BloodWorks Ltd
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Thank you for attending our **BloodWorks** clinic

Your report has been **generated by the team at BloodWorks Ltd** with support from subcontractors Eval Bloodwork Analysis and Randox Laboratories.

BloodWorks Ltd is a small **independent, private and not-for-profit** LERO (Lived Experience Recovery Organisation). We ran our **first blood clinic almost 20 years ago** and have been contributing to research that has culminated in national and international peer-reviewed published articles around hormone related health since 2009.

Our mission is simple - we want to offer easily accessible, private and confidential, health and fitness screening to reduce harms from Steroids and other Image and Performance Enhancing Drugs; Giving **you** the Knowledge to make the informed decision that **you** want to.

Our **lab and interpretation partner E-Val Blood Analysis**, health and fitness industry experts for over 15 years, have been providing blood evaluation for over 6 years. Analysis reports are written by a colleague with a Paramedic Science background (20 years of experience with additional advanced practice modules) and there is additional clinical governance oversight from a GMC registered GP and a Dr in Nutrition.

Kind regards

Joseph Kean
Director. BloodWorks Ltd 16396983.

L3 Certificate in Personal Training: Client Lifestyle and Fitness Assessment, Nutrition and Weight Management, Advanced Exercise and Fitness Knowledge.

Anabolic Steroids – Harm Reduction & Health Information

What are anabolic steroids?

Anabolic-androgenic steroids (often called steroids) are synthetic versions of testosterone, a natural hormone in the body. Some people use them to increase muscle size, strength, or recovery. Steroids can be taken as injections, tablets, gels, or creams.

What do steroids do?

Steroids can increase muscle growth and strength, speed up recovery after training, and affect energy, confidence, or motivation. They also affect the whole body, including hormones, heart, liver, kidneys, and mood.

What are the risks?

Physical risks include heart problems (high blood pressure, heart attack, stroke), liver and kidney stress, cholesterol changes, reduced natural testosterone production, fertility issues, acne, and hair changes.

Mental health risks can include mood swings, anxiety, irritability, aggression, and low mood or depression when stopping.

Injecting risks include abscesses, infections, scarring, and blood-borne viruses if equipment is shared.

How do people keep safer if using?

The safest option is not to use steroids. If someone does choose to use, harm reduction steps can reduce risk.

Avoid mixing steroids with other drugs or alcohol, do not increase doses to chase results, take breaks between cycles, and seek medical help if unwell.

The importance of health screening

Regular health screening can identify problems early, often before symptoms appear.

Health screening includes checks of onsite measures (blood pressure, height weigh, oxygen saturation etc) and venous blood screening covers: blood cells, liver and kidney function, cholesterol and diabetes markers, hormone levels, electrolytes, and more. Having a baseline before use and regular follow-up testing can help prevent serious long-term harm.

Safer injecting

Always use new, sterile needles and syringes. Never share injecting equipment including needles, barrels, or vials. Clean preparation surfaces, rotate injection sites, clean skin before injecting, and dispose of used equipment in sharps bins.

Free, confidential needle and syringe programmes can provide equipment and advice.

Name: Fakey McFake **DOB:** 01.01.1970

Tell me about your general health: Any existing health conditions or medical issues? Anything you're worried about in particular? What level and what type of exercise are you undertaking?

Not bad reported health, trains 4 days a week, mostly weights and resistance. Upper end of physically mobile during the day. Prior diabetic, now in remission. Significant weight loss over prolonged period of time.

Tell me about your nutritional intake: What food do you eat? How much and how often? How much water / fluid do you drink? Any non-prescribed medication including testosterone / weight loss?

High protein diet, good hydration, enhanced TRT of 180mg Test Cyp weekly split into 3 doses, 1 mg Arimidex twice weekly, Retatrutide (unsure of mg but has 8 clicks on the pen twice weekly). Reports being "new to all this" and has taken advice from online forums.

