

Wellness Blood Test

Sample

Understanding your results

Optimal vs standard

Optimal ranges for results refer to the values that are considered ideal for good health and can help to prevent disease. These values may be narrower than the standard ranges, and they are based on research that suggests that certain health outcomes are associated with particular levels of specific blood markers. Optimal ranges may differ depending on the individual's age, sex, and health history.

On the other hand, standard ranges for results are the values that are considered normal for most people, based on statistical analysis of a large group of healthy individuals. These ranges are used as a reference to determine whether a patient's test results fall within the expected range for their age, sex, and overall health. Standard ranges are typically wider than optimal ranges, as they take into account a broader range of health conditions and genetic variations.

In summary, optimal ranges for test results aim to identify the most desirable values for good health, while standard ranges provide a reference point to assess a patient's overall health status. Both optimal and standard ranges are useful in interpreting test results, and their interpretation should be done in consultation with a qualified healthcare provider who can consider the individual's unique health situation

Summary

Outside of normal range

Haematocrit	0.522 L/L - High
Haemoglobin	165.0 g/L - Above Optimal
HbA1c	40.0 mmol/mol - Above Optimal
Lymphocytes	3.13 x10 ⁹ /L - Above Optimal
MCHC	316.0 g/L - Below Optimal
MCV	92.2 fl - Above Optimal
MPV	11.3 fl - Above Optimal

Monocytes	0.92 x10 ⁹ /L - Above Optimal
Omega 6:3 ratio	12.0 - High
Platelets	274.0 x10 ⁹ /L - Above Optimal
RBC	5.66 x10 ¹² /L - Above Optimal
RDW	13.1 % - Above Optimal
WBC	8.0 x10 ⁹ /L - Above Optimal

Biochemistry

HbA1c



40.0 mmol/mol - Above Optimal

HbA1c (glycated haemoglobin) is a blood test that measures the average level of glucose (sugar) in the blood over the past 2-3 months. It does this by measuring the percentage of haemoglobin (a protein in red blood cells that carries oxygen) that is coated with glucose. The higher the blood sugar level over the previous 2-3 months, the higher the percentage of haemoglobin that is coated with glucose. It is an important monitoring tool for blood sugar control in people with type 2 diabetes and in people who are at risk.

Omega 6:3 ratio



12.0 - High

The Omega 6:3 ratio is a measure of the relative levels of omega-6 and omega-3 fatty acids in the body. Both types of fatty acids are essential for human health, but they must be consumed in the right balance to support optimal health. A diet with a high ratio of omega-6 to omega-3 fatty acids has been linked to increased inflammation and a higher risk of chronic diseases, such as heart disease, cancer, and autoimmune disorders.

RBC

Haematocrit



0.522 L/L - High

Haematocrit is a measure of the volume of red blood cells in the blood, expressed as a percentage of the total blood volume. Haematocrit plays a critical role in the body by determining the oxygen-carrying capacity of the blood. Red blood cells, which make up the majority of haematocrit, contain haemoglobin, a protein that binds to oxygen and carries it from the lungs to the body's tissues. Haematocrit can indicate anaemia, dehydration, and other conditions. A low haematocrit level can indicate a decreased number of red blood cells, which can lead to fatigue, shortness of breath, and other symptoms. A high haematocrit level can indicate an increased number of red blood cells, which can increase the risk of blood clots and other health issues.

Haemoglobin



165.0 g/L - Above Optimal

Haemoglobin is a protein found in red blood cells. It plays a critical role in transporting oxygen from the lungs to the rest of the body. It binds to oxygen in the lungs and releases it in the tissues where it is needed for energy production. Measuring haemoglobin levels in the blood can be used to evaluate overall blood health. Low levels may be associated with Anaemia.

MCH



29.2 pg - Optimal

MCH (mean corpuscular hemoglobin) is a measure of the average amount of hemoglobin (the oxygen-carrying protein in red blood cells) in each red blood cell. It is typically measured as part of a complete blood count (CBC) and is another method of assessing the ability of RBC to carry oxygen. MCH can be used to monitor various types of anemia, a condition in which the body does not have enough red blood cells or hemoglobin to carry oxygen to the body's tissues. Changes in MCH levels can also indicate underlying health conditions such as iron deficiency.

MCHC



316.0 g/L - Below Optimal

MCHC (mean corpuscular hemoglobin concentration) is a measure of the concentration of hemoglobin in a given volume of red blood cells. It is typically measured as part of a complete blood count (CBC) and is another method of assessing the ability of RBC to carry oxygen. MCHC can be used to monitor various types of anemia, such as hemolytic anemia or sickle cell disease. Changes in MCHC levels can also indicate underlying health conditions such as liver disease or alcoholism.

