



**Aceso
Health**

Health Check Report

(PATIENT NAME)

NON-FASTING SAMPLE

(DATE)

ATHLETE PERFORMANCE

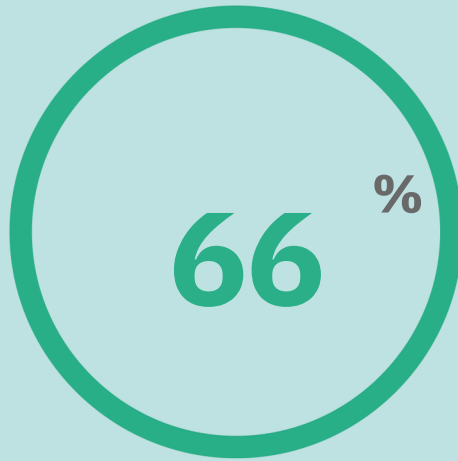
PROFILE

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Health Status

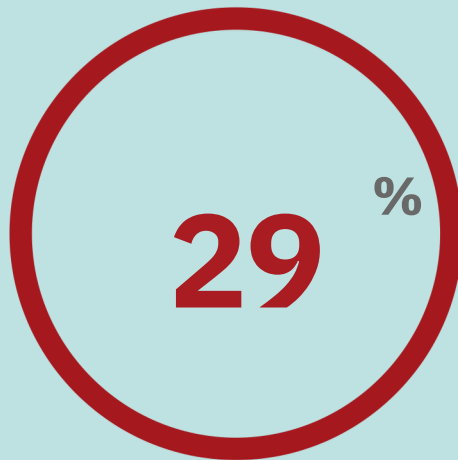
Track and improve your Health Status each time you visit Aceso Health.



 Green - In Range



 Amber - In Between



 Red - Out of Range

Your Results of Interest

The results presented in this section are a summary of all the tests that are either positive or fall outside the reference ranges. What does this mean? A reference range is a term used to determine if your results are within what is considered to be the 'normal' range of the population. If your results are outside the range for a test, it does not automatically mean the result is abnormal. Depending on each person's individual medical history, current medications and ongoing conditions or diseases, the results must be interpreted in this context to fully understand what these results mean to you. Therefore, in this section those results that are either positive or fall outside the reference range are highlighted so that they can be reviewed by a GP / Consultant to understand the relevance to your health. These results will also appear again throughout the report alongside the other results for that profile.



Personal Health Measurements

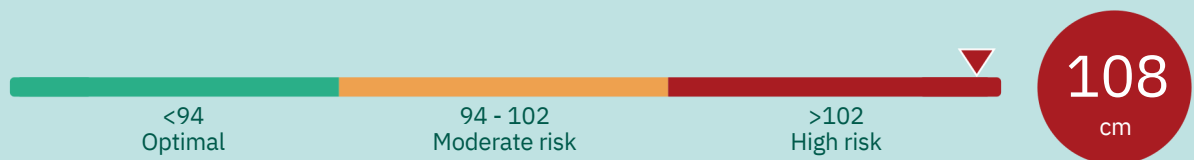
Body Mass Index (BMI)

Body Mass Index (BMI) calculated from an individual's weight and height, is an indicator of body fat and can identify weight problems, in terms of whether an individual is underweight, overweight or obese. Such weight problems are risk factors for conditions such as heart disease, high blood pressure, metabolic syndrome, diabetes, cancer and respiratory problems.



Waist Circumference

Waist Circumference relates closely to body mass index (BMI) and is part of the waist to hip ratio measurement. Waist circumference is a measure of central or abdominal fat and provides additional information on disease risk and other long-term health problems. Increased weight around the abdomen can increase the risk of developing conditions such as type 2 diabetes, metabolic syndrome, coronary heart disease and high blood pressure.



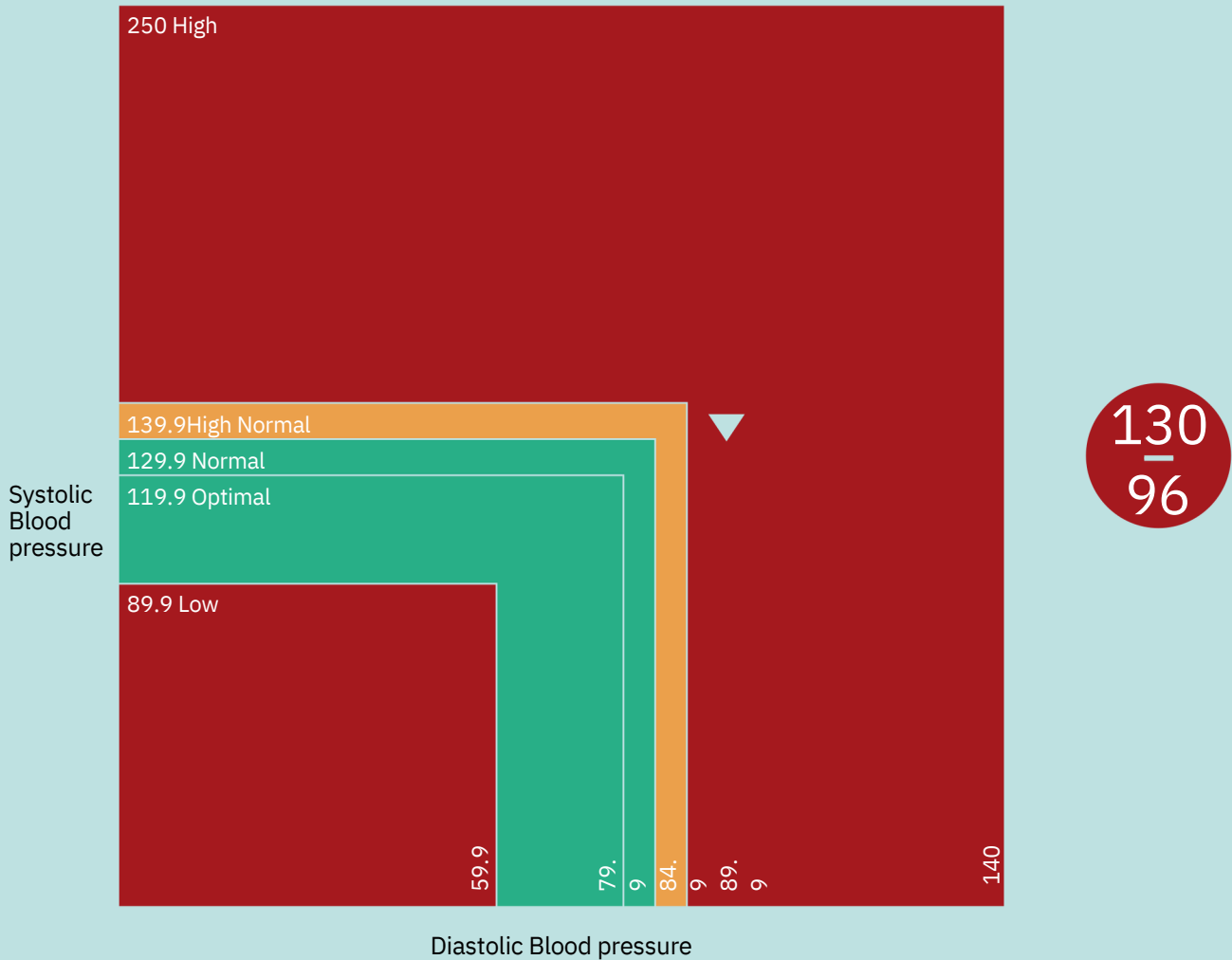
Waist / Hip Ratio

Waist / Hip Ratio is a measure of fat distribution and scientific research has demonstrated that people carrying more weight around their waist (apple shaped) have a greater risk of developing lifestyle related diseases such as heart disease and diabetes than people with excess fat around their hips (pear shaped).



Blood pressure

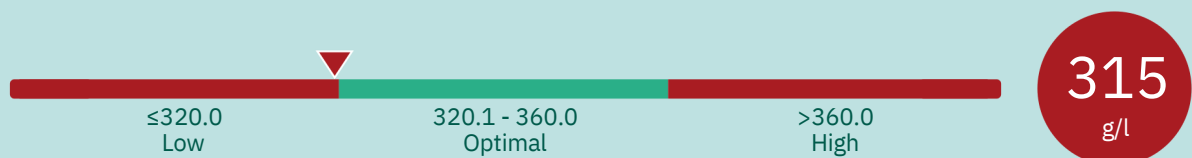
Blood Pressure is a measurement of the force applied to the walls of the arteries as the heart pumps blood through the body. Systolic blood pressure refers to the pressure of blood as your heart contracts. Diastolic blood pressure refers to the pressure of blood as your heart rests between beats. High blood pressure is a significant risk factor for the development of heart disease, stroke, kidney disease and metabolic syndrome. Dehydration, bleeding, inflammation, infection, heart disease, pregnancy and various medications can cause low blood pressure. Physically fit individuals may have low blood pressure and in some individuals, blood pressure is naturally low.



Full Blood Count

Mean Cell Haemoglobin Concentration (MCHC)

Mean Cell Haemoglobin Concentration (MCHC) is the average concentration of haemoglobin present in red blood cells. Low MCHC is a feature of conditions such as iron-deficiency anaemia, anaemia of chronic disease and thalassaemia (a group of hereditary blood disorders that impair haemoglobin production). Red blood cells that contain high concentrations of haemoglobin (increased MCHC) are observed in conditions such as hereditary spherocytosis (a rare hereditary condition in which red blood cells are ball-shaped and more fragile than usual).

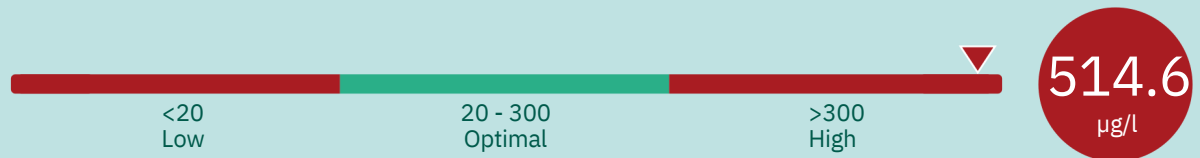




Iron Status

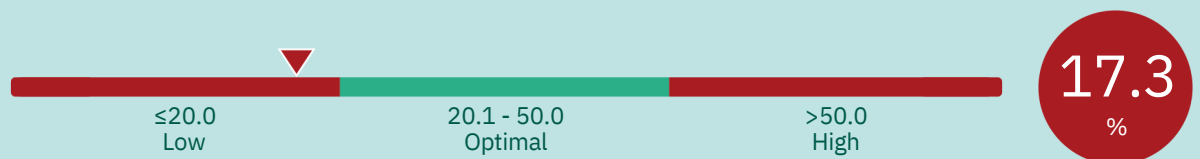
Ferritin

Ferritin is a major iron-storage protein and provides a good indication of available iron stores. Increased ferritin levels can be associated with disorders of excessive iron storage (e.g. haemochromatosis), iron poisoning, recent blood transfusions, megaloblastic anaemia (anaemia due to vitamin B12 or folic acid deficiency) or haemolytic anaemia (anaemia caused by premature destruction of red blood cells). However, ferritin is an acute phase protein, which can non-specifically increase with acute inflammatory disease, infection, liver disease or cancer, regardless of iron stores, due to leakage of ferritin from damaged organs (especially the liver, spleen and bone marrow). Decreased ferritin levels may be associated with iron-deficiency anaemia and very low protein levels.