Acknowledges that he does not enough fruit and or vegetables and has very recently started cutting out carbs.

Tell me about your psychological well-being: How is your mental health?

Good, reports that he has felt amazing since started TRT. Prior poor mental health and suicidal ideation. Discussed reasons why use had started in the first place and he advises that he had clinically low test levels but that his GP wasn't interested.

Other:

Injecting technique discussed and NSP provided. Discussed pro's and con's of IM Vs SubCut and due to frequency of injecting recommended trying SubCut. Equipment provided for both options.

Onsite measures			
Measure	Your reading	Recommended range	Evidence source
Blood Pressure	145/85	110/70	NICE NG136: Hypertension in adults
Resting Heart Rate	65	60 – 100	BHF: Your Heart Rate
Oxygen Saturation	98	95 – 100	BTS 2017 oxygen guideline
Weight	93	78 84	This is your personal optimum range
Height	170		
Grip strength	**L.** 48.2 **R.** 49		BIS test number: 1234

The next few pages outline your **Bio Impedance Spectroscopy (BIS)** measures.

BIS is used to assess body composition, fluid distribution and cellular health in the body by measuring how tissues respond to a small, undetectable, electrical current.

At low frequencies, current can't pass through cell membranes easily, so it travels predominantly through ExtraCellular Water (ECW). At higher frequencies, current penetrates cell membranes, so it travels through both IntraCellular Water (ICW) and ECW.

This is why Bio Impedance Spectroscopy is different to Bio Impedance Analysis (BIA) and significantly more advanced; BIA (standard handheld or scales technology) use one, or at the most, two frequencies and usually at or around 50kHz – whereas our BIS (BodyStat Mulitscan 5000) uses 256 different frequencies between 5kHz and 1000kHz.

Body Composition

Goes beyond BMI to show what the body is really made of, identifies health risks earlier and more precisely, tracks meaningful changes over time, helps guide nutrition, training, and clinical decisions.

Measure	Your reading	Your personal optimum range
Fat	25.5	11 16
Fat %	27.4	14 20
Lean	67.5	65 70
Lean %	72.6	80 86
Fat Free Mass Index	23.4	22 24

Fat-Free Mass Index (FFMI) is a body-composition metric that estimates how much lean tissue (muscle, bone, organs, water) you have relative to your height, after removing fat mass. It's often described as a "muscle-adjusted BMI"

Skel. Muscle Mass	33.7	

Skeletal Muscle Mass (SMM) is the weight of all the voluntary, contractile muscles attached to your skeleton – the muscles you consciously use to move, lift, stabilise, and train.

Hydration and Fluid Management

Hydration underpins every body function, supporting organ function, is essential for nutrient transport, temperature control, joint lubrication, and cellular function. Proper hydration improves wound healing, exercise recovery, immune function, and resilience against illness.

Measure	Your reading	Your optimum range
Total Body Water %	49.9	55 – 65
Extra Cellular Water	19.4	
Extra Cellular Water %	20.8	26

ECW (Extracellular Water): Primarily reflects short-term fluid balance and day-to-day hydration changes.

Intra Cellular Water	27	
Intra Cellular Water %	29	34

ICW (Intracellular Water): Reflects longer-term cellular hydration and muscle tissue quality.

Overhydration Index	-0.2	-1 to -2 indicates underhydration -1 to +1 optimum (the closer to 0 the better) +1 to +2 potential fluid overload

OHY is a derived screening indicator and should always be interpreted alongside ECW, ICW, muscle mass, and clinical context. In athletic individuals, elevated OHY values may reflect normal physiological adaptation rather than true over-hydration.

Nutritional health

The Nutrition Index ranges used here are based on real-world data collected using the MultiScan 5000 by BloodWorks, rather than generic reference values. Over the past year, results from nearly 100 assessments were reviewed to understand how this marker behaves in practice across a mixed population, including healthy, athletic, and clinical individuals.

