RANDOX

HEALTH

Order	XXXXXXXXX
Name	Example Report
Date of Birth	dd-Mmm-yyyy
Fasted For	Non-fasting Sample
Date of Sample Collection	dd-Mmm-yyyy
Date of Report	dd-Mmm-yyyy
Programme	**Advanced GP3**

CONTENTS

Health Status

87 **%**

○ Green - In Range

3 **%**

○ Amber - In Between

10 **%**

○ 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.

<18.5 Underweight	18.5 - 24.9 Optimal	25 - 29.9 Overweight	≥30 Obese

29.1 kg/m²

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).

<0.8 Low risk	0.8 - 0.85 Moderate Risk	>0.85 High risk

1 Ratio
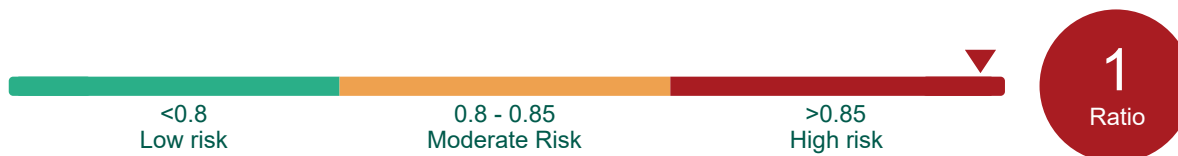
Heart Health

Total Cholesterol

Total Cholesterol refers to the measurement of all cholesterol circulating in the blood. Cholesterol is essential for various body functions such as the formation of bile acids, which facilitate digestion and absorption of nutrients, and production of hormones, which are vital for normal growth and development. Elevated total cholesterol levels are associated with increased risk of cardiovascular disease and stroke, as accumulation of cholesterol and fat can narrow blood vessels and impair blood flow. Low total cholesterol levels are associated with decreased risk of cardiovascular disease; however, low total cholesterol may also be associated with other problems, such as malnutrition, malabsorption disorders (conditions that affect the ability of the intestine to absorb nutrients) and liver disease.

<5.0 Desirable	≥5.0 High

5.51 mmol/l

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.

<3.0 Desirable	≥3.0 High

3.55 mmol/l

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.

<1.55 Low	≥1.55 Desirable

1.39 mmol/l

Apolipoprotein CII

Apolipoprotein CII is a protein found in various lipoprotein and large fat particles. Apolipoprotein CII (apo CII) is responsible for activation of lipoprotein lipase, an enzyme that is crucial for processing of fat from digested food. Low apo CII levels are associated with apolipoprotein CII deficiency, a rare inherited condition in which fat particles accumulate in the blood. However, too much apo CII, which inhibits lipoprotein lipase activity, also contributes to fat accumulation. Elevated apo CII levels may be associated with coronary heart disease, such as angina or heart attack, or with familial lipoprotein lipase deficiency, a rare genetic disorder.

<1.6 Low	1.6 - 4.2 Optimal	>4.2 High

4.65 mg/dl
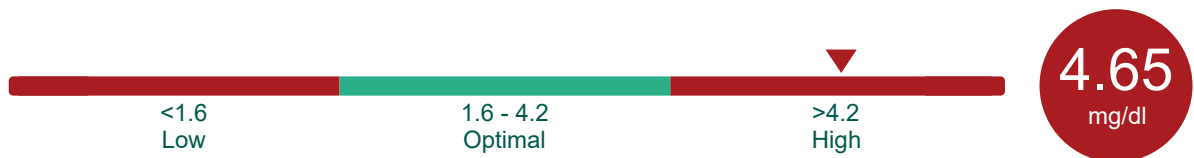
Apolipoprotein E

Apolipoprotein E is a protein produced by the liver that is essential for breaking down triglyceride-rich lipoproteins (particles containing both fat and protein). Apolipoprotein E (apo E) is involved in the transport of cholesterol and other lipids to the liver for removal from the body. Reduced availability of apo E impairs clearance of triglycerides from the blood and may be associated with increased risk of atherosclerosis (accumulation of cholesterol and fatty material in blood vessel walls).

<2.7 Low	2.7 - 4.5 Optimal	>4.5 High

4.88 mg/dl
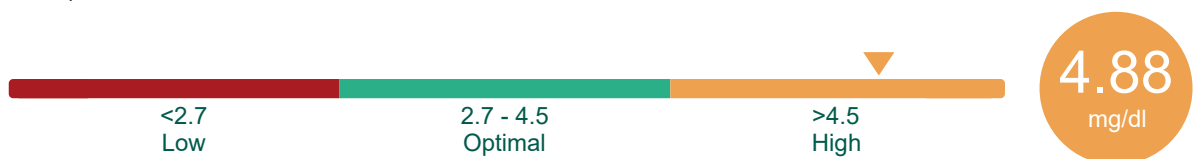
Lipoprotein (a)

Lipoprotein (a) is similar to low-density lipoprotein (LDL) as it contains apolipoprotein B, which is the main protein component of LDL ('bad') cholesterol. In addition, it also contains apolipoprotein (a). Apolipoprotein (a) may promote accumulation of LDL particles within blood vessel walls, which can cause arteries to narrow and harden, and may contribute to blood clot formation, which could potentially block blood vessels and increase the risk of a heart attack or stroke. Increased lipoprotein (a) levels are associated with increased risk of cardiovascular disease. Other conditions that may contribute to elevated lipoprotein (a) include oestrogen depletion (e.g. menopause), severe hypothyroidism (an underactive thyroid gland), uncontrolled diabetes and chronic kidney disease. Lipoprotein (a) is genetically determined and levels tend to remain constant throughout life. Unlike other lipoproteins, diet, exercise, lifestyle modification and most medications used to lower cholesterol levels have no effect on lipoprotein (a) levels.

<75.0 Optimal	≥75.0 High

177.6 nmol/l

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 indentified 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.

<1 Low Risk	1 - 3 Average Risk	>3 High Risk

2.09 mg/l

Metabolic Syndrome

Leptin

Leptin is an appetite-suppressing hormone secreted by adipose tissue (fat tissue). Leptin plays an important role in the maintenance of body weight and regulation of glucose levels. Obese individuals often have elevated blood leptin levels but are resistant to its effects. Increased leptin may also be associated with insulin resistance (a key feature of type 2 diabetes) and metabolic syndrome (a set of risk factors for cardiovascular disease and type 2 diabetes occurring simultaneously).

<15.4 Optimal	≥15.4 High

25.5 µg/l

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 indentified 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.

<1	1 - 3	>3
Low Risk	Average Risk	High Risk

2.09 mg/l

Kidney Health

Creatinine

Creatinine is a waste product produced by muscle tissue. Creatinine concentration in the blood represents a balance between muscle production and the filtration and subsequent removal of creatinine from the body by the kidneys. As production from muscle is relatively constant, the filtering ability of the kidneys determines creatinine concentration in the blood. Therefore, when kidney function diminishes, creatinine levels increase. Increased creatinine may be associated with glomerulonephritis (kidney inflammation), pyelonephritis (kidney infection), acute tubular necrosis (death of kidney tubule cells) and situations in which blood flow to the kidney is reduced, such as dehydration, heart failure and complications associated with diabetes. Muscle injury may cause a temporary increase in creatinine. Low creatinine values are rare and can be a sign of low muscle mass.

