



SCREENING RESULTS

Screening results that fall OUTSIDE of the reference range will have a H (High) or L (Low) in the flag column. The Reference range for each test is listed on the right side of your blood chemistry report.

Screening values that are OUTSIDE of the Reference ranges:

1. May show you had eaten shortly before blood was drawn.
2. May mean there was a problem with drawing your blood.
3. May indicate possible problems needing medical evaluation.

IT IS NOT POSSIBLE TO DIAGNOSE OR TREAT ANY DISEASE OR HEALTH PROBLEM WITH THIS BLOOD SCREEN ALONE.

It can help you learn more about your body and detect potential problems in early stages when treatment or changes in personal health habits can be most effective.

BLOOD RESULTS

You and your healthcare provider can learn a great deal about your health from a sample of your blood. Laboratory tests help in several ways. Sometimes test results will be abnormal before you have any symptoms. For those times when symptoms have developed, laboratory test results help confirm that a problem does exist.

MEDICATIONS AND FASTING

Over the counter medications, prescription drugs, alternative medications, alcohol consumption and your fasting time may affect blood chemistry screening results. Your healthcare provider must have a complete and honest picture of your use of medications in order to effectively evaluate your health status. If all the needed information is provided, time and money will be saved. A twelve hour fast is recommended for the most accurate results.

HEALTH FAIR / EXPANDED PROFILE

ELECTROLYTES

SODIUM is one of the body's principal minerals, regulated by the kidneys. It plays an important role in water balance in your body. A high level can be caused by dehydration, excessive salt intake in your diet and certain diseases. A low level of sodium may be caused by diarrhea, vomiting, or excessive sweating. Numerous drugs, including diuretics, certain blood pressure medications and steroids may alter the sodium level. Any abnormal value should be evaluated by your healthcare provider.

POTASSIUM is also one of the body's principal minerals, found primarily inside cells. It helps maintain water balance as well as proper function of nerves and muscles. Low or high levels in the blood are of critical significance and should be evaluated by your health care provider. This is especially important if you are taking a diuretic or heart medication. A high level may indicate kidney or liver disease, too much medication or bodily injury, such as a burn. Low levels of potassium can develop rapidly, most frequently produced as a side effect of drugs that cause increased urination.

CHLORIDE is also one of the body's minerals, involved with water balance, most body chloride comes from salt in the diet. A high chloride level may mean severe dehydration, certain kidney disorders or hyperventilation. A low chloride level may result from excessive vomiting, diarrhea, severe burns, excessive sweating or kidney failure. Borderline low or high levels of chloride have very little significance.

DIABETES SCREEN

GLUCOSE is the primary energy source for all body tissues. The sugars and carbohydrates you eat are ordinarily converted into glucose, which can be either used to produce immediate energy, stored in the liver or as fat throughout the body. High blood glucose (hyperglycemia) after fasting for 12 hours suggests diabetes. Your doctor may want to do further testing. A low glucose level (hypoglycemia) accompanied with symptoms such as weakness, nausea, sweating and difficulty thinking clearly, is suggestive for hypoglycemia. Even if you know you have diabetes, it is important to report any abnormal levels to your health care provider.

KIDNEY FUNCTION

BUN (blood urea nitrogen) is a waste product from protein breakdown in the liver. It is excreted by the kidneys. If kidney function is impaired, or if a person is dehydrated, the BUN level will increase. Internal blood loss, high protein diets and/or strenuous exercise can also cause a high BUN level. A low BUN level may be the result of liver disease, poor diet, pregnancy or drinking too much water.

CREATININE - The main job of the kidney is to filter the blood, excreting waste products into the urine while preserving essential elements. One way to measure kidney function is to determine how well the kidney can filter and excrete creatinine, an easily measured waste product of muscle metabolism. In certain types of kidney disease, the ability of the kidneys to clear the blood of creatinine decreases and blood levels of creatinine increase. High values require medical evaluation by your healthcare provider, especially when associated with high BUN results.

EGFR - Glomerular filtration rate (estimated) based on your blood creatinine test, age, race and gender. Test to measure your level of kidney function and determine your stage of kidney disease.

URIC ACID is a by-product from the breakdown of the body's own cells and certain proteins. A high level of uric acid in your blood may cause gout, arthritis or kidney stones. Kidney disease, stress, alcohol and certain diuretics may also raise the level. High levels should be evaluated by our health care provider, whereas low values are not generally considered significant.

CALCIUM is one of the most important elements in the body, essential for maintenance and repair of the bone and teeth, heart function and blood clotting. Ninety-nine percent of the calcium in your body is contained in your bones - only one percent is in the blood. Low levels of calcium in the blood are associated with malnutrition. High levels can be caused by bone disease, excessive use of antacids and milk, cancer, overdosing on Vitamin D and some hormone disorders. Any elevated calcium level should be evaluated by your healthcare provider.

PHOSPHORUS is closely related to calcium in bone development, with most phosphate in the body found in bones. Very low levels of phosphate can be associated with starvation or malnutrition, leading to muscle weakness. High levels of phosphate are associated with kidney disease. Values outside the range should be reported to your health care provider.