Measure	Your reading	Reference range
Nutrition Index	0.42	≥ 0.50 Excellent nutritional status 0.45 – 0.49 Optimal / well-supported 0.40 – 0.44 Adequate / normal range 0.35 – 0.39 Borderline nutritional stress 0.30 – 0.34 Poor nutritional status < 0.30 Severe nutritional compromise

The Nutrition Index provides an indication of how well the body's cells appear to be supported by energy and nutrients. On this system, values sit within a relatively narrow range. Higher values within that range suggest better cellular nourishment and recovery capacity, while lower values may reflect under-nutrition, illness, inflammation, or increased physiological stress.

Basal Metabolic Rate	1953	

Basal Metabolic Rate (BMR) estimates the amount of energy your body needs at rest to maintain essential functions such as breathing, circulation, and temperature regulation. It reflects the minimum number of calories required to sustain basic physiological processes.

Body Mass Index	32.2	

Body Mass Index (BMI) is a simple and limited screening tool that compares body weight to height. While it is useful for assessing population-level trends, it does not distinguish between fat mass and muscle mass, nor does it account for body composition, hydration, or physical fitness. As a result, muscular or athletic individuals may be classified as overweight, while people with low muscle mass but higher body fat may appear to be within a "healthy" range. BMI should therefore not be used as a standalone indicator of health.

Cellular Health

Cells are the foundation of health. When cells function well, the body has more energy, repairs itself better, and copes with stress more effectively. Supporting cell health helps improve recovery, performance, and overall wellbeing.

Measure	Your reading	
Cellular Membrane Capacitance	3520.4	< 300 Suggestive of illness or severe cellular stress 300 – 1500 Common population range 1500 – 3000 Optimal cellular function 3000 – 4000 Excellent cellular integrity > 4000 Exceptional cellular integrity
This measures the health of your cell membranes by assessing how efficiently they store and transmit electrical signals. It gives an indication of cellular integrity and tissue quality. Higher values generally reflect healthier cells, while lower values may indicate cellular stress or reduced function.		
Prediction Marker	0.737	0.540 – 0.630 Extremely Healthy 0.631 – 0.738 Normal 0.739 – 0.801 Caution 0.802 – 0.873 Significant cellular stress 0.874 – 1.000 Severe cellular stress
Higher Prediction Marker values are more commonly seen in individuals with existing health conditions or acute physiological stress. Elevated scores indicate reduced cellular balance and resilience, rather than diagnosing a specific illness.		
Phase Angle	7.42	7.9 – 12.0 Outstanding 6.9 – 7.9 Very good 6.4 – 6.9 Good 5.4 – 6.4 Average 4.4 – 5.4 Below average 3.5 – 4.4 Poor 0.0 – 3.5 Very poor
Phase Angle gives an indication of how healthy and resilient your body's cells are. Higher values suggest stronger, well-functioning cells, while lower values can be associated with stress, illness, or poor nutritional status.		

We do not diagnose or treat medical conditions. This report is provided to support your understanding of your health. Any actions taken remain your choice. Recommendations are based on professional experience and interpretation of the assessment results.

Knowledge is Strength

Eval Summary:

Haemoglobin is elevated and as a results **Haematocrit has elevated**. This indicates that your blood has thickened, this can be improved by having a blood let. For this level of elevation, 2 blood lets, 2 – 3 weeks apart would be needed.

Mean Cell Haemoglobin (MCH) is elevated, this is due to Haemoglobin levels being elevated in comparison to Red Blood Cells. The more Haemoglobin there is, the more concentrated it will appear in the cell. the lower half of the reference range.

Mean Cell Haemoglobin Concentration (MCHC) is reduced, this means there is less of the overall volume of the Red Blood Cell being occupied by Haemoglobin. This is due to MCV being towards the top of the range resulting in cell size being slightly larger in comparison to Haemoglobin levels. The reduction is minor and not concerning.