<44.0	44.0 - 80.0	>80.0
Low	Optimal	High

83.1 µmol/l
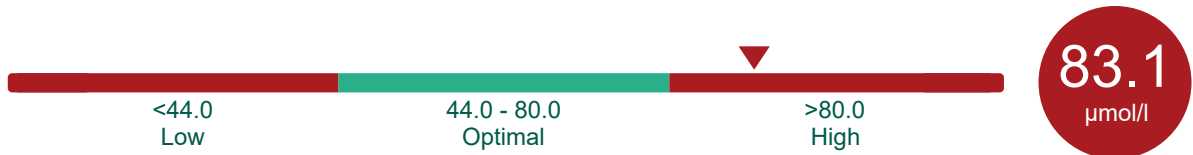
Urinalysis

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.

Negative	0 - 10	11 - 25	26 - 50	51 - 250
Optimal	+1	+2	+3	+4

250 RBC/µl
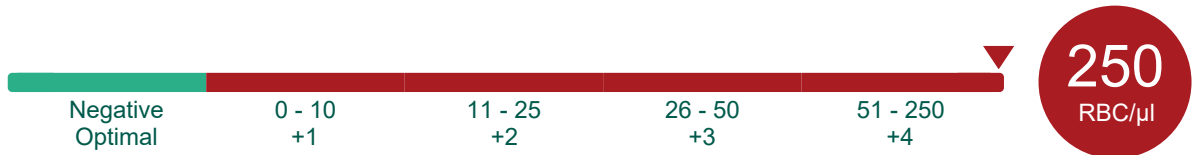
White Blood Cells (Urine)

White Blood Cells (Urine) are an essential part of the immune system, which help to protect the body against infection. Normally, urine is sterile and contains no WBCs. The presence of WBCs in a urine sample may suggest a urinary tract infection such as cystitis (bladder infection) or pyelonephritis (kidney infection).

Negative	0 - 25	26 - 100	101 - 500
Optimal	+1	+2	+3

100 Leuk/µl
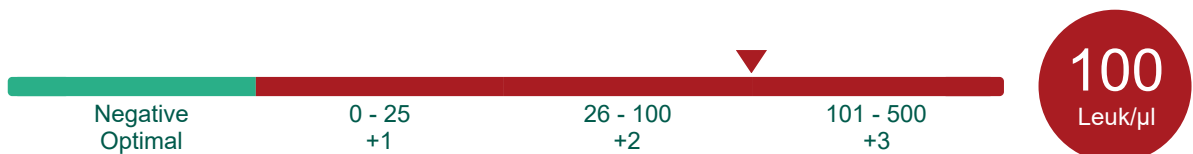
Allergy Evaluation

Immunoglobulin E (IgE)

Immunoglobulin E (IgE) is an immune system protein involved in allergic reactions. Exposure of an individual to something that they are allergic to prompts the immune system to generate IgE, which is measurable in the blood. In addition to allergies, elevated IgE levels may also be associated with parasitic infection, asthma and eczema.

≤100.0 Optimal	>100.0 High	**148.5** kU/l

Infection & Inflammation

Antistreptolysin O (ASO)

Antistreptolysin O (ASO) is a blood test that detects antibodies to the streptolysin O toxin produced by streptococcal bacteria. The presence of ASO antibodies is indicative of a recent or current streptococcal infection. Streptococcal bacteria are commonly associated with throat and skin infections and in the long-term may cause complications including glomerulonephritis (inflammation of the kidney) and endocarditis (inflammation of the lining of the heart).

<200.0 Optimal	≥200.0 High	**683.5** IU/ml

Personal Health Measurements

Measurements include pulse, blood pressure, waist circumference and calculation of body massindex (BMI). Various lifestyle and hereditary factors can influence these parameters, which areuseful in the overall assessment of an individual's risk of developing conditions such ascardiovascular disease or diabetes. The measurement of oxygen saturation by pulse oximetry isalso included. A low blood oxygen level, or hypoxaemia, may be associated with airwayobstruction, which occurs in conditions such as asthma, emphysema and chronic obstructivepulmonary disease.

Body Mass Index (BMI)