Transferrin Saturation

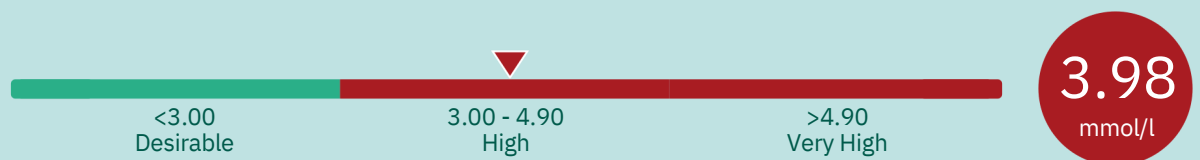
Transferrin Saturation represents the percentage of transferrin saturated with iron and is determined by dividing the iron level by the total iron binding capacity (TIBC). Calculation of transferrin saturation is helpful in determining the cause of abnormal iron and TIBC levels. A decrease in transferrin saturation can be associated with iron-deficiency anaemia and chronic illnesses. An increase in transferrin saturation can be associated with disorders of excessive iron storage (e.g. haemochromatosis), increased iron intake or other types of anaemia, such as haemolytic anaemia (anaemia caused by premature destruction of red blood cells) and megaloblastic anaemia (anaemia due to vitamin B12 or folic acid deficiency).



Heart Health

LDL Cholesterol

LDL Cholesterol describes cholesterol that is bound to low-density lipoprotein (LDL). Lipoproteins are responsible for transporting cholesterol in the blood. LDL cholesterol deposits excess cholesterol in the walls of blood vessels, which can narrow blood vessels or lead to blockage of blood flow to organs such as the heart and brain (a process known as atherosclerosis). Increased LDL cholesterol levels are associated with increased risk of atherosclerosis, cardiovascular disease, stroke and liver disease.



HDL Cholesterol

HDL Cholesterol describes cholesterol that is bound to high-density lipoprotein (HDL). Lipoproteins are responsible for transporting cholesterol in the blood. HDL cholesterol is 'protective' as it removes cholesterol from the peripheral tissues and transports it back to the liver for removal from the body. A low HDL cholesterol level is undesirable and is associated with increased risk of atherosclerosis (accumulation of cholesterol and fatty material within blood vessel walls) and cardiovascular disease. Obesity, metabolic syndrome (a set of risk factors for diabetes and cardiovascular disease occurring simultaneously), uncontrolled diabetes, smoking, malnutrition and lack of exercise are associated with low HDL cholesterol levels.



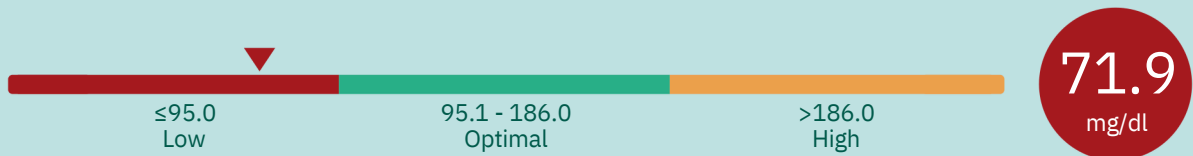
Total Cholesterol / HDL Cholesterol Ratio

Total Cholesterol / HDL Cholesterol Ratio is an indicator of cardiovascular risk. As HDL cholesterol is a 'protective' form of cholesterol, a greater proportion of HDL cholesterol as part of the total cholesterol is beneficial. The ratio of total cholesterol to HDL cholesterol should be less than 5.0. If the ratio is greater than 5.0, intervention may be necessary, either with lifestyle modification and / or with cholesterol lowering medications.



Apolipoprotein A-I

Apolipoprotein A-I is the main protein component of HDL cholesterol ('good' cholesterol). Apolipoprotein A-I (apo A-I) and HDL cholesterol transport cholesterol to the liver where it is processed and subsequently removed from the body. For this reason, a higher apo A-I level is desirable and deficiency is associated with increased risk of developing cardiovascular disease. Low apo A-I levels may be associated with uncontrolled diabetes, kidney or liver disease, obesity, smoking, high triglyceride levels or certain medications (e.g. beta-blockers). Increased levels of apo A-I may not be clinically significant but can be associated with familial hyperalphalipoproteinaemia (a rare genetic disorder), alcohol consumption, physical exercise, pregnancy, weight loss and certain prescribed drugs (such as oestrogens, oral contraceptives and statins).



Apolipoprotein B / A-I Ratio

Apolipoprotein B / A-I Ratio is useful when determining cardiovascular risk. Apolipoprotein B (apo B) in combination with LDL cholesterol is damaging to the body as it transports and deposits cholesterol in the blood vessels and increases risk of cardiovascular disease. Apolipoprotein A-I (apo A-I) in combination with HDL cholesterol helps the body to lower cholesterol levels, thus reducing risk of cardiovascular disease. Evidence suggests that apo B / A-I ratio may be a more effective predictor of increased risk of cardiovascular disease. The risk of cardiovascular disease is greater when the apo B/A-I ratio is higher (less apo A-I, more apo B).



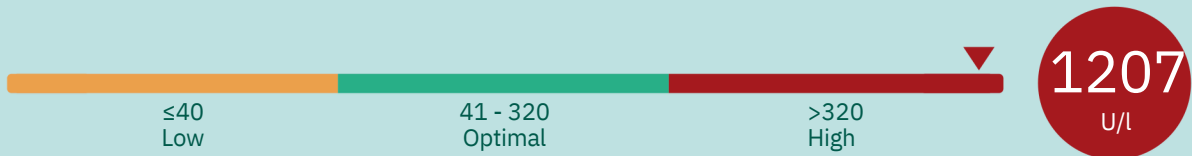
High Sensitivity C-Reactive Protein (hsCRP)

High Sensitivity C-Reactive Protein (hs-CRP) is an extra sensitive test that can detect very low levels of CRP, an acute phase protein produced primarily by the liver. Acute phase proteins are proteins that increase or decrease in the blood in response to inflammation. Elevated hs-CRP indicates the presence of inflammation, which many research studies have identified as a contributing factor to the development of atherosclerosis (accumulation of cholesterol in the blood vessels), a major feature of heart disease. Therefore, increased levels of hs-CRP are associated with greater risk of developing heart disease. However, before evaluating hs-CRP in this context, consideration of infection or inflammation is essential, as many conditions can raise hs-CRP, including infection, arthritis and inflammatory bowel disease. Obesity, pregnancy and oral contraceptives may also increase hs-CRP.



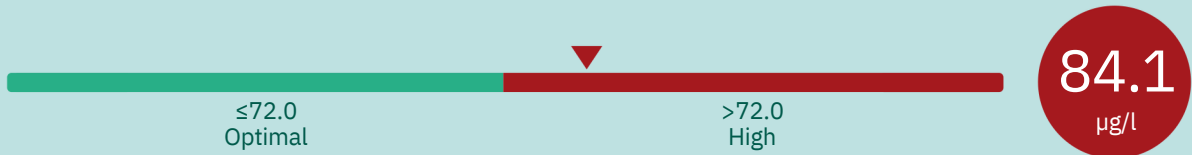
Creatine Kinase

Creatine Kinase is an enzyme present in muscle, which leaks out into the bloodstream when damage to muscle tissue occurs. Increased creatine kinase levels may be associated with greater muscle mass, muscle damage resulting from very heavy exercise (weight lifting, contact sports or long exercise sessions), myositis (inflammation of muscle tissue), crush injuries, surgery, or intramuscular injection.



Myoglobin

Myoglobin is an oxygen-binding protein present in muscle. Injury to muscle tissue can cause the release of myoglobin into the bloodstream. Elevated myoglobin levels may be associated with injury to heart or skeletal muscle, muscle disease, strenuous exercise, kidney failure or heavy alcohol consumption.



Diabetes Health

Glucose

Glucose is a simple sugar that provides energy for the body; however, having too much glucose in the blood can be damaging. High fasting blood glucose can indicate diabetes or increased risk of developing diabetes, and levels are often higher than normal in people with metabolic syndrome (where multiple risk factors for heart disease and type 2 diabetes occur simultaneously). High levels can also occur with kidney disease, hyperthyroidism (an overactive thyroid) and with some medications. Low blood glucose can occur in people with diabetes when they take too much diabetes medication. In those without diabetes, low blood glucose can occur with hypothyroidism (an underactive thyroid), liver disease and starvation. Other causes can include insulinoma (a rare tumour of the pancreas that produces excessive insulin) and dysfunction of the pituitary or adrenal glands; however, these conditions are rare.





Kidney Health

Potassium

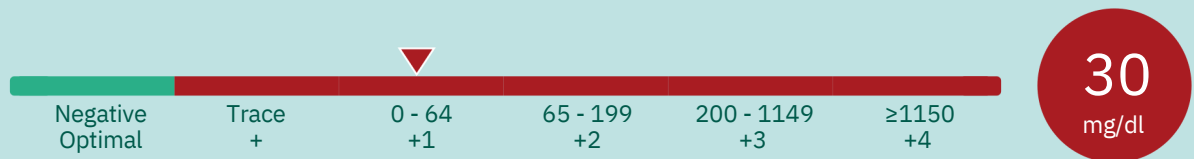
Potassium is an essential mineral that is normally only present in the blood at low concentrations. The body obtains potassium through the diet and the kidneys remove any excess in the urine. Hyperkalaemia, or raised blood potassium levels, may be associated with kidney disease, Addison's disease (a rare condition in which the adrenal glands are underactive), infection, eating disorders, dehydration or excessive dietary intake. Hypokalaemia, or low blood potassium levels, may be due to dehydration, vomiting, diarrhoea or inadequate dietary intake.



