

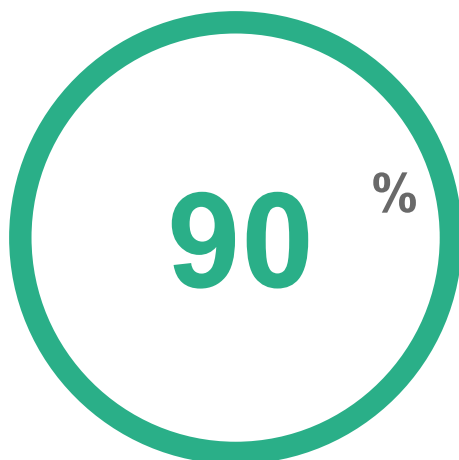
Order	TEH001-00045808
Name	
Date of Birth	
Fasted For	Non-fasting Sample
Date of Sample Collection	30-Jan-2024
Date of Report	01-Feb-2024
Programme	Standard Screen Plus Male

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Health Status

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



 Green - In Range



 Amber - In Between



 Red - Out of Range

Your Results of Interest

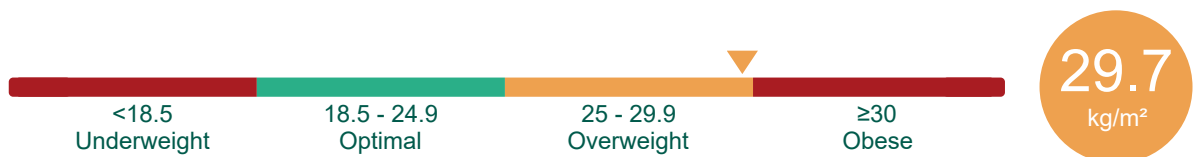
The results presented in this section are a summary of all the tests that are either positive or fall outside the reference ranges. What does this mean? A reference range is a term used to determine if your results are within what is considered to be the 'normal' range of the population. If your results 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

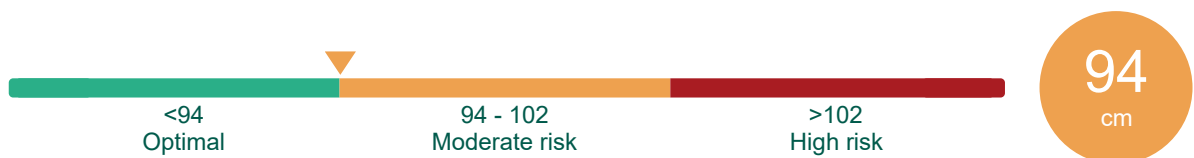
Body Mass Index (BMI)

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.



Heart Health

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.





Metabolic Syndrome

Waist Circumference

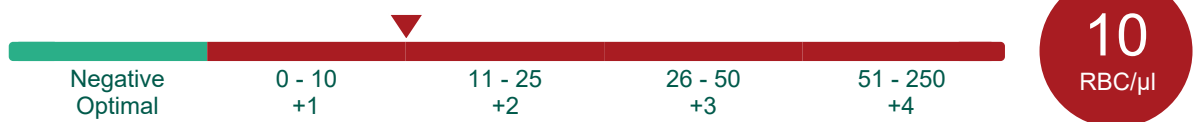
Waist Circumference {Metabolic Syndrome} relates closely to body mass index (BMI) and is part of the waist to hip ratio measurement. Waist circumference is a measure of central or abdominal fat and provides additional information on disease risk. The National Cholesterol Educational Program (NCEP) Adult Treatment Panel III (ATP III) states that individuals who have central obesity (defined as waist circumference greater than or equal to either 94 cm or 90 cm for males (depending on ethnicity) and greater than or equal to 80 cm for females) are at risk of metabolic syndrome.



Urinalysis

Red Blood Cells (Urine)

Red Blood Cells (Urine) in urine can be associated with kidney and urinary tract diseases or infection, menstrual bleeding, blood clotting disorders, chronic diseases (e.g. diabetes, high blood pressure), strenuous exercise and use of certain medications.