<18.5 Underweight	18.5 - 24.9 Optimal	25 - 29.9 Overweight	≥30 Obese

29.1 kg/m²

Waist Circumference

<81 Optimal	81 - 89 Moderate risk	>89 High risk

1 cm

Waist / Hip Ratio

<0.8 Low risk	0.8 - 0.85 Moderate Risk	>0.85 High risk

1 Ratio

Pulse

<60 Low	60 - 100 Optimal	>100 High

65 BPM
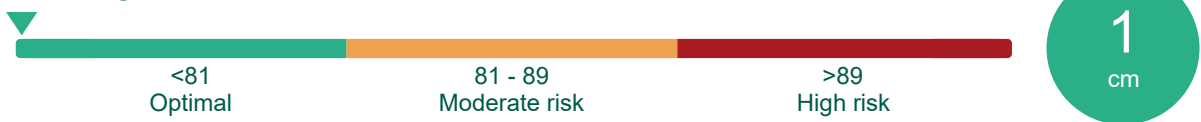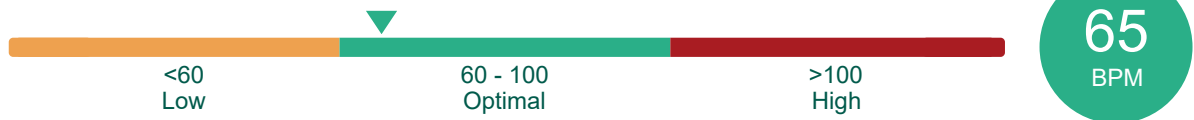
Blood pressure

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.
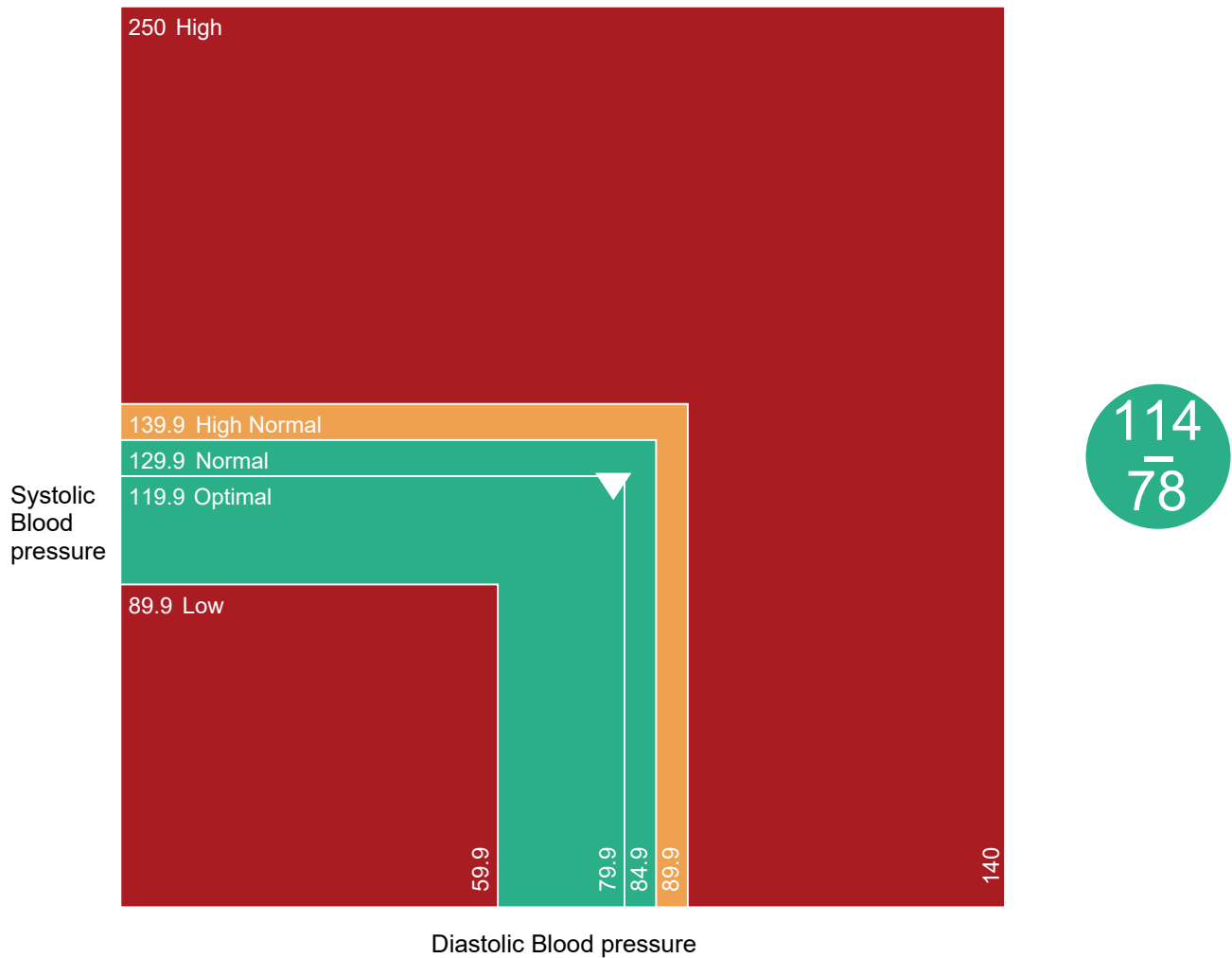
Height	Weight	Hip Circumference
1.75 m	89 kg	1 cm

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
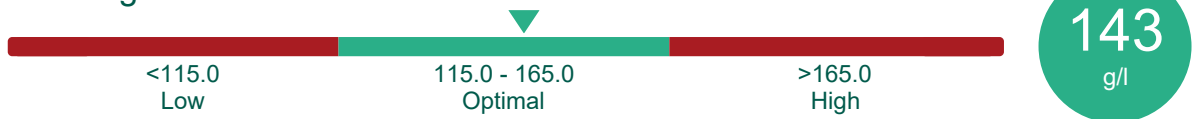
<115.0 Low	115.0 - 165.0 Optimal	>165.0 High

143 g/l

Haematocrit

<37.0 Low	37.0 - 47.0 Optimal	>47.0 High

43 %

Mean Cell Haemoglobin (MCH)

<27.0 Low	27.0 - 32.0 Optimal	>32.0 High

28 pg

Mean Cell Haemoglobin Concentration (MCHC)

<320.0 Low	320.0 - 360.0 Optimal	>360.0 High

333 g/l

Red Blood Cell Mean Cell Volume (MCV)

<76.0 Low	76.0 - 100.0 Optimal	>100.0 High

84.1 fl

Red Blood Cell Count

<3.8 Low	3.8 - 5.8 Optimal	>5.8 High

5.11 10^{12}/L

Basophil Count

<0.01 Low	0.01 - 0.1 Optimal	>0.1 High

0.04 10^9/L

Eosinophil Count

<0.04	0.04 - 0.4	>0.4
Low	Optimal	High
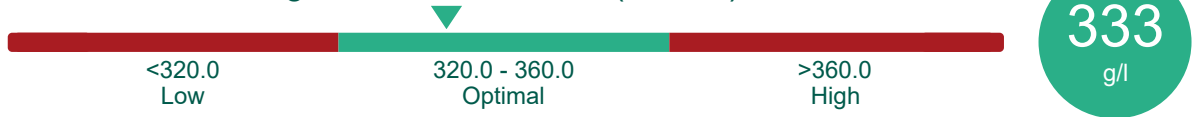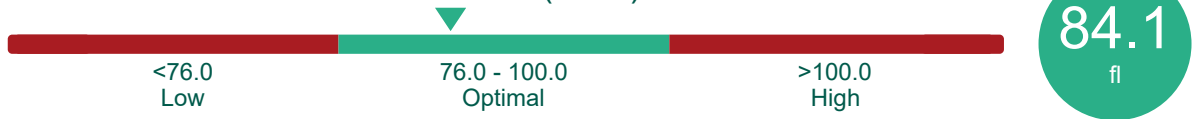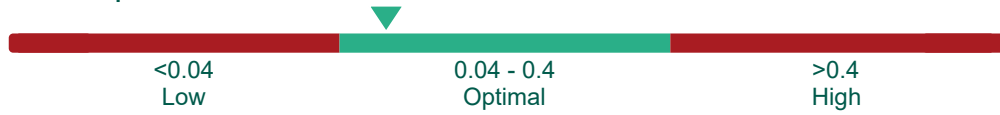
0.09 10⁹/L

Lymphocyte Count

<1.0	1.0 - 3.5	>3.5
Low	Optimal	High

2.03 10⁹/L

Monocyte Count

<0.2	0.2 - 0.8	>0.8
Low	Optimal	High

0.49 10⁹/L

Neutrophil Count

<2.0	2.0 - 7.5	>7.5
Low	Optimal	High

2.48 10⁹/L

White Blood Cell Count

<4.0	4.0 - 10.0	>10.0
Low	Optimal	High

5.13 10⁹/L

Platelet Count

<150	150 - 450	>450
Low	Optimal	High
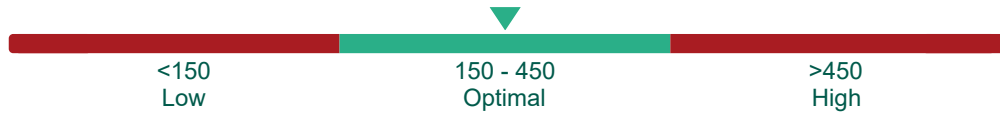
300 10⁹/L

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

<5.8	5.8 - 34.5	>34.5
Low	Optimal	High

17.1 µmol/l

Ferritin

<10	10 - 120	>120
Low	Optimal	High

37.3 µg/l

Total Iron Binding Capacity (TIBC)