Urinalysis

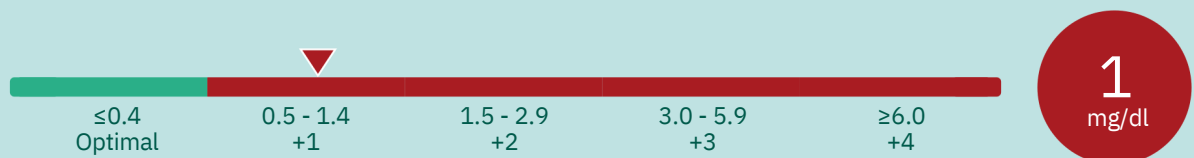
Protein (Urine)

Protein (Urine) is an important building block and is essential for the growth of cells and tissue repair. Normally, protein is not present in significant amounts in urine as the kidneys prevent the passage of protein from blood to urine. A high protein level in the urine (proteinuria) may be a sign of kidney dysfunction or urinary tract inflammation, injury or malignancy. Proteinuria can also be associated with heart failure, dehydration, systemic lupus erythematosus (a connective tissue disorder affecting many organs), amyloidosis (abnormal deposition of proteins in tissues and organs), heavy metal poisoning, extreme muscle exertion and drug induced kidney damage.



Urobilinogen (Urine)

Urobilinogen (Urine) is normally present in urine at low concentrations. Urobilinogen is a product of bilirubin (a by-product of red blood cell (RBC) destruction), produced by the action of bacteria in the intestines. Most urobilinogen is excreted in the stool or is reabsorbed and passed back to the liver. The remaining urobilinogen (about 1%) is excreted in the urine. High urobilinogen levels may be associated with haemolytic anaemia (anaemia caused by premature destruction of RBCs) or pernicious anaemia (insufficient RBC production due to vitamin B12 deficiency). Increased urobilinogen levels may also be associated with early hepatitis (inflammation of the liver), mild liver cell damage or toxic liver injury.

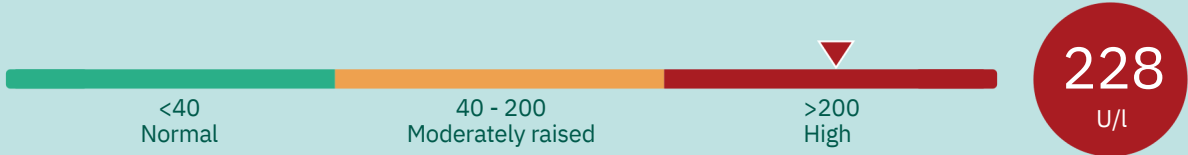




Liver Health

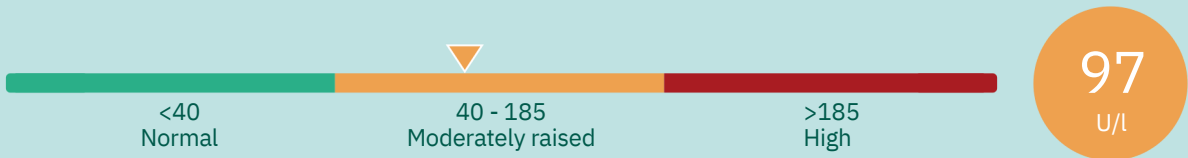
Alanine Aminotransferase (ALT)

Alanine Aminotransferase (ALT) is an enzyme found mainly in the liver. Normally, a low level of ALT exists in the blood. Liver injury or disease will release ALT into the bloodstream, thus elevating blood ALT levels. Very high levels of ALT can be due to acute hepatitis, often resulting from a viral infection. High levels can be associated with chronic liver disease, such as cirrhosis (scarring of the liver), excessive alcohol intake and conditions that cause blockage of the flow of bile from the liver. Mild elevations are often due to fatty liver disease, a common finding associated with mild liver dysfunction, obesity and increased risk of diabetes.



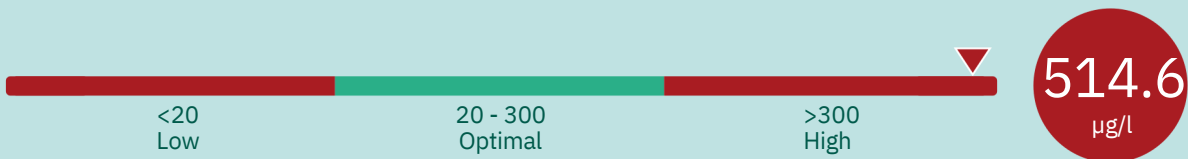
Aspartate Aminotransferase (AST)

Aspartate aminotransferase (AST) is an enzyme found mainly in the liver and heart but is also present in muscle cells. Disease or injury to these tissues causes release of AST into the bloodstream. Increased AST levels may be associated with hepatitis (inflammation of the liver), cirrhosis (scarring of the liver), drug-induced liver injury, heart disease and muscle damage. Mild elevations are often due to fatty liver disease, a common finding associated with mild liver dysfunction, obesity and increased risk of diabetes.



Ferritin

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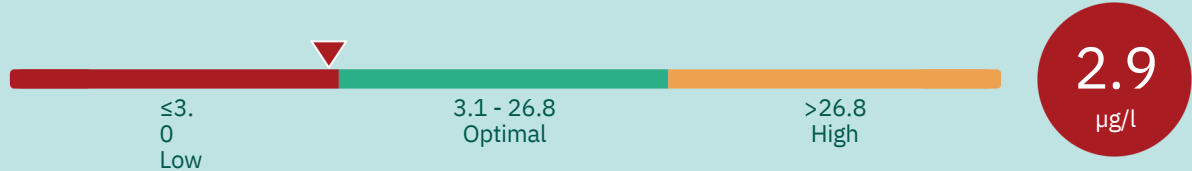




Nutritional Health

Folic acid

Folic Acid along with vitamin B12 is important for the normal development red blood cells. Decreased folic acid levels are associated with megaloblastic anaemia (anaemia due to folic acid or vitamin B12 deficiency). Low folic acid levels may be due to decreased dietary intake, alcoholism, pregnancy or malabsorption disorders (conditions that affect the ability of the intestine to absorb nutrients, e.g. Crohn's disease or coeliac disease). Increased folic acid levels generally are not cause for concern but may occur in individuals who consume a vegetarian diet or suffer from pernicious anaemia (anaemia due to impaired absorption of vitamin B12 by the intestine).



Vitamin D

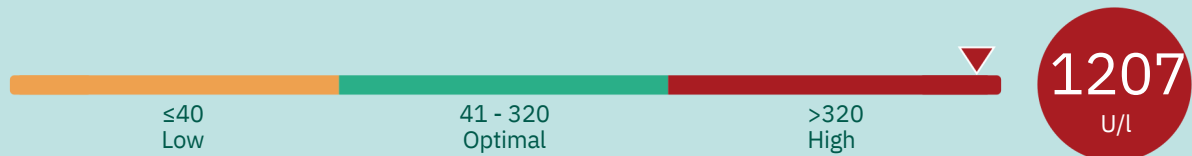
Vitamin D regulates calcium and phosphate levels in the blood and is important for good health, growth and strong bones. Low vitamin D levels are commonly due to inadequate sunlight exposure or dietary intake but may occur with malabsorption disorders (conditions that affect the ability of the intestine to absorb nutrients, e.g. Crohn's disease), liver disease or kidney disorders. Low vitamin D levels can increase the risk of bone disorders such as osteoporosis (weakening of the bones) and osteomalacia (softening of the bones), and may increase the risk of certain cancers, immune diseases and cardiovascular disease. Increased vitamin D levels may be associated with excessive supplementation, hyperparathyroidism (increased production of parathyroid hormone) or sarcoidosis (a rare disease in which areas of the body are inflamed). High levels of vitamin D can cause calcium levels in the blood to rise, which can be damaging to the body.



Muscle & Joint Health

Creatine Kinase

Creatine Kinase is an enzyme present in muscle, which leaks out into the bloodstream when damage to muscle tissue occurs. Increased creatine kinase levels may be associated with greater muscle mass, muscle damage resulting from very heavy exercise (weight lifting, contact sports or long exercise sessions), myositis (inflammation of muscle tissue), crush injuries, surgery, or intramuscular injection.



Myoglobin

Myoglobin is an oxygen-binding protein present in muscle. Injury to muscle tissue can cause the release of myoglobin into the bloodstream. Elevated myoglobin levels may be associated with injury to heart or skeletal muscle, muscle disease, strenuous exercise, kidney failure or heavy alcohol consumption.

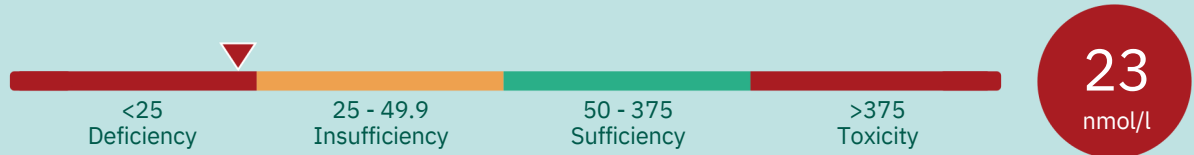




Bone Health

Vitamin D

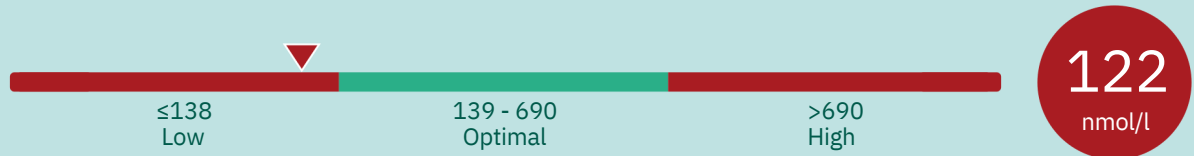
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Pituitary & Adrenal Health

Cortisol

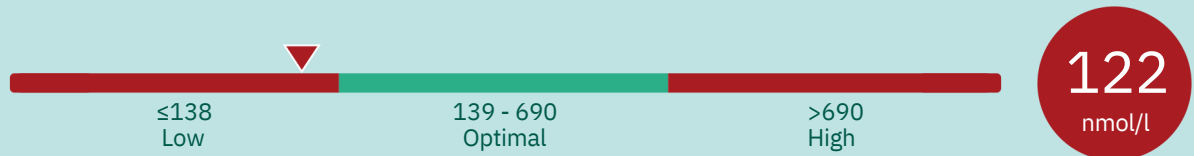
Cortisol is a hormone produced by the adrenal glands that is involved in blood pressure regulation, glucose metabolism and the body's response to stress. Cortisol levels vary throughout the day and tend to be high in the morning and lower at night. Elevated cortisol levels may be associated with acute stress, alcoholism, depression, obesity, oral contraceptives, hyperthyroidism (an overactive thyroid gland) or Cushing's syndrome (a rare condition in which the adrenal glands are overactive). Low cortisol levels may be associated with Addison's disease (decreased production of cortisol by the adrenal glands) or hypothyroidism (an underactive thyroid gland).