Liver Health

Total Bilirubin

Total Bilirubin measurement is a useful liver function test. Bilirubin is a yellowish-brown pigment found in bile (a fluid that facilitates digestion in the intestine). Conditions that block or reduce the flow of bile, such as problems within the liver or bile ducts, can increase bilirubin levels. High levels can occur with liver or bile duct blockage (e.g. due to gallstones), hepatitis (inflammation of the liver), cirrhosis (scarring of the liver), a drug reaction or prolonged excessive alcohol intake. High bilirubin in the absence of other liver test abnormalities usually reflects Gilbert's syndrome, a condition in which the body fails to process bilirubin properly but does not cause liver disease.





Nutritional Health

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.



34
nmol/l



Bone Health

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.



34
nmol/l



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)



Waist Circumference



Waist / Hip Ratio

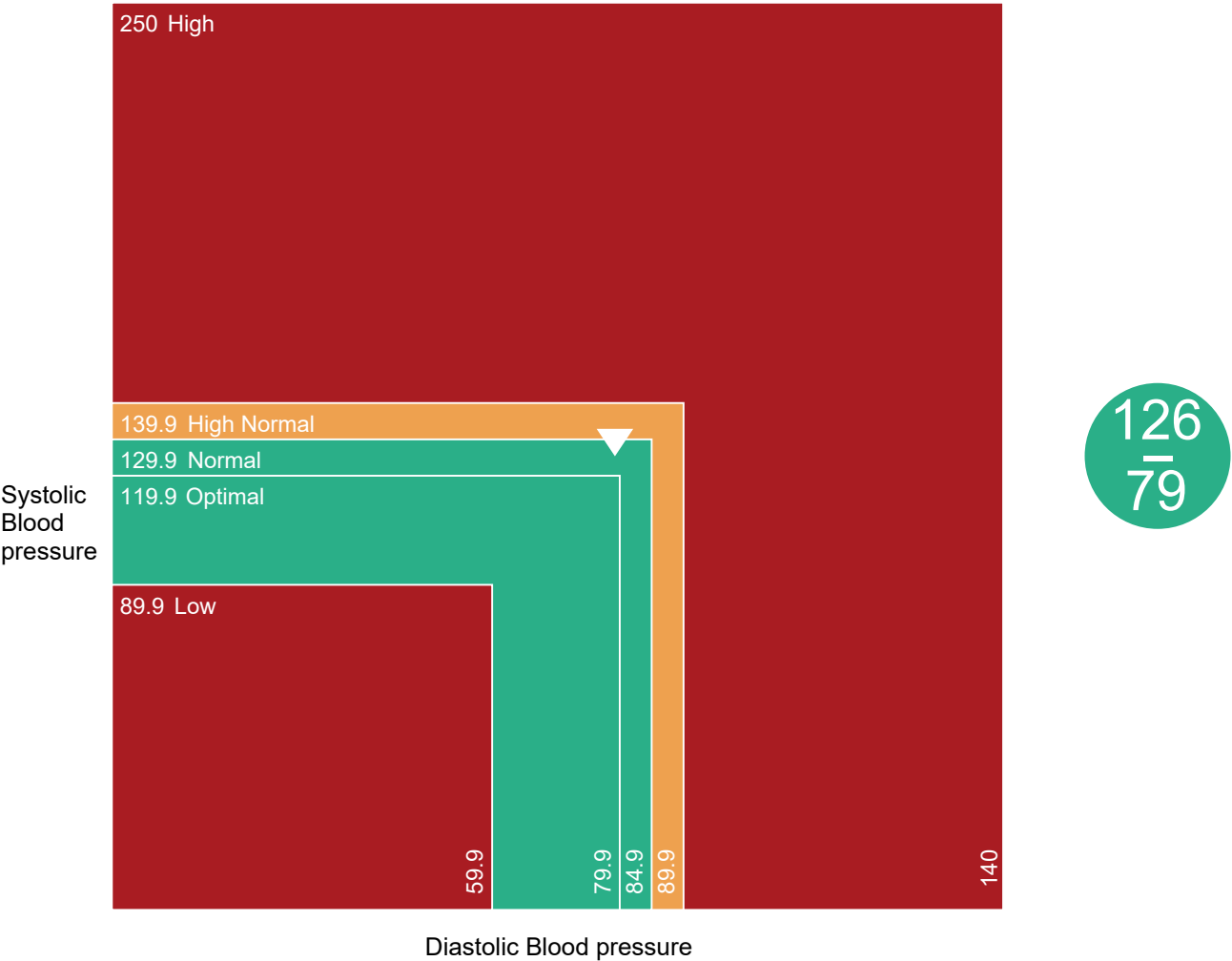


Pulse



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

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



152
g/l

Haematocrit



45.4
%

Mean Cell Haemoglobin (MCH)



29.9
pg

Mean Cell Haemoglobin Concentration (MCHC)



335
g/l

Red Blood Cell Mean Cell Volume (MCV)



89.4
fl

Red Blood Cell Count



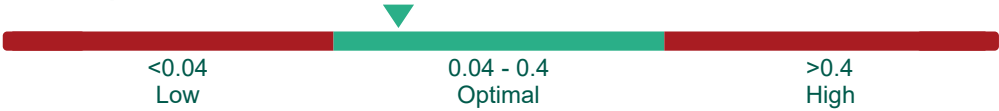
5.08
 $10^{12}/L$

Basophil Count



0.07
 $10^9/L$

Eosinophil Count



0.11
10⁹/L

Lymphocyte Count



1.42
10⁹/L

Monocyte Count



0.27
10⁹/L