<44.8	44.8 - 80.6	>80.6
Low	Optimal	High

73.3 µmol/l

Transferrin

<2.0	2.0 - 3.8	>3.8
Low	Optimal	High

3.05 g/l

Transferrin Saturation

<15	15 - 50	>50
Low	Optimal	High

23 %
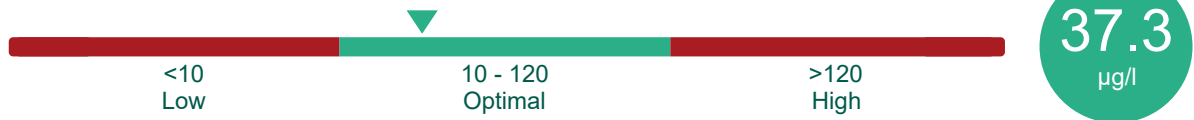
Heart Health

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

<5.0	≥5.0
Desirable	High

5.51 mmol/l

LDL Cholesterol

<3.0	≥3.0
Desirable	High

3.55 mmol/l

HDL Cholesterol

<1.55	≥1.55
Low	Desirable

1.39 mmol/l

Total Cholesterol / HDL Cholesterol Ratio

<5.0	≥5.0
Desirable	High

3.96 %

Triglycerides

<2.3	≥2.3
Desirable	High

0.87 mmol/l

Apolipoprotein A-I

<120.0	120.0 - 176.0	>176.0
Low	Optimal	High

134.7 mg/dl

Apolipoprotein B

<63	63 - 114	>114
Low	Optimal	High

105 mg/dl

Apolipoprotein B / A-I Ratio

≤0.90	0.91 - 1.50	>1.50
Optimal	Moderate Risk	High Risk

0.78 -

Apolipoprotein CII

<1.6 Low	1.6 - 4.2 Optimal	>4.2 High

4.65 mg/dl

Apolipoprotein CIII

<5.5 Low	5.5 - 9.5 Optimal	>9.5 High

9.4 mg/dl

Apolipoprotein E

<2.7 Low	2.7 - 4.5 Optimal	>4.5 High
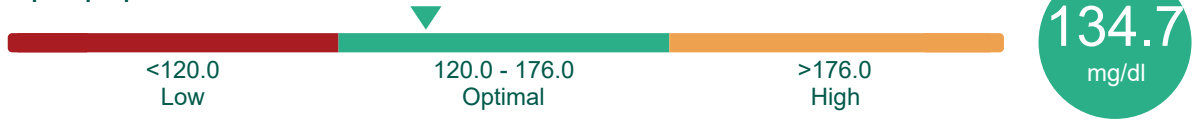
4.88 mg/dl

Small LDL Cholesterol

≤60.8 Optimal	>60.8 High

25.28 mg/dl

Lipoprotein (a)

<75.0 Optimal	≥75.0 High

177.6 nmol/l

High Sensitivity C-Reactive Protein (hsCRP)

<1 Low Risk	1 - 3 Average Risk	>3 High Risk

2.09 mg/l

Creatine Kinase

<25 Low	25 - 200 Optimal	>200 High

88 U/l

Cardiovascular Risk Score

<10 Desirable	10 - 20 Moderate Risk	>20 High Risk

1 %

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

<4.00	4.00 - 5.59	5.60 - 6.99	≥7.00
Low	Optimal	Pre-diabetic	High

4.27 mmol/l

HbA1c

<42.0	42.0 - 47.99	≥48.0
Optimal	Pre-diabetic	High

30.83 mmol/mol

Insulin

<17.8	17.8 - 173.0	>173.0
Low	Optimal	High

32.9 pmol/l

C-peptide

<1.1	1.1 - 4.4	>4.4
Low	Optimal	High

1.95 ng/ml
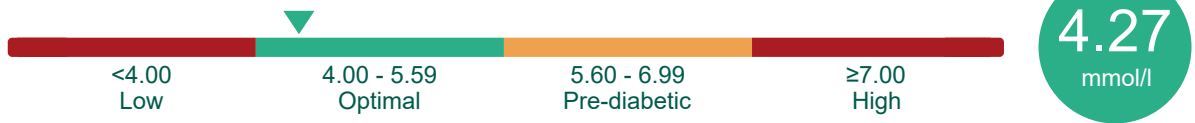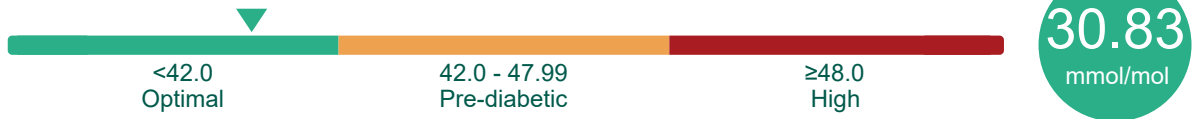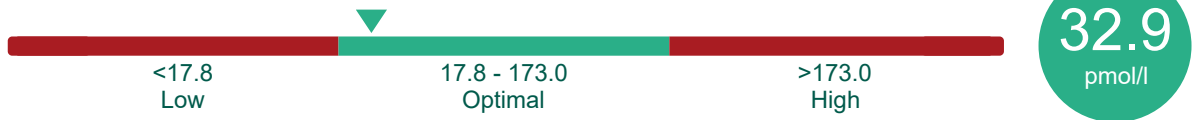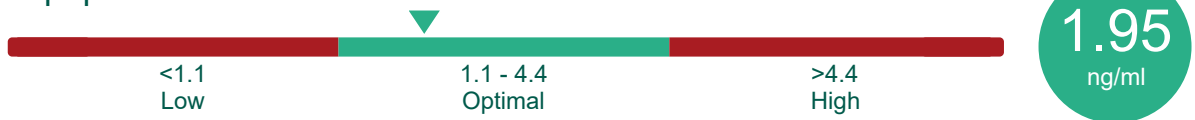
Metabolic Syndrome

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)

≤30 Optimal	>30 Risk

29.1 kg/m²

Waist Circumference

<80 Optimal	≥80 Risk

1 cm

Systolic Blood pressure

<130 Optimal	≥130 Risk

114 mmHg

Diastolic Blood pressure

<85 Optimal	≥85 Risk

78 mmHg

Adiponectin

<3.81 Low	3.81 - 14.09 Optimal	≥14.1 High

5.23 µg/ml

Glucose

<5.6 Optimal	≥5.6 Risk

4.27 mmol/l

HDL Cholesterol

<1.29 Risk	≥1.29 Optimal

1.39 mmol/l

Triglycerides
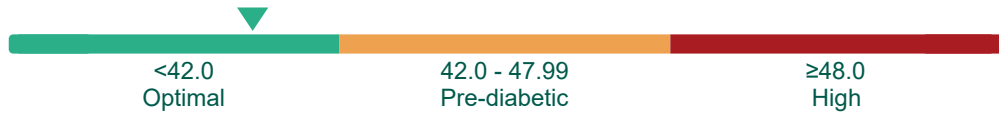
<1.7 Optimal	≥1.7 Risk

0.87 mmol/l

HbA1c

<42.0 Optimal	42.0 - 47.99 Pre-diabetic	≥48.0 High

30.83 mmol/mol

Insulin

<17.8 Low	17.8 - 173.0 Optimal	>173.0 High

32.9 pmol/l

C-peptide

<1.1 Low	1.1 - 4.4 Optimal	>4.4 High

1.95 ng/ml

Leptin

<15.4 Optimal	≥15.4 High

25.5 µg/l

Resistin

<2.85 Low	2.85 - 11.6 Optimal	>11.6 High

2.94 ng/ml

High Sensitivity C-Reactive Protein (hsCRP)