Hormonal Health

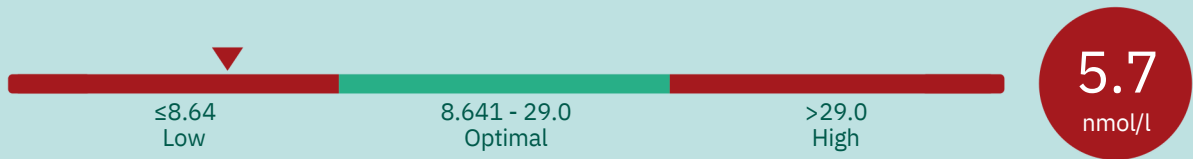
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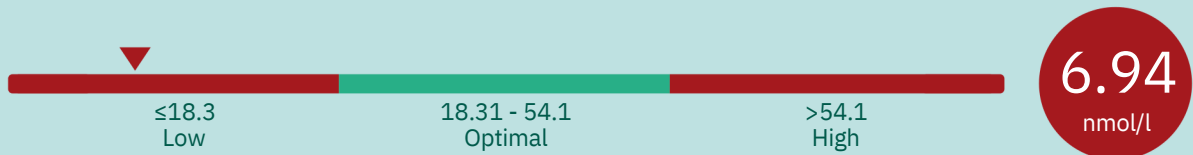
Testosterone

Testosterone is a steroid hormone produced by the testes in response to luteinising hormone from the pituitary gland. Testosterone stimulates sperm production and influences the development of male secondary sexual characteristics. Increased testosterone levels may be associated with hyperthyroidism (an overactive thyroid gland), testicular cancer, steroid use or testosterone-producing adrenal gland tumours. A low testosterone level may be due to hypothalamic or pituitary dysfunction, infertility or testicular damage, e.g. damage due to alcoholism. Studies have shown that testosterone levels may vary with stress.



Sex Hormone Binding Globulin

Sex Hormone Binding Globulin is a protein that binds testosterone and alters how much testosterone is available for use by the body. Elevated SHBG levels reduce testosterone availability and may be associated with infertility or erectile dysfunction. Elderly men typically have higher SHBG levels. Elevated SHBG may be observed in individuals with liver disease, hyperthyroidism (an overactive thyroid gland), and anorexia. Decreased SHBG levels may be associated with hypothyroidism (an underactive thyroid gland), obesity or Cushing's syndrome (a rare condition in which the adrenal glands are overactive).

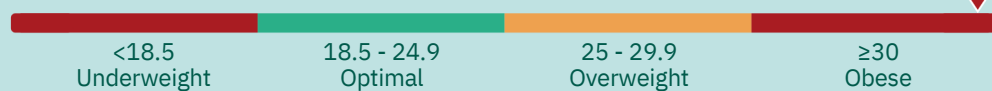




Personal Health Measurements

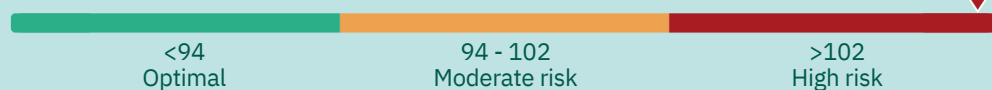
Measurements include pulse, blood pressure, waist circumference and calculation of body mass index (BMI). Various lifestyle and hereditary factors can influence these parameters, which are useful in the overall assessment of an individual's risk of developing conditions such as cardiovascular disease or diabetes. The measurement of oxygen saturation by pulse oximetry is also included. A low blood oxygen level, or hypoxaemia, may be associated with airway obstruction, which occurs in conditions such as asthma, emphysema and chronic obstructive pulmonary disease.

Body Mass Index (BMI)



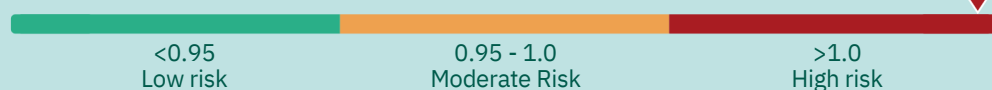
33.8
kg/m²

Waist Circumference



108
cm

Waist / Hip Ratio



1.069
Ratio

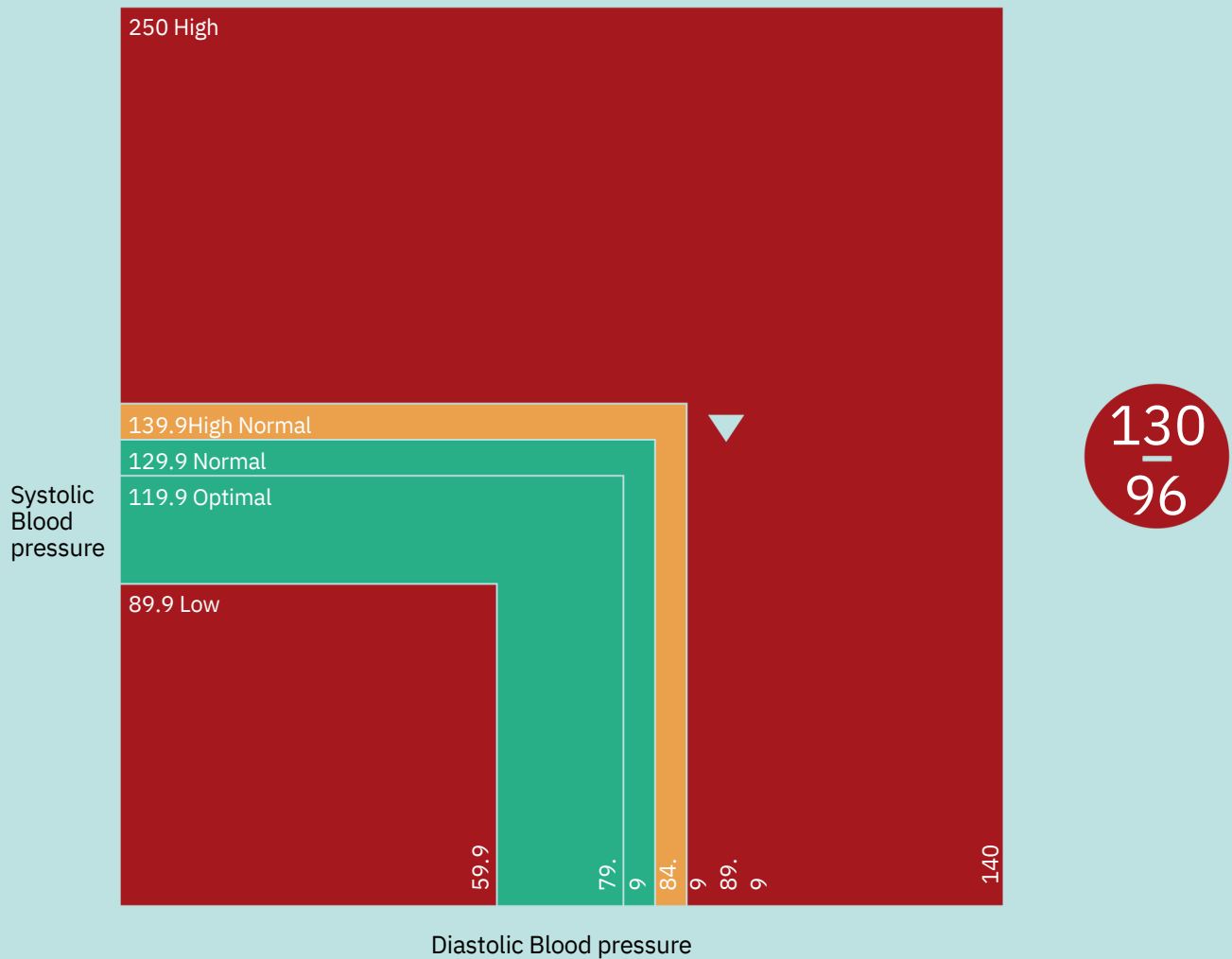
Pulse



78
BPM

Blood pressure

Blood Pressure is a measurement of the force applied to the walls of the arteries as the heart pumps blood through the body. Systolic blood pressure refers to the pressure of blood as your heart contracts. Diastolic blood pressure refers to the pressure of blood as your heart rests between beats. High blood pressure is a significant risk factor for the development of heart disease, stroke, kidney disease and metabolic syndrome. Dehydration, bleeding, inflammation, infection, heart disease, pregnancy and various medications can cause low blood pressure. Physically fit individuals may have low blood pressure and in some individuals, blood pressure is naturally low.



Height
1.77 m

Weight
106 kg

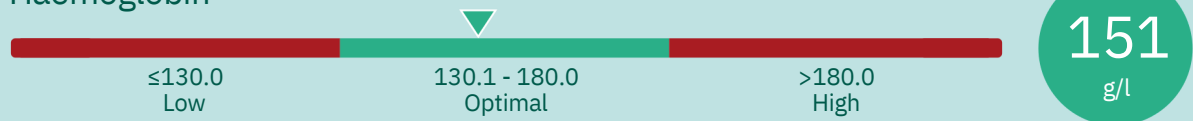
Hip Circumference
101 cm



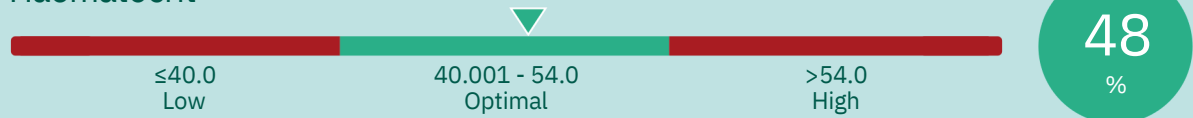
Full Blood Count

This panel provides information about the type and number of cells in the blood, including red blood cells, white blood cells and platelets. Red blood cells contain haemoglobin, a protein that carries oxygen from the lungs to all the tissues of the body and carbon dioxide back to the lungs. White blood cells form part of the immune system and help to defend the body against infection from foreign substances such as bacteria, fungi and viruses. The major types of white blood cells are neutrophils, lymphocytes, monocytes, eosinophils and basophils, with each having their own role in protecting the body from infection. Platelets are important for blood clotting. Their sticky surface enables them, along with other substances, to help wounds heal by forming clots to stop bleeding. The Full Blood Count is useful for evaluating general health status and as a screening tool for a variety of conditions, such as anaemia, infection, inflammation and other blood disorders.