Neutrophil Count



2.28
10⁹/L

White Blood Cell Count



4.15
10⁹/L

Platelet Count

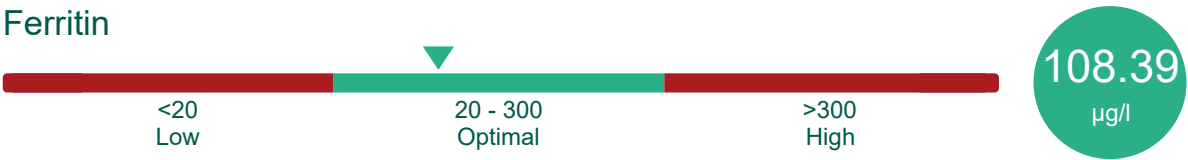


290
10⁹/L



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.





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



4.61
mmol/l

LDL Cholesterol



2.94
mmol/l

HDL Cholesterol



1.46
mmol/l

Total Cholesterol / HDL Cholesterol Ratio



3.16
%

Triglycerides



0.81
mmol/l

High Sensitivity C-Reactive Protein (hsCRP)



0.63
mg/l

Cardiovascular Risk Score



3
%



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').





Metabolic Syndrome

Metabolic syndrome refers to a collection of risk factors occurring simultaneously that together increase the risk of developing cardiovascular disease, type 2 diabetes and stroke. The National Cholesterol Educational Program (NCEP) Adult Treatment Panel III (ATP III) has defined metabolic syndrome as the presence of three or more of the following five factors: central obesity (increased body mass index (BMI) or waist circumference), high blood pressure, high fasting blood glucose, low HDL cholesterol, and elevated triglycerides. Previous diagnosis of type-2 diabetes, treatment for high blood pressure, or specific treatments for low HDL cholesterol and high triglycerides also count as factors. The risk of future heart disease, stroke or diabetes increases with the number of risk factors acquired. The Metabolic Syndrome panel includes the measurement of the five factors mentioned above and is indicative of an individual's risk of future cardiovascular disease and type-2 diabetes.