Mean Cell Volume (MCV) is mildly elevated indicating Red blood cells are larger than normal.

HDL is reduced, recommend increasing saturated fat intake and supplementing with 500mg citrus bergamot and 2g krill oil.

Folic Acid is within range but towards the lower end of the range. Recommend increasing intake of leafy greens and supplementing with Methyl Folate.

Vitamin B12 is elevated, this is common with over supplementation and is not concerning.

Vitamin D is within range but you would benefit from improving this, recommend supplementing with high strength vitamin D.

Anti-Thyroid Peroxidase Antibody (Anti-TPO) is elevated, this marker is prone to false elevation. This is not concerning as the remainder of your thyroid markers are within normal range, recommend re testing this in 3 months time.

FSH and LH are reduced due to suppression from AAS use. This is an expected finding and not concerning.

Testosterone is elevated due to AAS use and as a result, Free Testosterone is elevated. This is not concerning and an expected finding. However it is on the **high** side **for TRT and would recommend reducing dose to bring levels into natural ranges**, this is what is driving your haemoglobin up and thickening your blood, even though you have recently had a blood let. Also snoring / sleep apnoea smoking / vaping will also drive blood thickness.

BloodWorks Commentary:

Your **systolic blood pressure** is fractionally over the recommended range and while we often expect this to be raised while in clinic you should monitor this at home and if it remains high then you should speak to a healthcare professional.

Your **Body Composition** is not within optimum range but is indicative of general male populations of your age. Continuing your weight loss will improve this.

You are **underhydrated** across the board and should increase your fluid intake. You should be consuming a minimum of 2 litres a day. We recommend returning in 6 weeks for a repeat (free) BIS scan to monitor progression.

Your **Nutrition** is in normal range but can be improved. You should include more roughage in your dietary intake and should not fully exclude carbs from your diet but opt for whole seeded brown versions.

Your **Cellular Health** is good and there are no concerns in this area.

We agree with the Eval summary above in relation to your **lab results**. In relation to your Haematocrit (HCT), the guidance is that between 0.52 and 0.56 if you are symptomatic that a therapeutic venesection should be considered; over 0.56 and this should be considered regardless of symptoms due to the increased risks.

You should speak to a healthcare professional about your HCT. Increasing your fluid intake will help to improve this also.

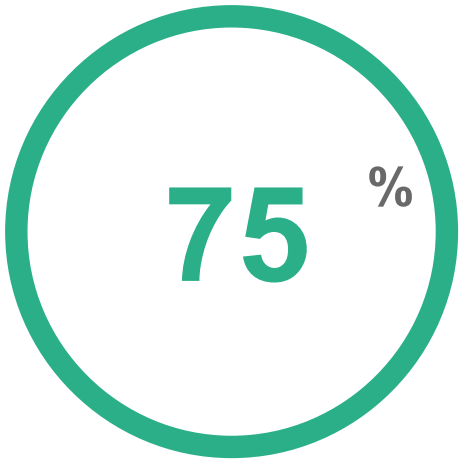
Recommendations are for repeat bloods in 3 to 4 months and repeat BIS scan in 6 weeks.

Order	SCT001-00788157
Name	Fakey McFake
Date of Birth	01-Jan-1970
Fasted For	Fasted Sample
Date of Sample Collection	21-Nov-2025
Date of Report	24-Nov-2025
Programme	AFER_M