<1 Low Risk	1 - 3 Average Risk	>3 High Risk

2.09 mg/l

| Height	Weight
1.75 m	89 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
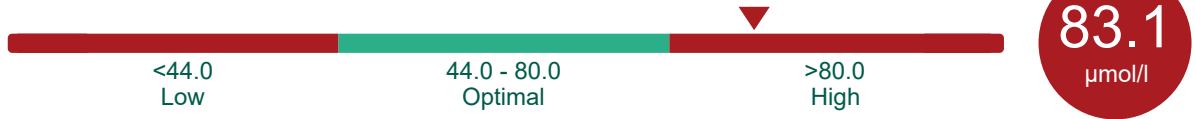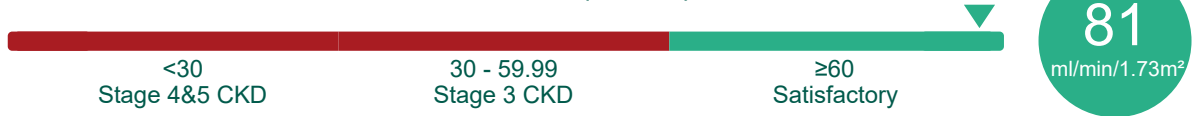
<44.0	44.0 - 80.0	>80.0
Low	Optimal	High

83.1 µmol/l

Estimated Glomerular Filtration Rate (eGFR)

<30	30 - 59.99	≥60
Stage 4&5 CKD	Stage 3 CKD	Satisfactory

81 ml/min/1.73m²

Cystatin C

<0.57	0.57 - 1.05	>1.05
Low	Optimal	High

0.85 mg/l

Calcium (adjusted)

<2.2	2.2 - 2.6	>2.6
Low	Optimal	High

2.24 mmol/l

Chloride

<95	95 - 108	>108
Low	Optimal	High

98 mmol/l

Magnesium

<0.7	0.7 - 1.1	>1.1
Low	Optimal	High

0.7 mmol/l

Phosphate

<0.8	0.8 - 1.5	>1.5
Low	Optimal	High

0.96 mmol/l

Potassium

<3.5	3.5 - 5.3	>5.3
Low	Optimal	High

3.94 mmol/l

Sodium

<133.0 Low	133.0 - 146.0 Optimal	>146.0 High

135.2 mmol/l

Urea

<2.5 Low	2.5 - 7.8 Optimal	>7.8 High

4.44 mmol/l

Uric Acid

| <140.0 Low	140.0 - 360.0 Optimal	>360.0 High
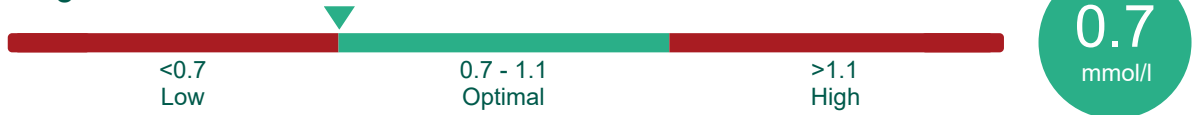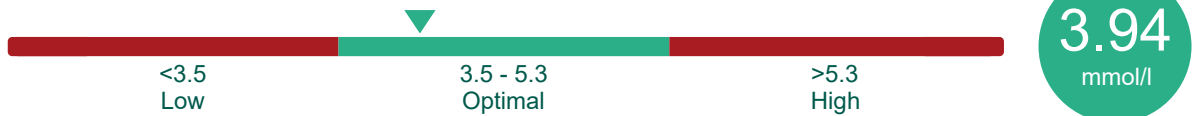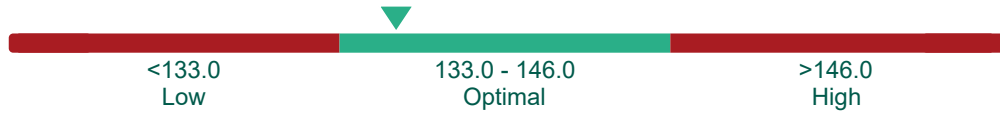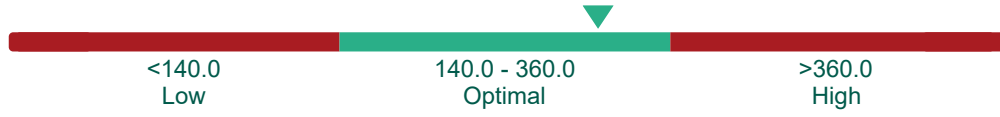
312 µmol/l

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)
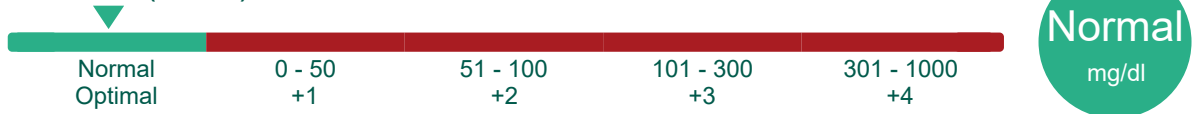
Negative Optimal	0 - 1 +1	2 - 3 +2	4 - 6 +3

Negative mg/dl

Glucose (Urine)

Normal Optimal	0 - 50 +1	51 - 100 +2	101 - 300 +3	301 - 1000 +4

Normal mg/dl

Ketones (Urine)

Negative Optimal	0 - 5 +	6 - 15 +1	16 - 50 +2	51 - 150 +3

Negative mg/dl

Nitrite (Urine)

Negative Optimal	Positive High

Negative mg/dl

pH (Urine)

<5.0 Low	5.0 - 7.5 Optimal	>7.5 High

7 pH

Protein (Urine)

Negative Optimal	0 - 25 +1	26 - 75 +2	76 - 150 +3	151 - 500 +4

Negative mg/dl

Red Blood Cells (Urine)

Negative Optimal	0 - 10 +1	11 - 25 +2	26 - 50 +3	51 - 250 +4

250 RBC/µl

Urobilinogen (Urine)

Normal Optimal	0 - 1 +1	2 - 4 +2	5 - 8 +3	9 - 12 +4

Normal mg/dl

White Blood Cells (Urine)

| Negative Optimal	0 - 25 +1	26 - 100 +2	101 - 500 +3

100 Leuk/µl

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)

<31	31 - 155	>155
Normal	Moderately raised	High

14.1 U/l

Alkaline Phosphatase (ALP)

<30	30 - 120	>120
Low	Optimal	High

75 U/l

Aspartate Aminotransferase (AST)

<32	32 - 155	>155
Normal	Moderately raised	High

<18.7 U/l

Gamma-Glutamyltransferase (GGT)

<8.0	8.0 - 42.0	>42.0
Low	Optimal	High

10.9 U/l

Total Bilirubin

<21.0	≥21.0
Optimal	High

8.07 µmol/l

Albumin

<35.0	35.0 - 50.0	>50.0
Low	Optimal	High

42.2 g/l

Ferritin

<10	10 - 120	>120
Low	Optimal	High

**37.3** µg/l

Pancreatic Health

The pancreas is a gland that produces hormones, pancreatic juice and digestive enzymes. Digestive enzymes (e.g. amylase) pass from the pancreas into the small intestine where they contribute to digestion. These enzymes help to further breakdown carbohydrates, proteins and fats in chyme (the partially digested mass of food). Pancreatic Health is useful for evaluating pancreatitis (inflammation of the pancreas) and other disorders that can affect the function of the pancreas.