Body Mass Index (BMI)



Waist Circumference



Systolic Blood pressure



Diastolic Blood pressure



HDL Cholesterol



Triglycerides



HbA1c



High Sensitivity C-Reactive Protein (hsCRP)



0.63
mg/l

Height
1.78 m

Weight
94 kg



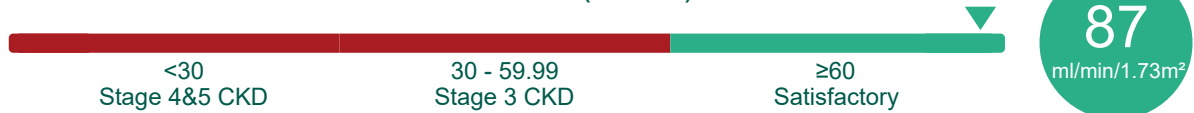
Kidney Health

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.

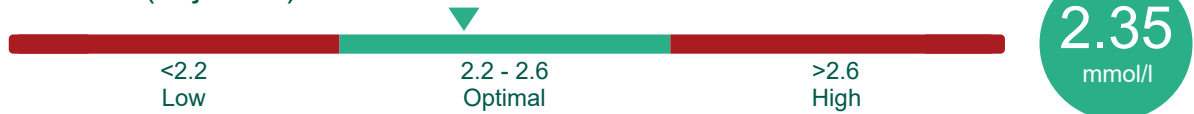
Creatinine



Estimated Glomerular Filtration Rate (eGFR)



Calcium (adjusted)



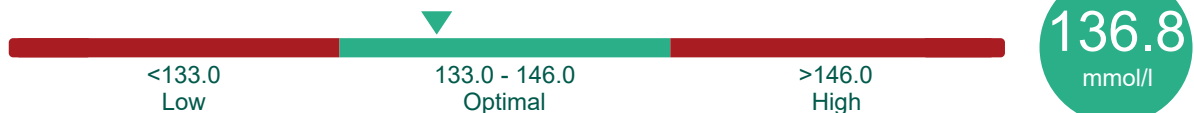
Chloride



Phosphate



Sodium



Urea





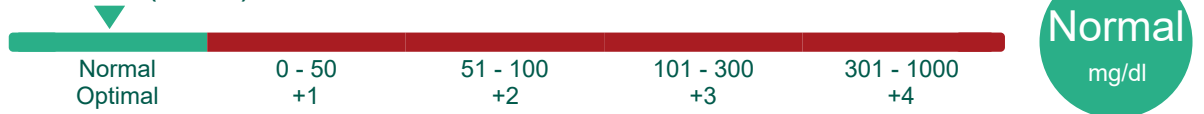
Urinalysis

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)



Glucose (Urine)



Ketones (Urine)



Nitrite (Urine)



pH (Urine)



Protein (Urine)



Red Blood Cells (Urine)



Urobilinogen (Urine)



White Blood Cells (Urine)

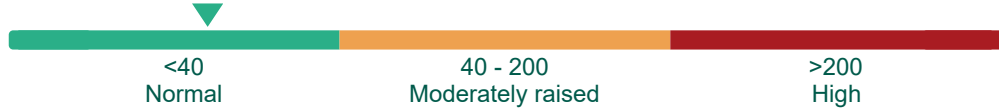




Liver Health

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)



23.9
U/l

Alkaline Phosphatase (ALP)



45
U/l

Aspartate Aminotransferase (AST)



31.1
U/l

Gamma-Glutamyltransferase (GGT)



50.7
U/l

Total Bilirubin



24.43
μmol/l

Albumin



46
g/l

Ferritin



108.39
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.

Albumin



46
g/l

Calcium (adjusted)



2.35
mmol/l

Vitamin D



34
nmol/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)



45
U/l

Calcium (adjusted)



2.35
mmol/l

Phosphate



0.96
mmol/l

Vitamin D



34
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.