MCV



92.2 fl - Above Optimal

MCV (mean corpuscular volume) is a measure of the average size of red blood cells. It is typically measured as part of a complete blood count (CBC) and is another method of assessing the ability of RBC to carry oxygen. MCV can be used to monitor various types of anemia, a condition in which the body does not have enough red blood cells or hemoglobin to carry oxygen to the body's tissues. Changes in MCV levels can also indicate underlying health conditions such as vitamin B12 or folate deficiency.

MPV



11.3 fl - Above Optimal

MPV (mean platelet volume) is a measure of the average size of platelets in the blood. Platelets are small, colorless blood cells that are important in blood clotting. . MPV levels are typically measured as part of a complete blood count (CBC) and can be used to diagnose and monitor various bleeding and clotting disorders. High MPV levels can indicate an increased risk of blood clotting, while low MPV levels can indicate a risk of bleeding disorders

Platelets



274.0 x10⁹/L - Above Optimal

Platelets are small, colorless blood cells that play a crucial role in blood clotting. When a blood vessel is damaged, platelets rapidly aggregate at the site of injury to form a plug that helps to stop bleeding. Platelets also release chemicals that activate the clotting system and promote the healing process. Out of range platelet function or count can result in bleeding disorders or clotting disorders, which can have serious health consequences.

RBC



5.66 x10¹²/L - Above Optimal

Red blood cells (RBCs), also known as erythrocytes, are the most common type of blood cell in the body. They are responsible for transporting oxygen from the lungs to the body's tissues and removing carbon dioxide from the tissues and transporting it to the lungs to be exhaled. RBCs are produced in the bone marrow and contain hemoglobin, a protein that binds to oxygen and gives the cells their red color. Out of range RBC count or function can indicate various medical conditions, such as anemia, blood disorders, dehydration or poor circulation.

RDW



13.1% - Above Optimal

Red Cell Distribution Width (RDW) is a measure of the variation in the size of red blood cells. It is calculated by measuring the width of the distribution curve of red blood cells. The RDW test is often used in combination with other blood tests to help diagnose certain types of anemia. A high RDW value may indicate that the red blood cells are varying in size, which can be caused by various conditions, including iron deficiency anemia, vitamin B12 deficiency, and folic acid deficiency.

WBC

Basophils



0.06 x10⁹/L - Optimal

Basophils are a type of white blood cell that plays a role in the immune system's response to inflammation and allergies. They make up a very small percentage of the total white blood cells in the body. Basophils release histamine and other substances in response to allergens and other stimuli, causing symptoms such as itching, swelling, and inflammation. Basophil counts in the blood are commonly used to diagnose and monitor certain diseases, including allergies, and parasitic infections.

Eosinophils



0.27 x10⁹/L - Optimal

Eosinophils are a type of white blood cell. They play a role in the immune system's response to allergic reactions, parasitic infections, and other inflammatory conditions. Eosinophils release chemical substances that can damage tissues and attack invading organisms. Elevated eosinophil counts in the blood can indicate allergic or parasitic diseases, while low counts can be a sign of certain infections or autoimmune disorders.

Lymphocytes



3.13 x10⁹/L - Above Optimal

Lymphocytes are a type of white blood cell that plays a crucial role in the immune system. They are responsible for recognizing and attacking foreign invaders, such as viruses, bacteria, and cancer cells. There are two main types of lymphocytes: B cells and T cells, each with its unique function in the immune response. Measuring lymphocyte levels in the blood can be associated with various infections, and other conditions.

Monocytes



0.92 x10⁹/L - Above Optimal

Monocytes are a type of white blood cell that play an important role in the immune system's defense against infection and disease. They are produced in the bone marrow and are part of the body's innate immune response. Monocytes are able to differentiate into macrophages and dendritic cells, which are important in engulfing and destroying foreign particles, such as bacteria and viruses. Elevated levels of monocytes in the blood can be a sign of infection and inflammation.

Neutrophils



3.62 x10⁹/L - Optimal

Neutrophils are a type of white blood cell that play a crucial role in the immune system's response to infection and injury. They are produced in the bone marrow and are the most abundant type of white blood cell in the bloodstream. Neutrophils are able to identify and engulf foreign particles, such as bacteria and viruses, and then destroy them using special enzymes and chemicals. Elevated levels of neutrophils in the blood can be a sign of infection or inflammation.

WBC



8.0 x10⁹/L - Above Optimal

White blood cells (WBCs) are a type of blood cell that is part of the body's immune system. They help defend the body against infections and foreign invaders. The WBC count is a measure of the total number of white blood cells in the blood. Out of range WBC count can indicate a wide range of medical conditions, including infections, autoimmune diseases, and allergies. The WBC count is usually measured as part of a complete blood count (CBC) test.