



# Testing List

Our carefully selected tests  
offer a comprehensive view of your health.



# Heart

**Diastolic Blood Pressure** is the second number in a blood pressure reading. It measures the pressure in your arteries when your heart rests between beats.

**Systolic Blood** is the first number in a blood pressure reading. It is a measure of the pressure in your arteries when your heart beats.

**Apolipoprotein B100 (ApoB)** is a protein that marks problematic cholesterol-carrying particles, such as LDL. Elevated concentrations of these particles indicate a higher risk of artery-clogging events, making it a significant marker for cardiovascular risk.

**LDL-c Low-density lipoprotein cholesterol (LDL-c)** is a measure of cholesterol content carried by atherogenic particles in the body. While cholesterol is essential for building cells and certain hormones, when deposited in artery walls, it can create inflammation and narrowing of blood vessels thereby increasing the risk of cardiovascular events like heart attacks and strokes.

**Lipoprotein(a) or Lp(a)** is a type of genetically-determined LDL cholesterol molecule. Elevated levels of Lp(a) in the blood are considered an independent risk factor for heart disease, such as coronary artery disease and aortic valve stenosis.

**Non-high-density lipoprotein cholesterol (non-HDL-c)** measures the cholesterol content in all atherogenic particles. It gives insight into the risk of arterial buildup of cholesterol making it an important measure for heart disease risk.

**Triglycerides** are a kind of fat in the blood. High levels, especially in combination with other lipid imbalances, may heighten the risk of cardiovascular disease, but are highly responsive to lifestyle change. Reductions of 50% in triglyceride levels can be achieved through a healthy lifestyle.

**High-density lipoprotein cholesterol (HDL-c)** is the cholesterol concentration found within high-density lipoprotein molecules, which play a vital role in removing cholesterol from the bloodstream. These particles act as a cleaner of blood vessels and are thought to be protective against heart disease.

**Uric acid** is produced during the breakdown of purines, substances found in certain foods and drinks. High levels in the blood can lead to conditions like gout or kidney stones and may be a risk factor for heart disease. Factors influencing uric acid include diet, alcohol, and certain genetic factors

**Total cholesterol** is a combined measure of cholesterol in LDL, HDL, and other particles in your blood. It provides a general overview of your cholesterol health, but individual components offer more specific risk insights.





# Metabolic

**Ferritin** is a protein that stores iron. Low levels typically indicate iron deficiency, while high levels might suggest inflammation or iron overload. Factors like iron intake, inflammation, and certain conditions can impact ferritin values.

**Hemoglobin A1c, or A1c** provides a snapshot of average blood sugar levels over the past 3 months, which is different from the point-in-time measures such as fasting or random glucose. It is a key indicator of diabetes management and risk. Factors that can influence A1c levels include blood sugar control, diet, exercise, and medication adherence.

**Fasting plasma glucose** measures blood sugar levels after an overnight fast. It is a primary tool for diagnosing diabetes. Elevated levels can indicate the body's inability to regulate sugar effectively. Diet, pancreatic function, and insulin sensitivity play roles in determining these levels.

**Thyroid stimulating hormone (TSH)** regulates thyroid function. Abnormal levels can suggest a thyroid that is overactive or underactive. TSH levels are influenced by the pituitary gland response to thyroid hormone levels.

**Iron saturation index** indicates the percentage of iron-binding sites occupied by iron. It is crucial for diagnosing iron-related disorders. Iron levels and total iron binding capacity values determine the saturation index.

**Total iron-binding capacity (TIBC)** measures the blood's capacity to bind iron. Elevated TIBC often indicates iron-deficiency anemia when combined with a low ferritin and/or serum iron.

**Folate** is a B-vitamin necessary for DNA synthesis. It is especially important to maintain at optimal levels in pregnancy. Dietary intake and absorption rates play roles in folate levels.

**Magnesium** is a mineral vital for muscle, nerve, and enzyme functions and plays a role in stool regulation. Imbalanced levels can lead to muscle cramps or cardiac issues. Dietary intake, kidney health, and certain medications can affect magnesium levels.

**Vitamin B12** is essential for nerve function and DNA formation. Deficiency can result in fatigue and neurological issues. B12 levels are influenced by diet, absorption efficiency, and certain medications.

**Thyroxine**, also known as T4, is a type of thyroid hormone. A T4 test measures the level of T4 in your blood. Too much or too little T4 can be a sign of thyroid disease. Note this is only tested if your TSH result is abnormal.

**Fasting insulin levels** give insight into how much insulin the body is producing when you have not eaten. Elevated levels can suggest insulin resistance, a precursor to diabetes. Factors that influence fasting insulin include diet, activity level, and overall metabolic health.