Pancreatic Amylase

<13	13 - 53	>53
Low	Optimal	High

38 U/l

Lipase

| <5.0	5.0 - 65.0	>65.0
Low	Optimal	High

41.9 U/l

Digestive Health

The process of digestion occurs in the gastrointestinal tract, which encompasses the stomach and intestine. The stomach is responsible for the storage and breakdown of ingested food. Food and fluids enter the stomach via the oesophagus and mix with stomach acids and digestive enzymes to begin the process of digestion. Partially digested food then enters the intestine where digestion continues and absorption of nutrients occurs. A protective layer of mucus coats the lining of the stomach to prevent damage by digestive acids and enzymes. Anti-inflammatory drug use (such as aspirin) and infection with H. pylori bacteria can disrupt this protective layer and lead to gastritis (inflammation of the stomach) and stomach ulcers. Damage to the intestine impairs the ability of the body to digest food and absorb nutrients. Coeliac disease is an autoimmune disorder in which the body's immune system reacts to gluten in the diet causing inflammation of the intestine. Anti-tissue Transglutaminase (Anti-tTG) Antibody is a sensitive marker for coeliac disease; however, testing is only appropriate in individuals who continue to consume gluten. The Digestive Health panel contains markers that are useful for the evaluation of health issues such as heartburn, acid reflux and coeliac disease.

H. pylori

<0.90	0.90 - 1.10	>1.10
Negative	Indeterminate	Positive

0.57 U/ml

Anti-Tissue Transglutaminase Antibodies (Coeliac Disease)

<7.0	≥7.0
Optimal	High

**0.6** AU/mL

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)

<1.3	≥1.3
Low	Optimal

2 mmol/l

Albumin

<35.0	35.0 - 50.0	>50.0
Low	Optimal	High

42.2 g/l

Calcium (adjusted)

<2.2	2.2 - 2.6	>2.6
Low	Optimal	High

2.24 mmol/l

Magnesium

<0.7	0.7 - 1.1	>1.1
Low	Optimal	High

0.7 mmol/l

Iron

<5.8	5.8 - 34.5	>34.5
Low	Optimal	High

17.1 µmol/l

Folic acid

<3.8	3.8 - 26.8	>26.8
Low	Optimal	High

12.8 µg/l

Vitamin B12

<197	197 - 771	>771
Low	Optimal	High

452 ng/l

Vitamin D

<25	25 - 49.9	50 - 375	>375
Deficiency	Insufficiency	Sufficiency	Toxicity

**68** nmol/l

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

<25	25 - 200	>200
Low	Optimal	High

88 U/l

Uric Acid

<140.0	140.0 - 360.0	>360.0
Low	Optimal	High

312 µmol/l

Rheumatoid Factor (RF)

<20.0	≥20.0
Optimal	High

<6.72 kU/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)

<30	30 - 120	>120
Low	Optimal	High

75
U/l

Calcium (adjusted)

<2.2	2.2 - 2.6	>2.6
Low	Optimal	High

2.24
mmol/l

Phosphate

<0.8	0.8 - 1.5	>1.5
Low	Optimal	High

0.96
mmol/l

Vitamin D

<25	25 - 49.9	50 - 375	>375
Deficiency	Insufficiency	Sufficiency	Toxicity
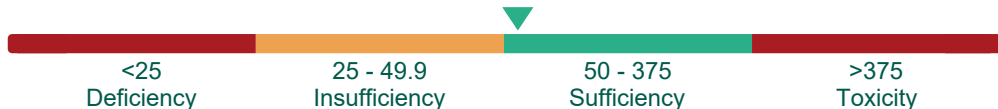
68
nmol/l

Parathyroid Hormone (PTH)

<1.6	1.6 - 6.9	>6.9
Low	Optimal	High

2.2
pmol/l

Allergy Evaluation

Allergies are increasingly common, with estimates suggesting that allergies will affect 25% of the population at some stage in life. An allergy is the immune system's response to a particular food or environmental substance (allergen). This response occurs in predisposed individuals and results in the production of a particular type of immune system protein (antibody) called immunoglobulin E (IgE). Subsequent exposure to the allergen generates IgE, which in turn causes the release of chemicals into the body. This chemical release causes the characteristic symptoms of allergies such as coughing, sneezing and itching. The Allergy Evaluation measures the total IgE level in the blood. However, generation of IgE is dependent on recent exposure to an allergen. The Allergy Evaluation may prove inconclusive in individuals who have limited their exposure to suspected allergens (e.g. removal of wheat from diet or avoidance of pets).

Immunoglobulin E (IgE)

≤100.0 Optimal	>100.0 High

148.5 kU/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)

≤5.0	>5.0
Optimal	High

2.09 mg/l

Rheumatoid Factor (RF)

<20.0	≥20.0
Optimal	High

<6.72 kU/l

Complement Component 3 (C3)

<0.8	0.8 - 1.6	>1.6
Low	Optimal	High

1.276 g/l

Complement Component 4 (C4)

<0.16	0.16 - 0.46	>0.46
Low	Optimal	High

0.291 g/l

Immunoglobulin A (IgA)

<0.9	0.9 - 4.5	>4.5
Low	Optimal	High

1.924 g/l

Immunoglobulin G (IgG)

<6.0	6.0 - 16.0	>16.0
Low	Optimal	High

14.71 g/l

Immunoglobulin M (IgM)

<0.7	0.7 - 2.8	>2.8
Low	Optimal	High

1.493 g/l

Antistreptolysin O (ASO)

<200.0	≥200.0
Optimal	High

683.5 IU/ml
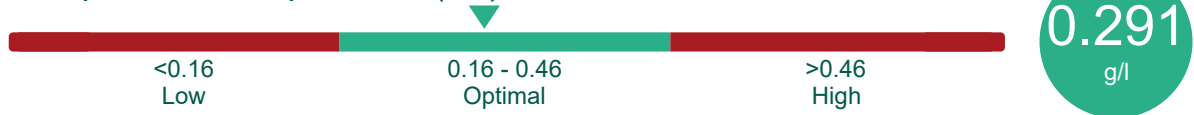
T Tumour Associated Markers

Tumour associated markers are substances that circulate in the bloodstream and can indicate the presence of cancer in the body. Tumour markers are not diagnostic of cancer but can be helpful when staging cancer, monitoring response to therapy or detecting cancer recurrence. The Tumour Associated Markers profile measures the levels of a range of markers that evidence suggests are associated with various cancer types. However, no marker is diagnostic of a particular cancer and elevated tumour marker levels can occur in many benign (non-cancerous) conditions and in healthy individuals with no evidence of disease. Equally, a negative result does not exclude the possibility of cancer being present, as not every individual with cancer will produces these substances. Therefore, test results indicating the function of other areas of the body in conjunction with any symptoms or relevant medical history are important to consider when interpreting tumour associated marker results.