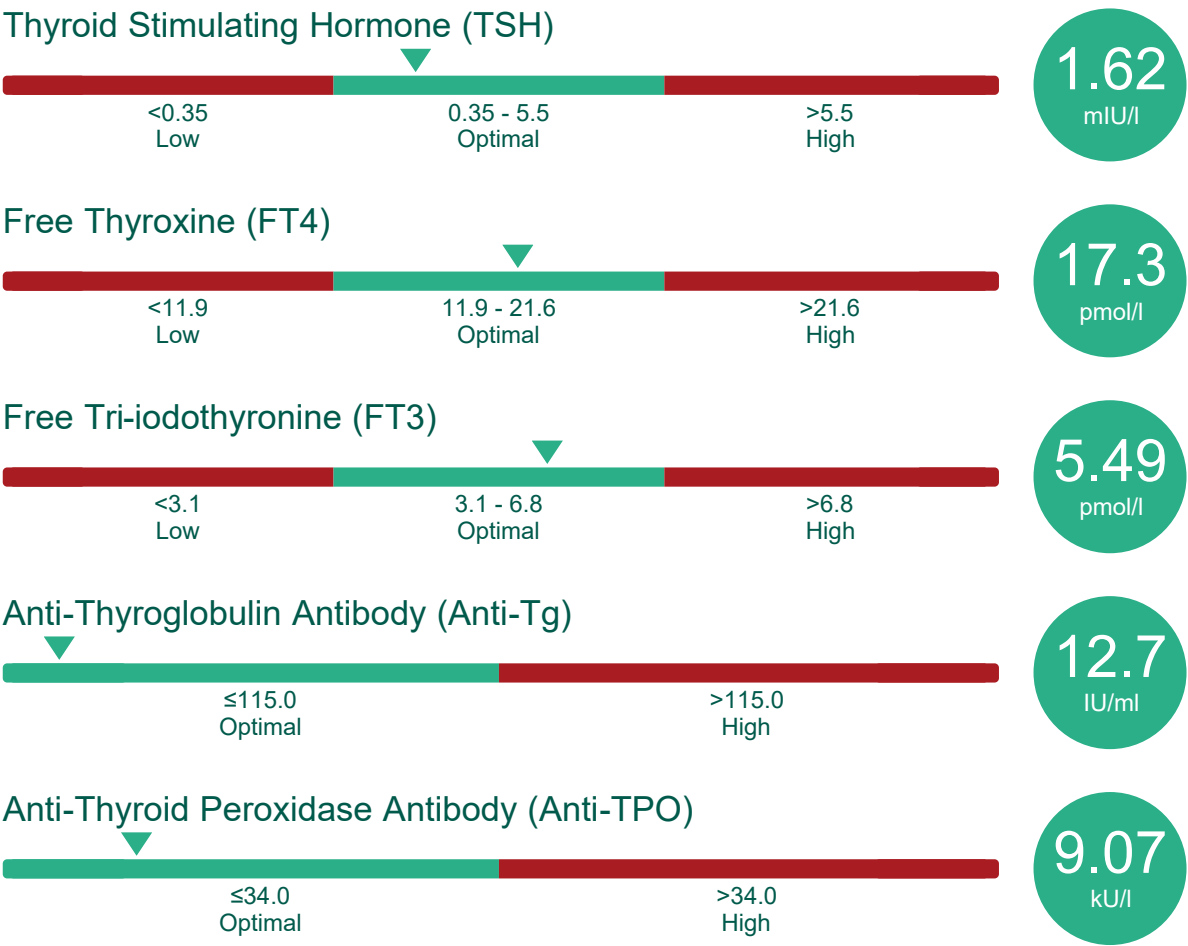
C-Reactive Protein (CRP)





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.





