are functioning. It takes into consideration your Creatinine, age and gender. Low levels should be reported to your doctor.

Comprehensive Metabolic Panel

The Comprehensive Metabolic Panel includes all tests included in the Basic Metabolic Panel

in addition to Albumin, Alkaline Phosphatase, ALT, AST, Total Bilirubin, and Total Protein. **ALT and AST** are proteins called enzymes. They aid cells in carrying out their specialized functions. AST is found in muscles, liver and heart. ALT is found in the liver. Elevated levels may be due to damage by alcohol, certain diseases or interferences from medications. Low levels are usually not significant.

Albumin and Total Protein measure the type and amount of protein in your blood. They serve as an index of overall nutrition.

Alkaline Phosphatase is found in the liver and bone. Expected values are higher in adolescents and in pregnancy. Low levels are probably not significant.

Bilirubin is the primary pigment in bile. Although low levels are probably not significant, high levels may indicate liver disease or some other disorder, which reduces the normal flow of bile.

Hemoglobin A1c (HbA1c)

HbA1c evaluates the average amount of glucose or sugar in the blood over the last 2 to 3 months by measuring the concentration of glycated (also called glycosylated) hemoglobin A1c. For certain people, this test may be used to screen for and diagnose diabetes and pre-diabetes.

Estimated Average Glucose (eAG) is a calculated result based on your A1c levels. The eAG helps you relate your A1c results to your everyday glucose levels. The formula for eAG converts percentage A1c to units of mg/dl (or mmol/L) so you can compare it to your glucose levels (also measured in mg/dl) from home monitoring systems or laboratory tests.

Complete Blood Count (CBC)

The CBC includes a number of tests used to determine the number and type of blood cells.

WBC (white blood cell count) may be elevated in infections and other diseases. A minimally abnormal WBC is not usually significant.

RBC (red blood cell count) indicates how your body is making the cells that are responsible for oxygen transport in your blood. High values should be evaluated by your physician. Low values may be associated with anemia or blood loss.

HGB (hemoglobin) is the measure of the protein that is responsible for oxygen transport in your red blood cells. Low values usually indicate anemia and should be evaluated by your physician.

HCT (hematocrit) is the percent of red blood cells compared to the amount of fluid (plasma) in your blood. This is used in conjunction with the other results to evaluate anemia.

The following values results further define if there is anemia present and can suggest a cause of the anemia.

MCV (mean corpuscular volume) is the measurement of size of red blood cells.

MCH (mean corpuscular hemoglobin) is the measurement of the amount of hemoglobin in the red blood cells.

MCHC (mean corpuscular hemoglobin concentration) is the measurement of the concentration of hemoglobin in each red blood cell.

Platelets are one of the factors of the blood clotting system. Very high or low values should be evaluated by your physician.