Cancer Antigen 125 (CA 125)

| <35	≥35
Optimal	High

17
kU/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)

<0.35	0.35 - 5.5	>5.5
Low	Optimal	High

1.53 mIU/l

Free Thyroxine (FT4)

<11.9	11.9 - 21.6	>21.6
Low	Optimal	High

17.3 pmol/l

Free Tri-iodothyronine (FT3)

<3.1	3.1 - 6.8	>6.8
Low	Optimal	High

4.68 pmol/l

Anti-Thyroglobulin Antibody (Anti-Tg)

≤115.0	>115.0
Optimal	High

14 IU/ml

Anti-Thyroid Peroxidase Antibody (Anti-TPO)

≤34.0	>34.0
Optimal	High

14.2 kU/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.

Prolactin

<102 Low	102 - 496 Optimal	>496 High

152 mIU/l

Testosterone

<0.29 Low	0.29 - 1.67 Optimal	>1.67 High
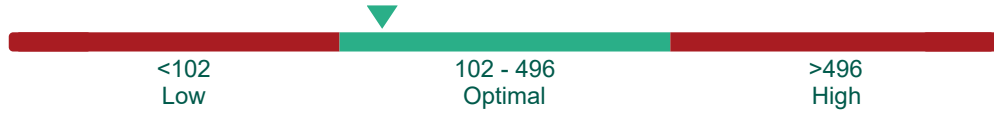
0.89 nmol/l

Sex Hormone Binding Globulin

<32.4 Low	32.4 - 128.0 Optimal	>128.0 High

55 nmol/l

Free Androgen Index

<0.3 Low	0.3 - 5.62 Optimal	>5.62 High

1.62 %

Follicle Stimulating Hormone

3.5 - 12.5 Follicular Phase
4.7 - 21.5 Mid Cycle
1.7 - 7.7 Luteal Phase
25.8 - 134.8 Post Menopausal

11.8 U/l

Oestradiol

45 - 854 Follicular Phase
151 - 1461 Midcycle
82 - 1251 Luteal Phase
<505 Post Menopausal

236 pmol/l

Luteinising Hormone

2.4 - 12.6 Follicular Phase
14 - 95.6 Mid Cycle
1 - 11.4 Luteal Phase
7.7 - 58.5 Post Menopausal

4.2 U/l

Progesterone

<0.616 Follicular Phase
0.175 - 13.2 Mid Cycle
13.1 - 46.3 Luteal Phase
<0.401 Post Menopausal

0.37 nmol/l

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	**1.75**	m	N/A
Weight	**89**	kg	N/A
Body Mass Index (BMI)	**29.1**	kg/m²	<18.5 Underweight 18.5 - 24.9 Optimal 25 - 29.9 Overweight ≥30 Obese
Waist Circumference	**1**	cm	<81 Optimal
Hip Circumference	**1**	cm	N/A
Waist / Hip Ratio	**1**	Ratio	<0.8 Low risk 0.8 - 0.85 Moderate Risk >0.85 High risk
Pulse	**65**	BPM	60 - 100 Optimal
Systolic Blood pressure	**114**	mmHg	90 - 119.9 Optimal
Diastolic Blood pressure	**78**	mmHg	59.9 - 79.9 Optimal
Full Blood Count			
Haemoglobin	**143**	g/l	115.0 - 165.0 Optimal
Haematocrit	**43**	%	37.0 - 47.0 Optimal
Mean Cell Haemoglobin (MCH)	**28**	pg	27.0 - 32.0 Optimal
Mean Cell Haemoglobin Concentration (MCHC)	**333**	g/l	320.0 - 360.0 Optimal
Red Blood Cell Mean Cell Volume (MCV)	**84.1**	fl	76.0 - 100.0 Optimal
Red Blood Cell Count	**5.11**	10¹²/L	3.8 - 5.8 Optimal
Basophil Count	**0.04**	10⁹/L	0.01 - 0.1 Optimal
Eosinophil Count	**0.09**	10⁹/L	0.04 - 0.4 Optimal
Lymphocyte Count	**2.03**	10⁹/L	1.0 - 3.5 Optimal
Monocyte Count	**0.49**	10⁹/L	0.2 - 0.8 Optimal
Neutrophil Count	**2.48**	10⁹/L	2.0 - 7.5 Optimal
White Blood Cell Count	**5.13**	10⁹/L	4.0 - 10.0 Optimal
Platelet Count	**300**	10⁹/L	150 - 450 Optimal
Iron Status			
Iron	**17.1**	µmol/l	5.8 - 34.5 Optimal

Test	Result	Units	Reference Range
Iron Status			
Ferritin	**37.3**	µg/l	10 - 120 Optimal
Total Iron Binding Capacity (TIBC)	**73.3**	µmol/l	44.8 - 80.6 Optimal
Transferrin	**3.05**	g/l	2.0 - 3.8 Optimal
Transferrin Saturation	**23**	%	15 - 50 Optimal
Heart Health			
Total Cholesterol	**5.51**	mmol/l	<5.0 Desirable ≥5.0 High
LDL Cholesterol	**3.55**	mmol/l	<3.0 Desirable ≥3.0 High
HDL Cholesterol	**1.39**	mmol/l	<1.55 Low ≥1.55 Desirable
Total Cholesterol / HDL Cholesterol Ratio	**3.96**	%	<5.0 Desirable
Triglycerides	**0.87**	mmol/l	<2.3 Desirable
Apolipoprotein A-I	**134.7**	mg/dl	120.0 - 176.0 Optimal
Apolipoprotein B	**105**	mg/dl	63 - 114 Optimal
Apolipoprotein B / A-I Ratio	**0.78**	-	≤0.90 Optimal
Apolipoprotein CII	**4.65**	mg/dl	<1.6 Low 1.6 - 4.2 Optimal >4.2 High
Apolipoprotein CIII	**9.4**	mg/dl	5.5 - 9.5 Optimal
Apolipoprotein E	**4.88**	mg/dl	<2.7 Low 2.7 - 4.5 Optimal >4.5 High
Small LDL Cholesterol	**25.28**	mg/dl	≤60.8 Optimal
Lipoprotein (a)	**177.6**	nmol/l	<75.0 Optimal ≥75.0 High
High Sensitivity C-Reactive Protein (hsCRP)	**2.09**	mg/l	<1 Low Risk 1 - 3 Average Risk >3 High Risk
Creatine Kinase	**88**	U/l	25 - 200 Optimal
Cardiovascular Risk Score	**1**	%	<10 Desirable
Diabetes Health			
Glucose	**4.27**	mmol/l	4.00 - 5.59 Optimal
HbA1c	**30.83**	mmol/mol	<42.0 Optimal
Insulin	**32.9**	pmol/l	17.8 - 173.0 Optimal