Prostate Health

Prostate specific antigen (PSA) is a protein produced by cells of the prostate gland. Prostate specific antigen is detectable in the serum of almost all men and levels tend to increase with age and size of the prostate. Although PSA is highly specific for prostate disease, it is not specific for prostate cancer. Two forms of PSA are found in the blood; PSA that is 'free' and PSA that is 'bound' to protein. The combination of these two forms comprises the Total PSA (TPSA). In most cases, this panel consists of the measurement of TPSA alone. However, if TPSA is elevated, Free PSA (FPSA) is also measured and the percentage of FPSA to TPSA is calculated. FPSA is only applicable when TPSA is elevated. It should be noted that in men under the age of 50, no specific reference range exists for TPSA and the ranges provided are for guidance only.

Total Prostate Specific Antigen (TPSA)





Other

Panel containing tests, that could not be mapped.

Testosterone



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	1.78	m	N/A
Weight	94	kg	N/A
Body Mass Index (BMI)	29.7	kg/m ²	<18.5 Underweight 18.5 - 24.9 Optimal 25 - 29.9 Overweight ≥30 Obese
Waist Circumference	94	cm	<94 Optimal 94 - 102 Moderate risk >102 High risk
Hip Circumference	99	cm	N/A
Waist / Hip Ratio	0.949	Ratio	<0.95 Low risk
Pulse	73	BPM	60 - 100 Optimal
Systolic Blood pressure	126	mmHg	120 - 129.9 Normal
Diastolic Blood pressure	79	mmHg	59.9 - 79.9 Optimal
Full Blood Count			
Haemoglobin	152	g/l	130.0 - 180.0 Optimal
Haematocrit	45.4	%	40.0 - 54.0 Optimal
Mean Cell Haemoglobin (MCH)	29.9	pg	27.0 - 32.0 Optimal
Mean Cell Haemoglobin Concentration (MCHC)	335	g/l	320.0 - 360.0 Optimal
Red Blood Cell Mean Cell Volume (MCV)	89.4	fl	76.0 - 100.0 Optimal
Red Blood Cell Count	5.08	10 ¹² /L	4.5 - 6.5 Optimal
Basophil Count	0.07	10 ⁹ /L	0.01 - 0.1 Optimal
Eosinophil Count	0.11	10 ⁹ /L	0.04 - 0.4 Optimal
Lymphocyte Count	1.42	10 ⁹ /L	1.0 - 3.5 Optimal
Monocyte Count	0.27	10 ⁹ /L	0.2 - 0.8 Optimal
Neutrophil Count	2.28	10 ⁹ /L	2.0 - 7.5 Optimal
White Blood Cell Count	4.15	10 ⁹ /L	4.0 - 10.0 Optimal
Platelet Count	290	10 ⁹ /L	150 - 450 Optimal
Iron Status			
Ferritin	108.39	µg/l	20 - 300 Optimal

Test	Result	Units	Reference Range
Heart Health			
Total Cholesterol	4.61	mmol/l	<5.0 Desirable
LDL Cholesterol	2.94	mmol/l	<3.0 Desirable
HDL Cholesterol	1.46	mmol/l	<1.55 Low ≥1.55 Desirable
Total Cholesterol / HDL Cholesterol Ratio	3.16	%	<5.0 Desirable
Triglycerides	0.81	mmol/l	<2.3 Desirable
High Sensitivity C-Reactive Protein (hsCRP)	0.63	mg/l	<1 Low Risk
Cardiovascular Risk Score	3	%	<10 Desirable
Diabetes Health			
HbA1c	37.17	mmol/mol	<42.0 Optimal
Metabolic Syndrome			
Height	1.78	m	N/A
Weight	94	kg	N/A
Body Mass Index (BMI)	29.7	kg/m ²	≤30 Optimal
Waist Circumference	94	cm	<94 Optimal ≥94 Risk
Systolic Blood pressure	126	mmHg	<130 Optimal
Diastolic Blood pressure	79	mmHg	<85 Optimal
HDL Cholesterol	1.46	mmol/l	≥1.03 Optimal
Triglycerides	0.81	mmol/l	<1.7 Optimal
HbA1c	37.17	mmol/mol	<42.0 Optimal
High Sensitivity C-Reactive Protein (hsCRP)	0.63	mg/l	<1 Low Risk
Kidney Health			
Creatinine	96	μmol/l	53.0 - 97.0 Optimal
Estimated Glomerular Filtration Rate (eGFR)	87	ml/min/1.73m ²	≥60 Satisfactory
Calcium (adjusted)	2.35	mmol/l	2.2 - 2.6 Optimal
Chloride	96	mmol/l	95 - 108 Optimal
Phosphate	0.96	mmol/l	0.8 - 1.5 Optimal
Sodium	136.8	mmol/l	133.0 - 146.0 Optimal
Urea	6.49	mmol/l	2.5 - 7.8 Optimal

