

Please Note—[An appointment with your doctor is required in order to include the health fair lab report in your clinical medical records.](#) Patients are encouraged to make an appointment with their provider to discuss their results, or bring the report into their physician at the time of their next appointment. **We cannot include your Health Fair results in your medical records without a Doctor's Appointment and review.**

Health Fair Blood Chemistry includes:

Lipid Panel

Cholesterol (CHOL)- Cholesterol is required for the production of steroids, hormones, bile acids, and cellular membranes. Most of the cholesterol we eat comes from foods of animal origin. Elevated cholesterol levels may be a risk factor for cardiovascular disease. However, by itself, cholesterol is not a totally accurate predictor of heart disease. Levels above the desirable range should be discussed with your physician.

Triglycerides (TRIG) Triglycerides are produced in the liver and act as a storage source for energy. When triglyceride levels in the blood are in excess, they are deposited into the fatty tissues. Elevated triglycerides may be a risk factor for cardiovascular disease and metabolic syndromes. Levels above normal should be discussed with your physician.

High Density Lipoproteins (HDL)- The purpose of HDL is to remove cholesterol from the blood stream and transport it to the liver for excretion. HDL has a protective effect by preventing cellular uptake of cholesterol, therefore, earning the title "good cholesterol". Decreased levels of HDL lead to an increased risk of **cardiovascular** disease.

Low Density Lipoproteins (LDL)- Cholesterol carried by LDL's ("bad cholesterol") can be deposited onto artery walls and is associated with an increased risk of arteriosclerotic heart and vascular disease.

The expert panel, National Cholesterol Education Program (NCEP) currently feels that the Non-HDL cholesterol target should be below 130, which is calculated as follows:

Total cholesterol - HDL = Non-HDL cholesterol (<130) If this value is greater than 130, consult your physician.

CBC without Differential

White Blood Cell count (WBC)- Useful in the diagnosis and management of infection, inflammatory disorders, leukemias, drug effects and response to various toxic agents.

Red Blood Cell count (RBC)- This is the number of circulating red blood cells. May be decreased in anemias, hemorrhage, leukemias, pregnancy or dietary deficiencies. May be increased with polycythemia, dehydration or vigorous exercise.

Hemoglobin (HGB)- Determines the oxygen-carrying capacity of blood. Reasons for increased and decreased values are the same as for RBC.

Hematocrit (HCT)- Measures the percentage of the total blood volume that is made up by the red blood cells. Reasons for increased or decreased values are the same as for RBC.

Platelet count (PLT)- Fragments of cells which play an essential part in clot formation.

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Complete Metabolic Panel (CMP)

Alkaline Phosphatase (ALP) Principally measured to evaluate diseases of liver or bone. The ALP will be elevated in growing children, decrease to an adult level, and then increases slightly in older people. Increased levels will **also** be observed during pregnancy.

Alanine Aminotransferase (ALT)- Usually measured to evaluate liver disease. Elevation of ALT is rarely observed in conditions other than liver disease.

Aspartate Aminotransferase (AST)- Elevated in liver disease, heart attack, muscle trauma, recent vigorous exercise, or certain types of anemia.

Total Bilirubin (TBIL)- This is a pigment that results from the destruction of red blood cells or ineffective formation of red cells in the bone marrow. The liver excretes this pigment. High concentrations of bilirubin may result in jaundice.

Blood Urea Nitrogen (BUN)- The BUN is useful in the evaluation of kidney function and nutritional status. Increased levels will be seen with kidney disease, increased protein intake (high protein diet), and dehydration. Decreased levels will be seen with over hydration, severe primary liver disease and malnutrition.

Creatinine (CA)- Used in the evaluation of kidney function. Elevations in creatinine generally suggest chronic kidney disease.

Blood Urea Nitrogen/Creatinine Ratio (BUN/CREA)- This ratio is used to differentiate pre-renal (kidney), renal, and post-renal (obstructive) disease.

Calcium (CA)- When the calcium level is elevated on at least three separate determinations, it is usually associated with hyperparathyroidism. Excess Vitamin D may also cause increased calcium levels.

Glucose (GLUC)- Used in the diagnosis of diabetes. If elevated (above 100) on a fasting specimen, contact your medical provider. Diabetes is a disease which may result in complications such as heart attack, stroke, blindness, amputation and kidney failure.

Total Protein (TP)-The sum of the circulating proteins in the blood. Proteins are found in muscle, enzymes, hormones, and several other key functional and structural entities within the body.

Albumin (ALB)- Albumin is approximately 60% of the total protein. It is formed in the liver and transports important blood constituents such as drugs, hormones and enzymes. Decreased levels are associated with liver disease and malnutrition. Increased levels are seen with dehydration.

Globulin (GLOB)- the key building block of antibodies.

Albumin/Globulin Ratio (Mb/Glob)- Normally this should always be greater than 1.0.

Electrolytes- Sodium (Na), Potassium (K), Chloride (Cl), Carbon Dioxide (CO₂)- There are almost no metabolic processes that are not dependent on or affected by electrolytes. Thus, abnormal levels of electrolytes may be either the cause or the consequence of a variety of disorders and should be discussed with your physician.

TSH

Thyroid stimulating Hormone- Used to screen for thyroid disease, diagnosis of hyperthyroidism (decreased) and diagnosis of hypothyroidism (elevated). Slight elevations will be seen as a natural part of aging. Consult your physician with abnormal results.

PSA

For male participants

Prostate-specific antigen - A protein made by the prostate gland and found in the blood. Prostate-specific antigen blood levels may be higher than normal in men who have prostate cancer, benign prostatic hyperplasia (BPH), or infection or inflammation of the prostate gland. Also called PSA.