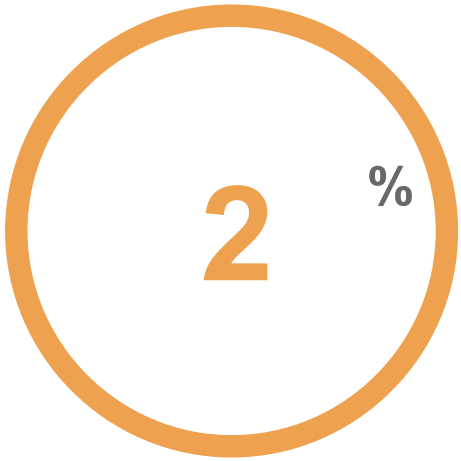
CONTENTS

Health Status

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

Full Blood Count

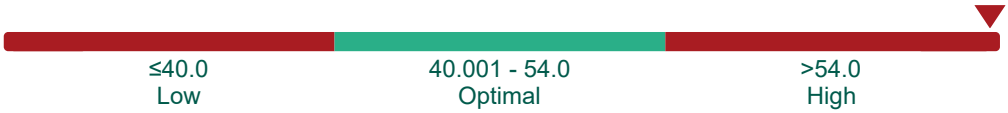
Haemoglobin

Haemoglobin is an iron-containing protein found in red blood cells, which transports oxygen around the body. A lack of haemoglobin can indicate anaemia, where the body produces too few red blood cells and oxygen availability to the body is reduced. This can lead to excessive tiredness and weakness. Higher than normal haemoglobin may indicate that the body is producing too many red blood cells. In addition, smoking and dehydration can cause haemoglobin levels to rise.

184 g/l

Haematocrit

Haematocrit measurement indicates how much of your blood volume is occupied by red blood cells. Therefore, a low haematocrit value indicates fewer red blood cells are present, as occurs with anaemia (where a lack of red blood cells leads to tiredness and weakness). Higher than normal haematocrit can occur when the body produces too many red blood cells; however, the most common cause of an increase in haematocrit is dehydration.



58.6 %

Mean Cell Haemoglobin (MCH)

Mean Cell Haemoglobin (MCH) is a measure of the average amount (weight) of haemoglobin within a red blood cell. Large red blood cells generally have more haemoglobin (greater MCH) and small red blood cells generally have less haemoglobin (lower MCH). A decreased MCH can occur with iron-deficiency anaemia, which is associated with production of smaller than normal red blood cells. An increased MCH can occur with anaemia due to vitamin B12 or folic acid deficiency, which is associated with production of larger than normal red blood cells.

32.1 pg

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).

314
g/l

Red Blood Cell Mean Cell Volume (MCV)

Red Blood Cell Mean Cell Volume (MCV) is a measure of the average size of a single red blood cell (RBC), which is useful for determining whether anaemia is microcytic (characterised by small RBCs), normocytic (normal sized RBCs) or macrocytic (large RBCs). A common cause of macrocytic anaemia (increased MCV) is folic acid or vitamin B12 deficiency. Microcytic anaemia (decreased MCV) may indicate iron-deficiency anaemia or thalassaemia (a group of hereditary blood disorders that impair haemoglobin production).

102.1
fl

Basophil Count

Basophil Count refers to the number of basophils per volume of blood. Basophils are white blood cells that are involved in response to infections and allergic stimuli. Basophil levels may be elevated in conditions involving inflammation and allergic reactions. A high basophil count may also be associated with an alteration in bone marrow function such as leukaemia. A low basophil count may be associated with an acute allergic reaction, hyperthyroidism (an overactive thyroid gland) and stress.

0.01
10^9/L

Heart Health

HDL Cholesterol

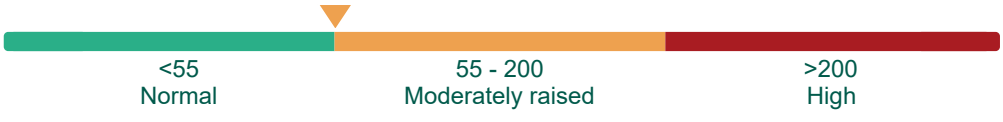
HDL Cholesterol describes cholesterol that is bound to high-density lipoprotein (HDL). Lipoproteins are responsible for transporting cholesterol in the blood. HDL cholesterol is ‘protective’ as it removes cholesterol from the peripheral tissues and transports it back to the liver for removal from the 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.