## Kidney

**eGFR**, or estimated Glomerular Filtration Rate, is a measure of kidney function. A low eGFR indicates that the kidneys may not be filtering the blood effectively. It is calculated using age, sex, creatinine levels, and other factors.

**Creatinine:** Creatinine is a byproduct of muscle metabolism and a measure of kidney function. Elevated levels in the blood can indicate impaired kidney function as the kidneys are responsible for its filtration and excretion. Factors influencing creatinine include muscle mass, age, and kidney health.



## Liver

**Aspartate aminotransferase (AST)** is another enzyme originating from the liver and some other organs. Elevated levels can signal liver injury or other tissue damage. Various factors, including liver health, medications, and alcohol, can influence AST values.

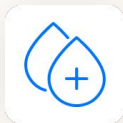
**Gamma glutamyl transferase (GGT)** is a liver enzyme. An increase in its levels often points to liver disease or bile duct issues. Alcohol consumption, gallbladder and bile duct disorders, and certain medications can also raise GGT levels.

**Total bilirubin** is derived from the breakdown of red blood cells (RBCs). High levels can cause jaundice and suggest liver dysfunction or certain types of anemia. Factors like liver health and rapid RBC breakdown influence bilirubin levels.

**Alanine aminotransferase (ALT)** is an enzyme found in the liver. Elevated ALT levels in the blood can indicate liver damage or inflammation. Factors like alcohol consumption, medications, or certain diseases can impact ALT levels.

**Alkaline phosphatase (ALP)** is an enzyme linked to the liver and the bones as well as the gallbladder and gut. High levels can suggest abnormalities in these organs.





# Blood

**RBC, or Red Blood Cell count**, indicates the number of oxygen-carrying cells. Abnormal counts can suggest anemia or hydration issues.

**Mean platelet volume (MPV)** measures the average size of your platelets. Platelets are small blood cells that stick together to make blood clots that stop or slow bleeding when you have a cut or injury. Platelets are made in your bone marrow and this marker can help diagnose bleeding disorders and diseases of the bone marrow.

**Hematocrit (HCT)** shows the portion of blood made of red blood cells. It provides insight into oxygen-carrying capacity.

**Platelets** are small blood cells vital for clotting. Abnormal counts can suggest bleeding disorders or certain diseases. Bone marrow function, immune health, and certain conditions can influence platelet counts.

**Hemoglobin** is a protein in red blood cells that carries oxygen. Low levels suggest anemia. Iron status, bone marrow health, and hydration among many other diseases can affect hemoglobin values

**Mean Corpuscular Hemoglobin Concentration (MCHC)** gauges the average concentration of hemoglobin in red blood cells. It is used in anemia diagnosis.

**Red blood cell distribution width (RDW)** indicates the variation in red blood cell size. It is used to diagnose and classify anemia. Bone marrow function, blood cell development, and iron status can influence RDW.

**Mean corpuscular hemoglobin (MCH)** is the average amount in each of your red blood cells of a protein called hemoglobin, which carries oxygen around your body.

**Mean corpuscular volume (MCV)** measures the average size of red blood cells. It is key for classifying types of anemia. Bone marrow function, iron status, and certain vitamin levels as well as other factors like kidney function influence the MCV as does alcohol.

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# Immune Function

**WBC, or White Blood Cell** count, measures immune cells in the blood. High or low levels can suggest infections or other conditions. Immune function, bone marrow health, and certain diseases can affect WBC values.

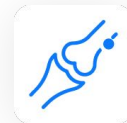
**Lymphocytes** play a role in the body's immune response, targeting viruses and cancers. Abnormal counts can indicate viral infections or immune disorders. Immune health, certain diseases, and bone marrow function can influence lymphocyte levels.

**Monocytes** are white blood cells that become macrophages, essential for fighting infections. Elevated or reduced levels can hint at chronic inflammation or certain diseases. Factors influencing monocyte counts include immune function and overall health.

**Eosinophils** fight parasites and are involved in allergic reactions. High counts can suggest allergies or parasitic infections. Allergic conditions, certain medications, and immune responses can impact eosinophil levels.

**Neutrophils** are white blood cells crucial for fighting bacterial infections. Abnormal levels can suggest infections, inflammation, or other conditions. Factors include immune responses, certain medications, and bone marrow health.

**Basophils** are involved in allergic responses. Elevated levels are rare but can suggest certain blood disorders. Allergies, immune function, and certain conditions can influence basophil counts.



# Bone

**Vitamin D** helps in calcium absorption and bone health. Low levels can lead to bone loss or other disorders. Sun exposure, diet, and absorption rates can affect vitamin D levels.