Test	Result	Units	Reference Range
Urinalysis			
Bilirubin (Urine)	Negative	mg/dl	Negative Optimal
Glucose (Urine)	Normal	mg/dl	Normal Optimal
Ketones (Urine)	Negative	mg/dl	Negative Optimal
Nitrite (Urine)	Negative	mg/dl	Negative Optimal
pH (Urine)	5	pH	5.0 - 7.5 Optimal
Protein (Urine)	Negative	mg/dl	Negative Optimal
Red Blood Cells (Urine)	10	RBC/μl	Negative Optimal 0 - 10 +1 11 - 25 +2 26 - 50 +3 51 - 250 +4
Urobilinogen (Urine)	Normal	mg/dl	Normal Optimal
White Blood Cells (Urine)	Negative	Leuk/μl	Negative Optimal
Liver Health			
Alanine Aminotransferase (ALT)	23.9	U/l	<40 Normal
Alkaline Phosphatase (ALP)	45	U/l	30 - 120 Optimal
Aspartate Aminotransferase (AST)	31.1	U/l	<40 Normal
Gamma-Glutamyltransferase (GGT)	50.7	U/l	10.0 - 71.0 Optimal
Total Bilirubin	24.43	μmol/l	<21.0 Optimal ≥21.0 High
Albumin	46	g/l	35.0 - 50.0 Optimal
Ferritin	108.39	μg/l	20 - 300 Optimal
Nutritional Health			
Albumin	46	g/l	35.0 - 50.0 Optimal
Calcium (adjusted)	2.35	mmol/l	2.2 - 2.6 Optimal
Vitamin D	34	nmol/l	<25 Deficiency 25 - 49.9 Insufficiency 50 - 375 Sufficiency >375 Toxicity
Bone Health			
Alkaline Phosphatase (ALP)	45	U/l	30 - 120 Optimal
Calcium (adjusted)	2.35	mmol/l	2.2 - 2.6 Optimal
Phosphate	0.96	mmol/l	0.8 - 1.5 Optimal

Test	Result	Units	Reference Range
Bone Health			
Vitamin D	34	nmol/l	<25 Deficiency 25 - 49.9 Insufficiency 50 - 375 Sufficiency >375 Toxicity
Infection & Inflammation			
C-Reactive Protein (CRP)	0.63	mg/l	≤5.0 Optimal
Thyroid Health			
Thyroid Stimulating Hormone (TSH)	1.62	mIU/l	0.35 - 5.5 Optimal
Free Thyroxine (FT4)	17.3	pmol/l	11.9 - 21.6 Optimal
Free Tri-iodothyronine (FT3)	5.49	pmol/l	3.1 - 6.8 Optimal
Anti-Thyroglobulin Antibody (Anti-Tg)	12.7	IU/ml	≤115.0 Optimal
Anti-Thyroid Peroxidase Antibody (Anti-TPO)	9.07	kU/l	≤34.0 Optimal
Prostate Health			
Total Prostate Specific Antigen (TPSA)	0.47	µg/l	≤2.0 Optimal
Other			
Testosterone	18.5	nmol/l	8.64 - 29.0 Optimal