Test	Result	Units	Reference Range
Diabetes Health			
C-peptide	**1.95**	ng/ml	1.1 - 4.4 Optimal
Metabolic Syndrome			
Height	**1.75**	m	N/A
Weight	**89**	kg	N/A
Body Mass Index (BMI)	**29.1**	kg/m²	≤30 Optimal
Waist Circumference	**1**	cm	<80 Optimal
Systolic Blood pressure	**114**	mmHg	<130 Optimal
Diastolic Blood pressure	**78**	mmHg	<85 Optimal
Adiponectin	**5.23**	µg/ml	3.81 - 14.09 Optimal
Glucose	**4.27**	mmol/l	<5.6 Optimal
HDL Cholesterol	**1.39**	mmol/l	≥1.29 Optimal
Triglycerides	**0.87**	mmol/l	<1.7 Optimal
HbA1c	**30.83**	mmol/mol	<42.0 Optimal
Insulin	**32.9**	pmol/l	17.8 - 173.0 Optimal
C-peptide	**1.95**	ng/ml	1.1 - 4.4 Optimal
Leptin	**25.5**	µg/l	<15.4 Optimal ≥15.4 High
Resistin	**2.94**	ng/ml	2.85 - 11.6 Optimal
High Sensitivity C-Reactive Protein (hsCRP)	**2.09**	mg/l	<1 Low Risk 1 - 3 Average Risk >3 High Risk
Kidney Health			
Creatinine	**83.1**	µmol/l	<44.0 Low 44.0 - 80.0 Optimal >80.0 High
Estimated Glomerular Filtration Rate (eGFR)	**81**	ml/min/1.73m²	≥60 Satisfactory
Cystatin C	**0.85**	mg/l	0.57 - 1.05 Optimal
Calcium (adjusted)	**2.24**	mmol/l	2.2 - 2.6 Optimal
Chloride	**98**	mmol/l	95 - 108 Optimal
Magnesium	**0.7**	mmol/l	0.7 - 1.1 Optimal
Phosphate	**0.96**	mmol/l	0.8 - 1.5 Optimal
Potassium	**3.94**	mmol/l	3.5 - 5.3 Optimal
Sodium	**135.2**	mmol/l	133.0 - 146.0 Optimal

Test	Result	Units	Reference Range
Kidney Health			
Urea	**4.44**	mmol/l	2.5 - 7.8 Optimal
Uric Acid	**312**	µmol/l	140.0 - 360.0 Optimal
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)	**7**	pH	5.0 - 7.5 Optimal
Protein (Urine)	**Negative**	mg/dl	Negative Optimal
Red Blood Cells (Urine)	**250**	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)	**100**	Leuk/µl	Negative Optimal 0 - 25 +1 26 - 100 +2 101 - 500 +3
Liver Health			
Alanine Aminotransferase (ALT)	**14.1**	U/l	<31 Normal
Alkaline Phosphatase (ALP)	**75**	U/l	30 - 120 Optimal
Aspartate Aminotransferase (AST)	**<18.7**	U/l	<32 Normal
Gamma-Glutamyltransferase (GGT)	**10.9**	U/l	8.0 - 42.0 Optimal
Total Bilirubin	**8.07**	µmol/l	<21.0 Optimal
Albumin	**42.2**	g/l	35.0 - 50.0 Optimal
Ferritin	**37.3**	µg/l	10 - 120 Optimal
Pancreatic Health			
Pancreatic Amylase	**38**	U/l	13 - 53 Optimal
Lipase	**41.9**	U/l	5.0 - 65.0 Optimal
Digestive Health			
H. pylori	**0.57**	U/ml	<0.90 Negative
Anti-Tissue Transglutaminase Antibodies (Coeliac Disease)	**0.6**	AU/mL	<7.0 Optimal

Test	Result	Units	Reference Range
Nutritional Health			
Total Antioxidant Status (TAS)	**2**	mmol/l	≥1.3 Optimal
Albumin	**42.2**	g/l	35.0 - 50.0 Optimal
Calcium (adjusted)	**2.24**	mmol/l	2.2 - 2.6 Optimal
Magnesium	**0.7**	mmol/l	0.7 - 1.1 Optimal
Iron	**17.1**	µmol/l	5.8 - 34.5 Optimal
Folic acid	**12.8**	µg/l	3.8 - 26.8 Optimal
Vitamin B12	**452**	ng/l	197 - 771 Optimal
Vitamin D	**68**	nmol/l	50 - 375 Sufficiency
Muscle & Joint Health			
Creatine Kinase	**88**	U/l	25 - 200 Optimal
Uric Acid	**312**	µmol/l	140.0 - 360.0 Optimal
Rheumatoid Factor (RF)	**<6.72**	kU/l	<20.0 Optimal
Bone Health			
Alkaline Phosphatase (ALP)	**75**	U/l	30 - 120 Optimal
Calcium (adjusted)	**2.24**	mmol/l	2.2 - 2.6 Optimal
Phosphate	**0.96**	mmol/l	0.8 - 1.5 Optimal
Vitamin D	**68**	nmol/l	50 - 375 Sufficiency
Parathyroid Hormone (PTH)	**2.2**	pmol/l	1.6 - 6.9 Optimal
Allergy Evaluation			
Immunoglobulin E (IgE)	**148.5**	kU/l	≤100.0 Optimal >100.0 High
Infection & Inflammation			
C-Reactive Protein (CRP)	**2.09**	mg/l	≤5.0 Optimal
Rheumatoid Factor (RF)	**<6.72**	kU/l	<20.0 Optimal
Complement Component 3 (C3)	**1.276**	g/l	0.8 - 1.6 Optimal
Complement Component 4 (C4)	**0.291**	g/l	0.16 - 0.46 Optimal
Immunoglobulin A (IgA)	**1.924**	g/l	0.9 - 4.5 Optimal
Immunoglobulin G (IgG)	**14.71**	g/l	6.0 - 16.0 Optimal
Immunoglobulin M (IgM)	**1.493**	g/l	0.7 - 2.8 Optimal
Antistreptolysin O (ASO)	**683.5**	IU/ml	<200.0 Optimal ≥200.0 High
Tumour Associated Markers			

Test	Result	Units	Reference Range
Tumour Associated Markers			
Cancer Antigen 125 (CA 125)	**17**	kU/l	<35 Optimal
Thyroid Health			
Thyroid Stimulating Hormone (TSH)	**1.53**	mIU/l	0.35 - 5.5 Optimal
Free Thyroxine (FT4)	**17.3**	pmol/l	11.9 - 21.6 Optimal
Free Tri-iodothyronine (FT3)	**4.68**	pmol/l	3.1 - 6.8 Optimal
Anti-Thyroglobulin Antibody (Anti-Tg)	**14**	IU/ml	≤115.0 Optimal
Anti-Thyroid Peroxidase Antibody (Anti-TPO)	**14.2**	kU/l	≤34.0 Optimal
Hormonal Health			
Follicle Stimulating Hormone	**11.8**	U/l	3.5 - 12.5 Follicular Phase 4.7 - 21.5 Mid Cycle 1.7 - 7.7 Luteal Phase 25.8 - 134.8 Post Menopausal
Oestradiol	**236**	pmol/l	45 - 854 Follicular Phase 151 - 1461 Midcycle 82 - 1251 Luteal Phase <505 Post Menopausal
Luteinising Hormone	**4.2**	U/l	2.4 - 12.6 Follicular Phase 14 - 95.6 Mid Cycle 1 - 11.4 Luteal Phase 7.7 - 58.5 Post Menopausal
Progesterone	**0.37**	nmol/l	<0.616 Follicular Phase 0.175 - 13.2 Mid Cycle 13.1 - 46.3 Luteal Phase <0.401 Post Menopausal
Prolactin	**152**	mIU/l	102 - 496 Optimal
Testosterone	**0.89**	nmol/l	0.29 - 1.67 Optimal
Sex Hormone Binding Globulin	**55**	nmol/l	32.4 - 128.0 Optimal
Free Androgen Index	**1.62**	%	0.3 - 5.62 Optimal