ALKALINE PHOSPHATASE is an enzyme that is found in many body tissues, but the most important sites are bone, liver, bile ducts and gut. A high level of alkaline phosphates in your blood may indicate bone, liver, or bile duct disease. Certain drugs may also cause increased levels. Growing children, because of bone growth, normally have higher levels than adults. Low values are not generally considered significant.

LIVER FUNCTION

TRANSAMINASE, AST (SGOT) The AST enzyme is found mainly in the heart, liver and muscles. It is released into the blood stream when any of these organs are damaged. Increased levels are usually associated with liver disease or heart attacks.

TRANSAMINASE, ALT (SGPT) The ALT enzyme is found mainly in the liver. Damage from alcohol, strenuous exercise and a number of diseases can cause high values for both AST (SGOT) and ALT (SGPT) and should be evaluated by your healthcare provider. Low value are not generally considered significant.

TOTAL BILIRUBIN is the pigment in the blood that makes the plasma or serum part of your blood yellow. When the bilirubin level in the blood is very high for a period of time, the whites of your eyes and your skin may become yellow, this is known as jaundice. Bilirubin comes from the breakdown of old red cells in the blood. A high bilirubin level in the blood can be caused by red blood cells being destroyed (hemolyzed), by liver disease, or by a blockage of bile ducts.

TOTAL PROTEIN is a measure of the total amount of protein in your blood. A low or high total protein does not indicate a specific disease, but it does mean that some additional tests may be required to determine if there is a problem.

ALBUMIN is the most plentiful protein in the blood. Approximately two-thirds of the total protein circulating in your blood is albumin. It is produced primarily in the liver and helps keep the fluid portion of the blood within the blood vessels. When your albumin level is too low, water can leak into other parts of your body and cause swelling. This can be caused by malnutrition, too much water in the body, liver or kidney disease, severe injury or major bone fractures and slow bleeding over a long period of time.

HEART FUNCTION

CHOLESTEROL is an essential blood fat found in nearly every body tissue. Elevated levels have been shown to be associated with a higher risk of heart disease and clogged blood vessels. If elevated, the result should be discussed with your health care provider.

HDL CHOLESTEROL High density lipoprotein (HDL) cholesterol is one of several types of fats and is measured as "total cholesterol". It is referred to as "good cholesterol" because it acts as a scavenger, removing excess cholesterol from artery walls. It has been shown that the HIGHER the level of HDL cholesterol the LOWER the risk of developing heart disease.

TRIGLYCERIDES are a fatty substance in the body which acts as a major form of stored energy. This is a blood fat that may be related to a higher risk of heart disease. Elevated levels may be caused by food and alcohol. You must not eat for at least 12 hours to obtain an accurate result for this test. Low values are not generally considered significant.

LDL CHOLESTEROL Low density lipoprotein (LDL) cholesterol is a part of the "total cholesterol". This is the cholesterol that forms deposits on artery walls. The LOWER the amount of LDL cholesterol, the LOWER the risk of developing heart disease.

MAGNESIUM helps regulate energy production in the cell. It is one of the most abundant minerals in the body. A low magnesium level in the blood may indicate alcoholism, severe malnutrition, vomiting or diarrhea. High values indicate kidney disease. As with all other abnormal results, any value outside the reference range should be reported to your health care provider.

THYROID FUNCTION

TSH (Thyroid Stimulating Hormone) TSH is the pituitary hormone which controls thyroid gland function. It stimulates the thyroid to produce thyroid hormone. When the thyroid gland fails, due to primary disease of the thyroid, pituitary TSH increases. This condition is called primary hypothyroidism. In contrast, when the thyroid gland is overactive and producing too much thyroid hormone, the serum TSH decreases. This is called primary hyperthyroidism. Both primary hypothyroidism and hyperthyroidism can be detected by the sensitive TSH method. In addition, the TSH test can tell if your dose of thyroid hormone is correct, should you be taking that medication.

OPTIONAL BLOOD SCREENINGS

Optional screenings are charged individually

PSA - PROSTATIC SPECIFIC ANTIGEN (for males only) is a blood test that measures a protein that is only produced by the male prostate gland. Elevations of PSA may occur in men with prostate cancer or non-cancerous prostatic diseases. A normal PSA level does not entirely exclude the possibility of prostate cancer. Although high PSA values do not always indicate prostate cancer, all elevated values should be reported to your healthcare provider for further evaluation.

CBC - COMPLETE BLOOD COUNT consists of white blood count, hemoglobin concentration, hematocrit value and platelet count. It helps to screen or monitor conditions such as anemia, infection and bleeding disorders.

HEMOGLOBIN A1C - Hemoglobin A1C is a test that is used to monitor glucose control among people treated for diabetes. A high level suggests that you should be evaluated by your physician for diabetes.

VITAMIN D BLOOD RESULTS - A low blood level of 25-hydroxyvitamin D may mean that a person is not getting enough exposure to sunlight or enough dietary vitamin D to meet his or her body's demand or that there is a problem with its absorption from the intestines. A high level of 25-hydroxyvitamin D usually reflects excess supplementation form vitamin pills or other nutritional supplements. Consult with your physician for abnormal test results.

Provided by Valley View Hospital HealthQuest.
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