Haemoglobin



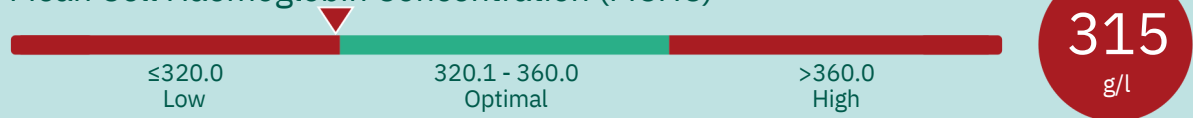
Haematocrit



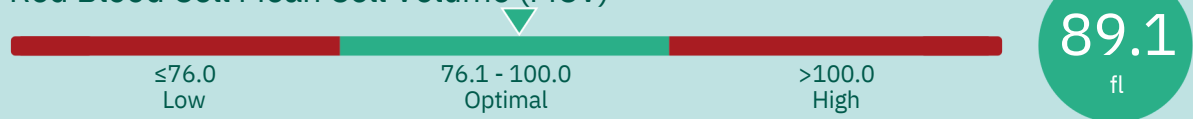
Mean Cell Haemoglobin (MCH)



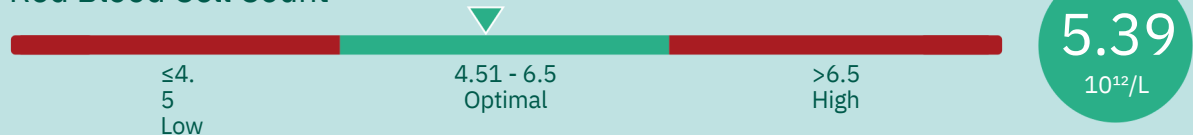
Mean Cell Haemoglobin Concentration (MCHC)



Red Blood Cell Mean Cell Volume (MCV)



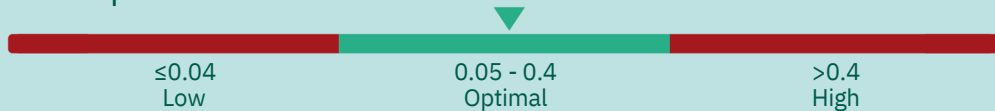
Red Blood Cell Count



Basophil Count

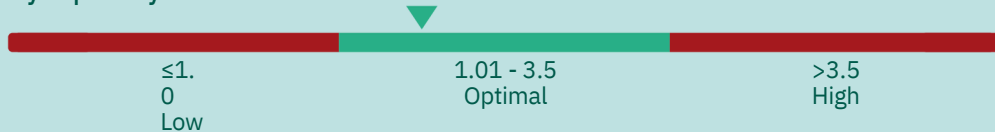


Eosinophil Count



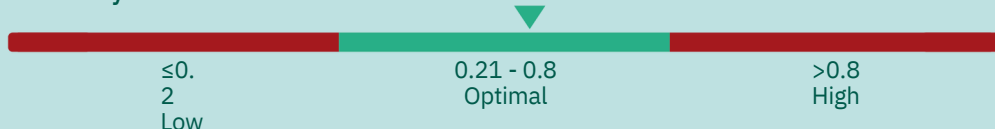
0.23
10⁹/L

Lymphocyte Count



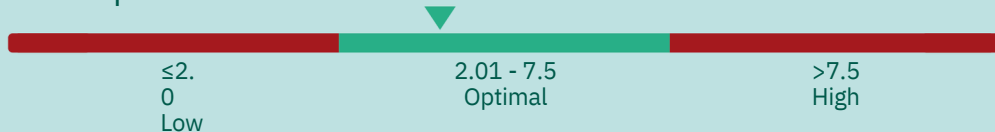
1.63
10⁹/L

Monocyte Count



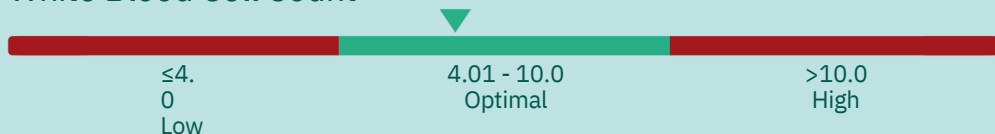
0.55
10⁹/L

Neutrophil Count



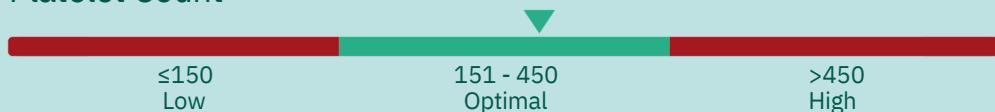
3.68
10⁹/L

White Blood Cell Count



6.11
10⁹/L

Platelet Count



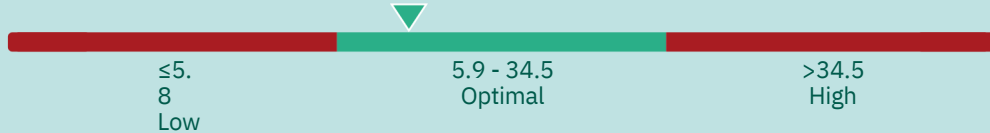
332
10⁹/L



Iron Status

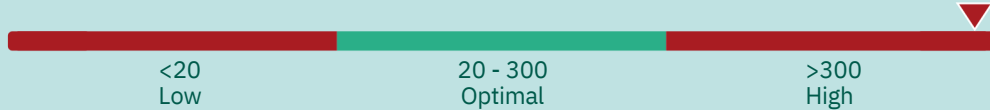
Iron is essential for red blood cell formation. Most of the body's iron, approximately 70%, is present in red blood cells, where its primary role is to carry oxygen from the lungs to all the tissues of the body. Additionally, iron facilitates energy production and release from cells and participates in the functioning of the immune and central nervous systems. Iron Status is useful for evaluating conditions such as iron-deficiency, which can cause anaemia, and iron overload, which can cause organ damage, particularly to the liver.

Iron



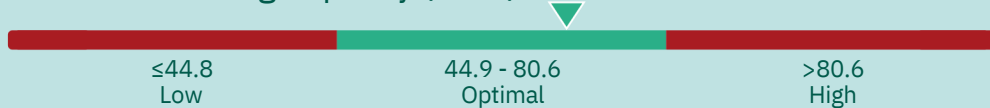
12.1
μmol/l

Ferritin



514.6
μg/l

Total Iron Binding Capacity (TIBC)



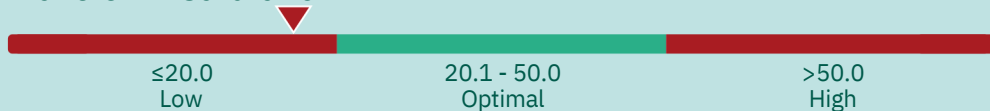
69.8
μmol/l

Transferrin



2.81
g/l

Transferrin Saturation



17.3
%



Heart Health

A major contributing factor to heart disease is the gradual accumulation of fat and cholesterol within blood vessel walls, a process known as atherosclerosis. Cholesterol is a fatty substance that is vital for the normal functioning of the body. However, too much cholesterol is damaging and the risk of developing heart disease is greater in individuals with high cholesterol levels. Heart Health helps assess an individual's risk of developing cardiovascular diseases such as heart disease and stroke.

Total Cholesterol



4.96
mmol/l

LDL Cholesterol



3.98
mmol/l

HDL Cholesterol



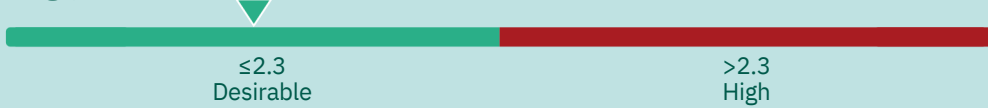
0.69
mmol/l

Total Cholesterol / HDL Cholesterol Ratio



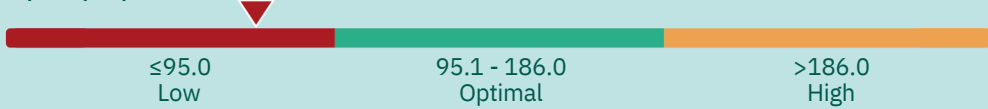
7.19
-

Triglycerides



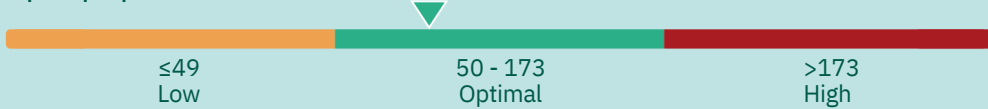
1.15
mmol/l

Apolipoprotein A-I



71.9
mg/dl

Apolipoprotein B



85
mg/dl

Apolipoprotein B / A-I Ratio



1.18
-

High Sensitivity C-Reactive Protein (hsCRP)



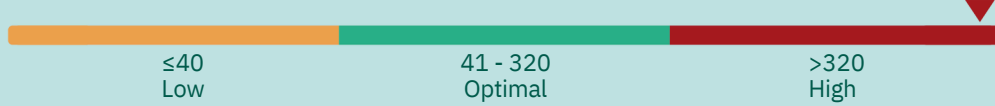
1.34
mg/l

Creatine Kinase-MB (CK-MB)



2.99
μg/l

Creatine Kinase



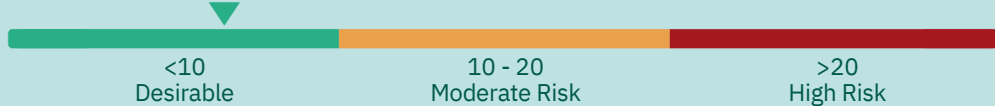
1207
U/l

Myoglobin



84.1
μg/l

Cardiovascular Risk Score



6.5
%



Diabetes Health

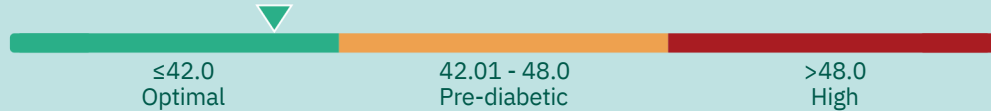
Diabetes mellitus is a chronic condition that is characterised by a high blood glucose level. Normally, insulin (a hormone produced by the pancreas) regulates blood glucose levels. Type 1 diabetes is a condition in which the insulin producing cells of the pancreas are destroyed resulting in very little or no insulin production. Type 2 diabetes is a condition in which the pancreas continues to produce insulin but blood sugar levels remain high due to an insufficient amount of insulin or insulin resistance. Although glucose provides an essential fuel for the body, long-term high levels of glucose are destructive, causing damage to blood vessels, nerves and organs. This damage can increase the risk of developing high blood pressure, heart disease, kidney disease and loss of vision. The Diabetes Health panel includes measurement of glucose and HbA1c levels in the blood, which is useful for the diagnosis and monitoring of diabetes. Higher than normal levels can be associated with a greater risk of developing diabetes in the future ('high risk' or 'pre-diabetes').

Glucose



3.77
mmol/l

HbA1c



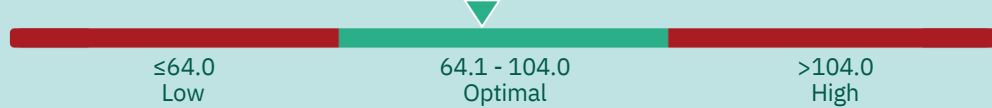
33.61
mmol/mol



Kidney Health

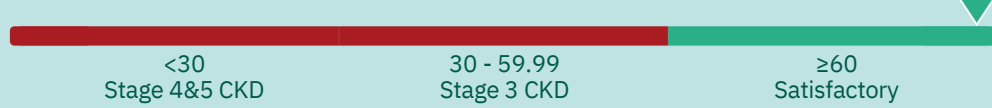
The kidneys are responsible for the production of urine and regulation of water and salt levels in the blood. The kidneys filter blood to remove waste products, water and salts. The fluid containing these waste products travels through kidney tubules where re-absorption of water and salts takes place. This absorption process is crucial to the maintenance of fluid balance in the body, which is also important for blood pressure regulation. Many conditions can impair the filtering ability of the kidney or lead to destruction of kidney tissue, including urinary tract obstruction, glomerulonephritis and acute kidney injury. Kidney Health helps evaluate the filtering ability of the kidneys and can indicate how well the kidneys are functioning.

Creatinine



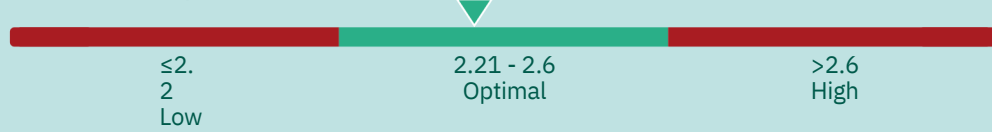
81.4
μmol/l

Estimated Glomerular Filtration Rate (eGFR)



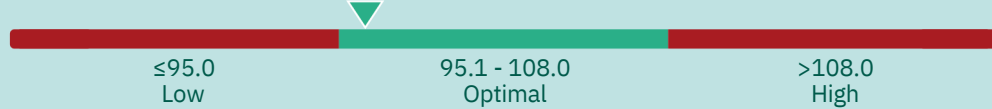
113
ml/min/1.73m²

Calcium (adjusted)



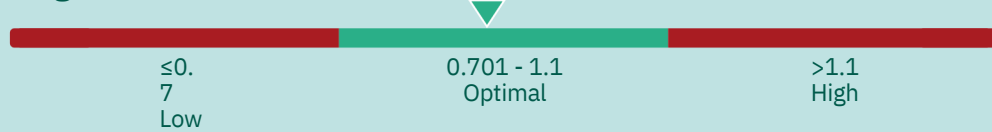
2.37
mmol/l

Chloride



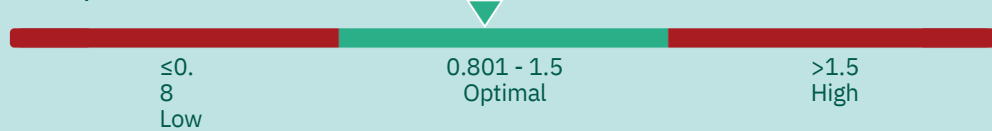
96.1
mmol/l

Magnesium



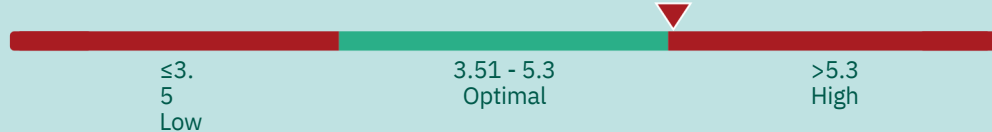
0.88
mmol/l

Phosphate



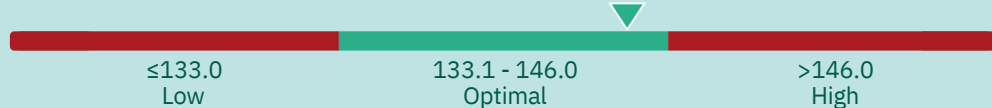
1.11
mmol/l

Potassium



5.31
mmol/l

Sodium



144.4
mmol/l

Urea



Uric Acid





Urinalysis

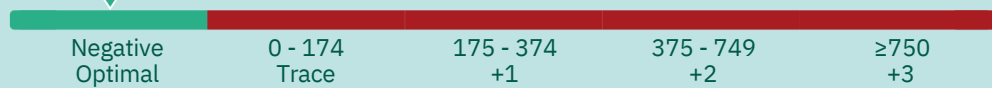
Urinalysis is part of routine diagnostic and screening evaluations. It can reveal a significant amount of preliminary information about the kidneys and other metabolic processes. Urinalysis tests for substances that are normally not present or are present at low concentrations in the urine. In addition, pH measurement helps determine the acidity of urine and is indicative of acid-base balance in the body.

Bilirubin (Urine)



Negative
mg/dl

Glucose (Urine)



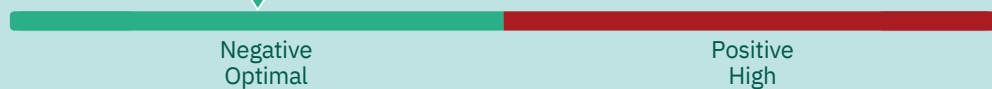
Negative
mg/dl

Ketones (Urine)



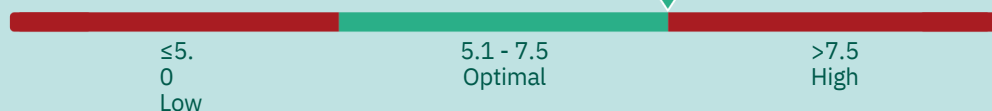
Negative
mg/dl

Nitrite (Urine)



Negative
mg/dl

pH (Urine)



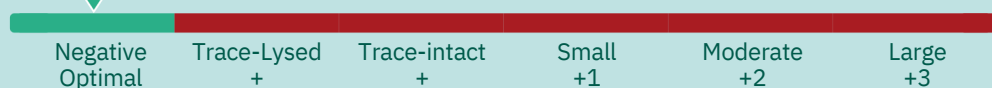
7.5
pH

Protein (Urine)



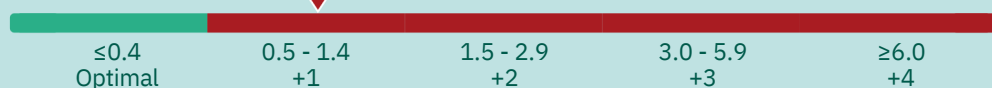
30
mg/dl

Red Blood Cells (Urine)



Negative
RBC/μl

Urobilinogen (Urine)



1
mg/dl

White Blood Cells (Urine)



Negative
Leuk/ μ l



Liver Health

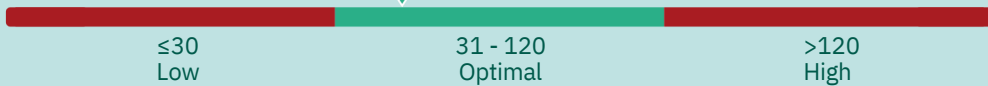
The liver is a vital organ that plays a major role in the regulation of metabolism. The liver performs many complex functions, which include processing of carbohydrates, proteins and fats, breakdown of harmful or toxic substances, decomposition of red blood cells, removal of waste products from the blood and the production and secretion of bile. Bile is a fluid, which aids in the digestion of fats. Once secreted from the liver, bile travels through a series of ducts to the small intestine or to the gallbladder for storage. Liver disease encompasses many conditions that can cause damage to the liver, such as cirrhosis (irreversible scarring of liver tissue), hepatitis (inflammation of the liver), fatty liver disease, gallbladder disease and bile duct obstruction. The Liver Health panel consists of tests that evaluate the function of the liver.

Alanine Aminotransferase (ALT)



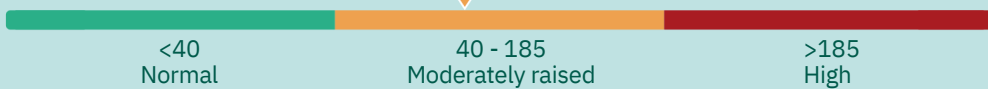
228
U/l

Alkaline Phosphatase (ALP)



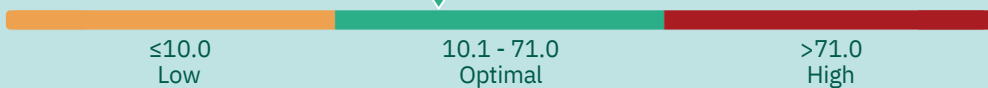
49
U/l

Aspartate Aminotransferase (AST)



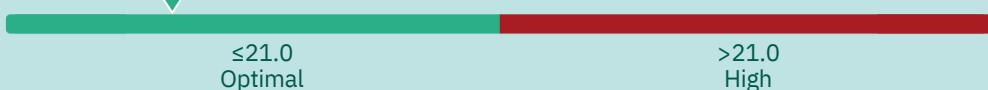
97
U/l

Gamma-Glutamyltransferase (GGT)



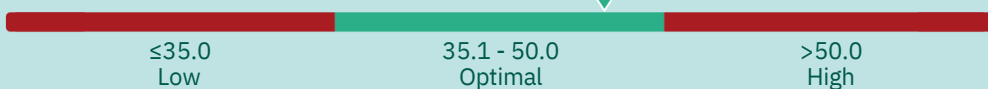
29.2
U/l

Total Bilirubin



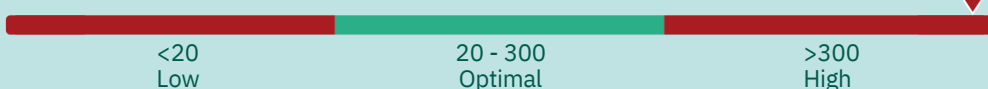
7.02
μmol/l

Albumin



47.3
g/l

Ferritin



514.6
μg/l



Nutritional Health

Nutrition is the supply of materials (in the form of food), which are necessary to allow the body to function normally. Vitamins and minerals support normal growth, and help organs and cells to function. Therefore, good nutrition is vital for health and wellbeing. A poor diet or malabsorption disorders (conditions caused by an impaired ability to digest and/or absorb nutrients from food) may lead to nutritional deficiency. The Nutritional Health panel evaluates the levels of various nutrients and can help identify whether an individual's nutritional status is adequate.

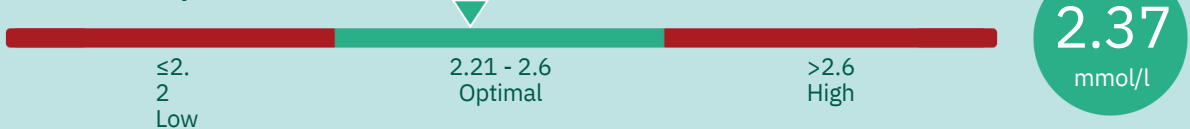
Total Antioxidant Status (TAS)



Albumin



Calcium (adjusted)



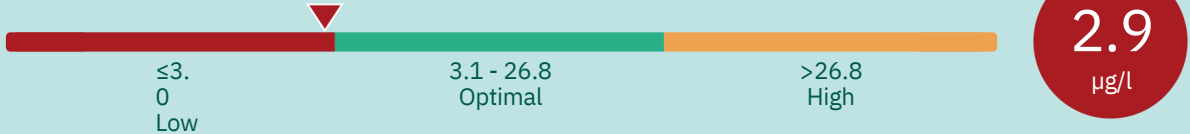
Magnesium



Iron



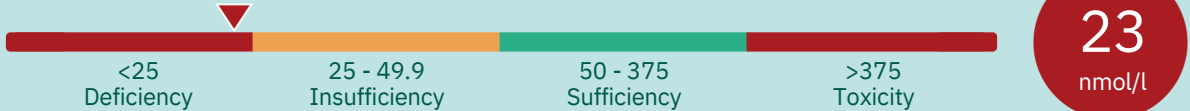
Folic acid



Vitamin B12



Vitamin D

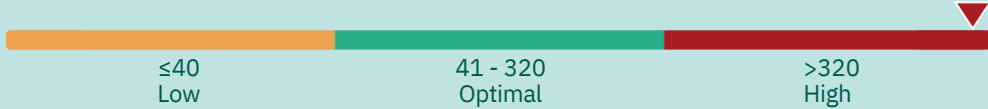




Muscle & Joint Health

Muscles, which are composed of bundles of contractile fibres, are responsible for the movement of various parts of the body. When muscle fibres contract, movement occurs. Damage to muscles occurs in conditions such as myopathies (muscle disorders that cause muscle weakness) and myositis (inflammation of the skeletal muscles). In addition, muscle damage can arise from injury and excessive use of muscles during exercise. Joints form the connections between bones and permit movement and flexibility in various parts of the body. Arthritis is a condition characterised by inflammation, pain and stiffness of the joints and many types exist, including rheumatoid arthritis and gout. The Muscle & Joint Health panel includes markers associated with muscle damage and joint problems such as arthritis and gout.

Creatine Kinase



1207
U/l

Creatine Kinase-MB (CK-MB)



2.99
µg/l

Myoglobin



84.1
µg/l

Uric Acid



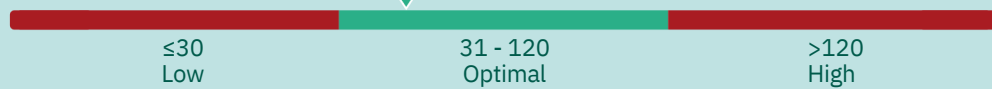
302.3
µmol/l



Bone Health

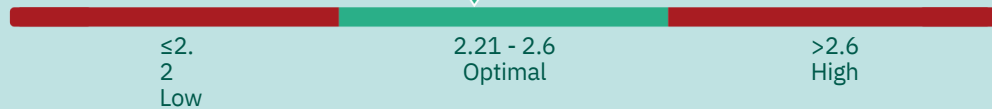
Bones provide structural support for the body and offer protection to delicate organs and tissues (e.g. the ribs protect the heart and lungs and the skull protects the brain). Bones are subject to a continuous remodelling process where old bone tissue is replaced with new tissue. For bones to remain strong and healthy, various factors are required, including calcium and vitamin D. Osteoporosis is a condition in which bones lose density and become weak. Risk factors for osteoporosis include oestrogen deficiency (post-menopause), vitamin D deficiency, calcium deficiency and an inactive lifestyle. Bone Health helps evaluate the levels of these important bone- strength factors, which can be useful for identifying individuals at risk of future bone-related health problems.

Alkaline Phosphatase (ALP)



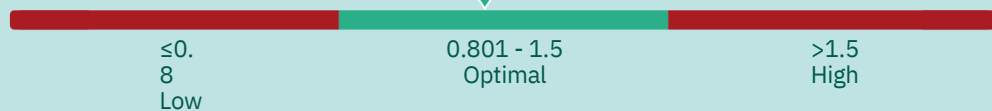
49
U/l

Calcium (adjusted)



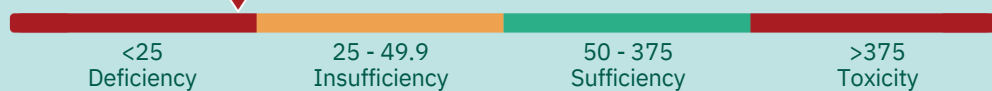
2.37
mmol/l

Phosphate



1.11
mmol/l

Vitamin D



23
nmol/l



Infection & Inflammation

Inflammation is the body's natural response to infection, irritation or injury and is characterised by pain, swelling, warmth and redness of the affected area. Inflammation is a protective mechanism that occurs in an attempt to remove the cause of the injury or irritation and to initiate healing and repair. The Infection & Inflammation panel can indicate the presence of infection or inflammation in the body.

C-Reactive Protein (CRP)



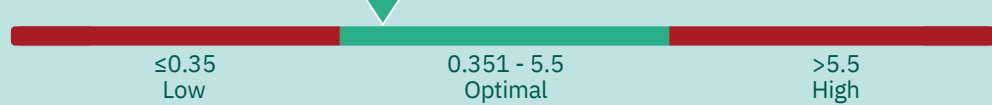
1.34
mg/l



Pituitary & Adrenal Health

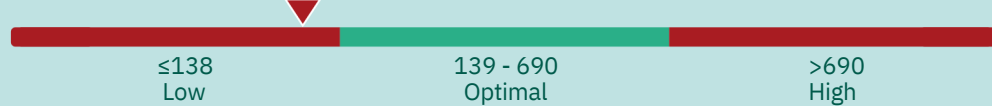
The pituitary and adrenal glands are responsible for the production and release of hormones. Hormones are chemical messengers that travel through the bloodstream and enable communication between different tissues. The pituitary gland, located in the brain, regulates the hormone producing activity of other glands such as the adrenals, thyroid and ovaries, and helps to control various body processes, such as blood pressure, metabolism, growth, temperature and ovulation. The adrenal glands, located just above each kidney, produce hormones that help to regulate blood pressure and the body's response to stress. The Pituitary & Adrenal Health panel comprises the measurement of various hormones produced by each gland and can be useful for evaluating whether the pituitary or adrenal glands are overactive or underactive.

Thyroid Stimulating Hormone (TSH)



1.01
mIU/l

Cortisol



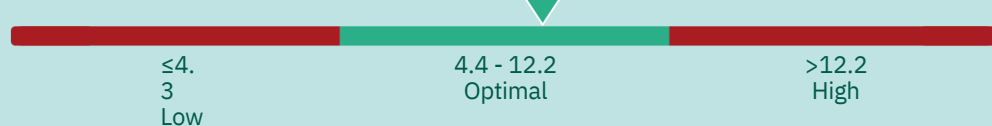
122
nmol/l

Luteinising Hormone



6.4
U/l

Dehydroepiandrosterone Sulphate (DHEAs)



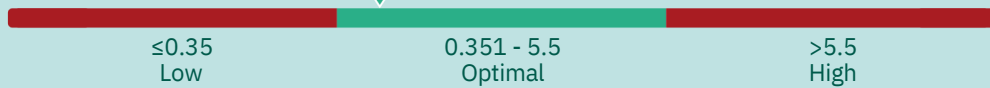
9.2
µmol/l



Thyroid Health

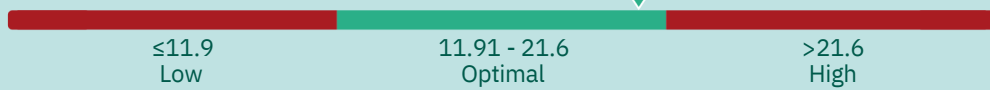
The thyroid gland plays an important role in controlling the body's metabolism by producing hormones. The thyroid hormones help the body to use energy, stay warm and keep the heart, brain, muscle and other organs functioning properly. Thyroid Health consists of tests that can be used to help diagnose an 'underactive thyroid' (hypothyroidism) or an 'overactive thyroid' (hyperthyroidism), or to monitor the treatment of these conditions.

Thyroid Stimulating Hormone (TSH)



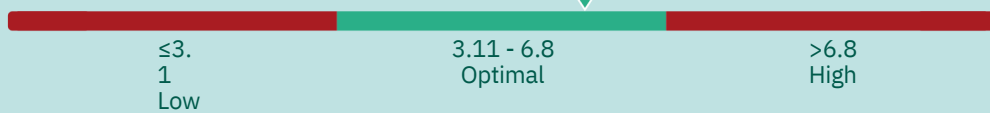
1.01
mIU/l

Free Thyroxine (FT4)



20.8
pmol/l

Free Tri-iodothyronine (FT3)



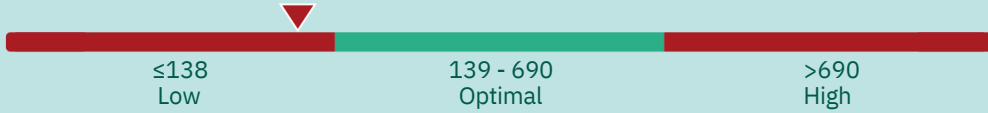
5.89
pmol/l



Hormonal Health

A hormone is a chemical substance that is produced in response to certain changes in the physiological processes that occur in the body. Hormones carry information between cells and help regulate metabolism, growth, reproduction and mood alteration.

Cortisol



122
nmol/l

Dehydroepiandrosterone Sulphate (DHEAs)



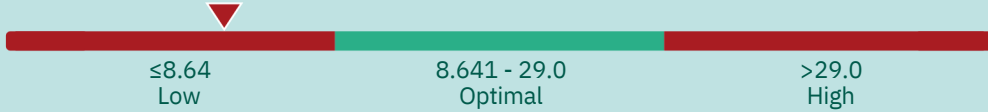
9.2
µmol/l

Luteinising Hormone



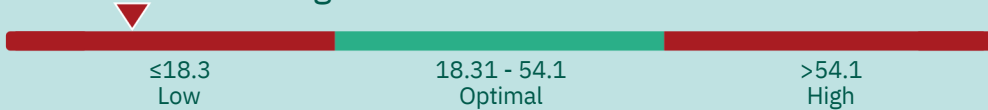
6.4
U/l

Testosterone



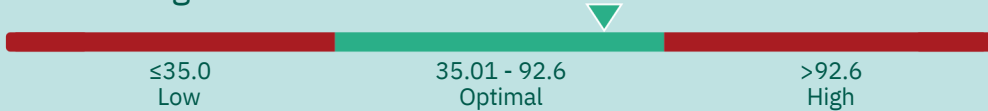
5.7
nmol/l

Sex Hormone Binding Globulin



6.94
nmol/l

Free Androgen Index



82.13
-

Results for your Doctor

This section contains all your test results. Your doctor may prefer to see your test results in this format. The results that are either positive or fall outside the reference range are highlighted in red.

Test	Result	Units	Reference Range
Personal Health Measurements			
Height	1.77	m	N/A
Weight	106	kg	N/A
Body Mass Index (BMI)	33.8	kg/m ²	<18.5 Underweight 18.5 - 24.9 Optimal 25 - 29.9 Overweight ≥30 Obese
Waist Circumference	108	cm	<94 Optimal 94 - 102 Moderate risk >102 High risk
Hip Circumference	101	cm	N/A
Waist / Hip Ratio	1.069	Ratio	<0.95 Low risk 0.95 - 1.0 Moderate Risk >1.0 High risk
Pulse	78	BPM	60 - 100 Optimal
Systolic Blood pressure	130	mmHg	0 - 89.9 Low 90 - 119.9 Optimal 120 - 129.9 Normal 130 - 139.9 High Normal 140 - 250 High
Diastolic Blood pressure	96	mmHg	0 - 59.9 Low 59.9 - 79.9 Optimal 79.9 - 84.9 Normal 84.9 - 89.9 High Normal 90 - 140 High
Full Blood Count			
Haemoglobin	151	g/l	130.1 - 180.0 Optimal
Haematocrit	48	%	40.001 - 54.0 Optimal
Mean Cell Haemoglobin (MCH)	28	pg	27.1 - 32.0 Optimal
Mean Cell Haemoglobin Concentration (MCHC)	315	g/l	≤320.0 Low 320.1 - 360.0 Optimal >360.0 High
Red Blood Cell Mean Cell Volume (MCV)	89.1	fl	76.1 - 100.0 Optimal
Red Blood Cell Count	5.39	10 ¹² /L	4.51 - 6.5 Optimal
Basophil Count	0.02	10 ⁹ /L	0.02 - 0.1 Optimal
Eosinophil Count	0.23	10 ⁹ /L	0.05 - 0.4 Optimal
Lymphocyte Count	1.63	10 ⁹ /L	1.01 - 3.5 Optimal
Monocyte Count	0.55	10 ⁹ /L	0.21 - 0.8 Optimal

Test	Result	Units	Reference Range
Full Blood Count			
Neutrophil Count	3.68	10 ⁹ /L	2.01 - 7.5 Optimal
White Blood Cell Count	6.11	10 ⁹ /L	4.01 - 10.0 Optimal
Platelet Count	332	10 ⁹ /L	151 - 450 Optimal
Iron Status			
Iron	12.1	μmol/l	5.9 - 34.5 Optimal
Ferritin	514.6	μg/l	<20 Low 20 - 300 Optimal >300 High
Total Iron Binding Capacity (TIBC)	69.8	μmol/l	44.9 - 80.6 Optimal
Transferrin	2.81	g/l	2.01 - 3.8 Optimal
Transferrin Saturation	17.3	%	≤20.0 Low 20.1 - 50.0 Optimal >50.0 High
Heart Health			
Total Cholesterol	4.96	mmol/l	<5.00 Desirable
LDL Cholesterol	3.98	mmol/l	<3.00 Desirable 3.00 - 4.90 High >4.90 Very High
HDL Cholesterol	0.69	mmol/l	≤1.55 Low >1.55 Desirable
Total Cholesterol / HDL Cholesterol Ratio	7.19	-	≤5.0 Desirable >5.0 High
Triglycerides	1.15	mmol/l	≤2.3 Desirable
Apolipoprotein A-I	71.9	mg/dl	≤95.0 Low 95.1 - 186.0 Optimal >186.0 High
Apolipoprotein B	85	mg/dl	50 - 173 Optimal
Apolipoprotein B / A-I Ratio	1.18	-	≤1.00 Optimal 1.01 - 1.60 Moderate Risk >1.60 High Risk
High Sensitivity C-Reactive Protein (hsCRP)	1.34	mg/l	<1 Low Risk 1 - 3 Average Risk >3 High Risk
Creatine Kinase-MB (CK-MB)	2.99	μg/l	≤6.13 Optimal
Creatine Kinase	1207	U/l	≤40 Low 41 - 320 Optimal >320 High
Myoglobin	84.1	μg/l	≤72.0 Optimal >72.0 High

Test	Result	Units	Reference Range
Heart Health			
Cardiovascular Risk Score	6.5	%	<10 Desirable
Diabetes Health			
Glucose	3.77	mmol/l	<4.00 Low 4.00 - 5.59 Optimal 5.60 - 6.99 Pre-diabetic ≥7.00 High
HbA1c	33.61	mmol/mol	≤42.0 Optimal
Kidney Health			
Creatinine	81.4	µmol/l	64.1 - 104.0 Optimal
Estimated Glomerular Filtration Rate (eGFR)	113	ml/min/1.73m ²	≥60 Satisfactory
Calcium (adjusted)	2.37	mmol/l	2.21 - 2.6 Optimal
Chloride	96.1	mmol/l	95.1 - 108.0 Optimal
Magnesium	0.88	mmol/l	0.701 - 1.1 Optimal
Phosphate	1.11	mmol/l	0.801 - 1.5 Optimal
Potassium	5.31	mmol/l	≤3.5 Low 3.51 - 5.3 Optimal >5.3 High
Sodium	144.4	mmol/l	133.1 - 146.0 Optimal
Urea	4.33	mmol/l	2.51 - 7.8 Optimal
Uric Acid	302.3	µmol/l	200.1 - 430.0 Optimal
Urinalysis			
Bilirubin (Urine)	Negative	mg/dl	Negative Optimal
Glucose (Urine)	Negative	mg/dl	Negative Optimal
Ketones (Urine)	Negative	mg/dl	Negative Optimal
Nitrite (Urine)	Negative	mg/dl	Negative Optimal
pH (Urine)	7.5	pH	5.1 - 7.5 Optimal
Protein (Urine)	30	mg/dl	Negative Optimal Trace + 0 - 64 +1 65 - 199 +2 200 - 1149 +3 ≥1150 +4
Red Blood Cells (Urine)	Negative	RBC/µl	Negative Optimal
Urobilinogen (Urine)	1	mg/dl	≤0.4 Optimal 0.5 - 1.4 +1 1.5 - 2.9 +2 3.0 - 5.9 +3 ≥6.0 +4

Test	Result	Units	Reference Range
Urinalysis			
White Blood Cells (Urine)	Negative	Leuk/ μ l	Negative Optimal
Liver Health			
Alanine Aminotransferase (ALT)	228	U/l	<40 Normal 40 - 200 Moderately raised >200 High
Alkaline Phosphatase (ALP)	49	U/l	31 - 120 Optimal
Aspartate Aminotransferase (AST)	97	U/l	<40 Normal 40 - 185 Moderately raised >185 High
Gamma-Glutamyltransferase (GGT)	29.2	U/l	10.1 - 71.0 Optimal
Total Bilirubin	7.02	μ mol/l	\leq 21.0 Optimal
Albumin	47.3	g/l	35.1 - 50.0 Optimal
Ferritin	514.6	μ g/l	<20 Low 20 - 300 Optimal >300 High
Nutritional Health			
Total Antioxidant Status (TAS)	1.86	mmol/l	>1.3 Optimal
Albumin	47.3	g/l	35.1 - 50.0 Optimal
Calcium (adjusted)	2.37	mmol/l	2.21 - 2.6 Optimal
Magnesium	0.88	mmol/l	0.701 - 1.1 Optimal
Iron	12.1	μ mol/l	5.9 - 34.5 Optimal
Folic acid	2.9	μ g/l	\leq 3.0 Low 3.1 - 26.8 Optimal >26.8 High
Vitamin B12	747	ng/l	198 - 771 Optimal
Vitamin D	23	nmol/l	<25 Deficiency 25 - 49.9 Insufficiency 50 - 375 Sufficiency >375 Toxicity
Muscle & Joint Health			
Creatine Kinase	1207	U/l	\leq 40 Low 41 - 320 Optimal >320 High
Creatine Kinase-MB (CK-MB)	2.99	μ g/l	\leq 6.13 Optimal
Myoglobin	84.1	μ g/l	\leq 72.0 Optimal >72.0 High
Uric Acid	302.3	μ mol/l	200.1 - 430.0 Optimal
Bone Health			

Test	Result	Units	Reference Range
Bone Health			
Alkaline Phosphatase (ALP)	49	U/l	31 - 120 Optimal
Calcium (adjusted)	2.37	mmol/l	2.21 - 2.6 Optimal
Phosphate	1.11	mmol/l	0.801 - 1.5 Optimal
Vitamin D	23	nmol/l	<25 Deficiency 25 - 49.9 Insufficiency 50 - 375 Sufficiency >375 Toxicity
Infection & Inflammation			
C-Reactive Protein (CRP)	1.34	mg/l	≤5.0 Optimal
Pituitary & Adrenal Health			
Thyroid Stimulating Hormone (TSH)	1.01	mIU/l	0.351 - 5.5 Optimal
Cortisol	122	nmol/l	≤138 Low 139 - 690 Optimal >690 High
Luteinising Hormone	6.4	U/l	1.8 - 8.6 Optimal
Dehydroepiandrosterone Sulphate (DHEAs)	9.2	µmol/l	4.4 - 12.2 Optimal
Thyroid Health			
Thyroid Stimulating Hormone (TSH)	1.01	mIU/l	0.351 - 5.5 Optimal
Free Thyroxine (FT4)	20.8	pmol/l	11.91 - 21.6 Optimal
Free Tri-iodothyronine (FT3)	5.89	pmol/l	3.11 - 6.8 Optimal
Hormonal Health			
Cortisol	122	nmol/l	≤138 Low 139 - 690 Optimal >690 High
Dehydroepiandrosterone Sulphate (DHEAs)	9.2	µmol/l	4.4 - 12.2 Optimal
Luteinising Hormone	6.4	U/l	1.8 - 8.6 Optimal
Testosterone	5.7	nmol/l	≤8.64 Low 8.641 - 29.0 Optimal >29.0 High
Sex Hormone Binding Globulin	6.94	nmol/l	≤18.3 Low 18.31 - 54.1 Optimal >54.1 High
Free Androgen Index	82.13	-	35.01 - 92.6 Optimal



Acseso Health

You are strongly encouraged to contact your own physician if there are any red areas showing on your report.

If you wish to discuss any aspect of your results, please book a consultation at www.aceso.co.uk/book

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