1.04
mmol/l

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 releases 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.



55 U/l

Nutritional Health

Vitamin B12

Vitamin B12 along with folic acid is important for the normal development of red blood cells (RBCs). Vitamin B12 is also vital for the normal functioning of nerves. Decreased vitamin B12 levels are associated with megaloblastic anaemia (anaemia due to vitamin B12 or folic acid deficiency) and pernicious anaemia (anaemia due to impaired absorption of vitamin B12 by the intestine). Low vitamin B12 levels may be due to decreased dietary intake, malabsorption disorders (conditions that affect the ability of the intestine to absorb nutrients), gastritis (inflammation of the stomach) or liver disorders that affect vitamin B12 storage. Liver injury, myeloproliferative disorders (a group of conditions in which blood cells grow abnormally) and vitamin C, vitamin A or oestrogen supplementation may cause vitamin B12 levels to rise.

871 ng/l

Thyroid Health

Anti-Thyroid Peroxidase Antibody (Anti-TPO)

Anti-Thyroid Peroxidase Antibody (Anti-TPO) is a protein produced by the immune system that attacks thyroid peroxidase (an enzyme found in the thyroid gland). Elevated anti-TPO levels are associated with Hashimoto's thyroiditis, an autoimmune condition that causes hypothyroidism (an underactive thyroid gland) and Graves' disease, an autoimmune condition that causes hyperthyroidism (an overactive thyroid gland).

40.2 kU/l

Hormonal Health

Follicle Stimulating Hormone

Follicle stimulating hormone (FSH) is produced by the pituitary gland in the brain. FSH promotes testicular growth and production of mature sperm, and it is normal for FSH levels to rise with age, as testicular function declines. However, high FSH may reflect testicular dysfunction and can be associated with erectile dysfunction, loss of libido and low energy levels. In addition, benign tumours of the pituitary gland can secrete FSH; however, such tumours are rare. A low FSH level can occur with stress, malnutrition, dysfunction of the pituitary gland and the use of certain medications.

<0.30 U/l

Luteinising Hormone

Luteinising hormone (LH) is a key reproductive hormone produced by the pituitary gland in the brain. In males, LH helps to stimulate testosterone production. LH and FSH levels typically rise and fall together; therefore, high LH levels are associated with the same conditions featuring high FSH, such as reduced testicular function. In addition, LH levels increase with age. Meanwhile, stress, malnutrition and dysfunction of the pituitary gland can lead to a lower-than-normal LH level.

<0.3 U/l

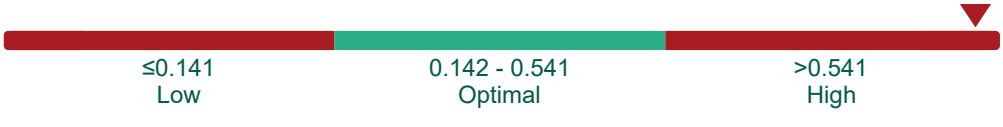
Testosterone

Testosterone is a sex hormone. It is essential for the development of male reproductive organs and sperm production. Testosterone is present at much higher levels in males than females but plays important roles in both sexes, helping to maintain sexual function, bone mass and muscle strength. A lack of testosterone can result in loss of libido, low energy, changes in mood and erectile dysfunction. Reduced testosterone production can occur with dysfunction of the pituitary gland, chronic conditions, such as diabetes, and with use of certain drugs and medications. Additionally, testosterone levels naturally fall with age. Higher than normal testosterone can occur with hyperthyroidism and testosterone-secreting tumours (e.g. testicular and adrenal tumours). Testosterone-replacement treatments and use of anabolic steroids can also affect testosterone levels.

40.3 nmol/l

Free Testosterone

Free Testosterone measurement indicates the amount of testosterone circulating freely in the body (i.e. not bound to albumin or sex hormone binding globulin). Understanding free testosterone levels can be useful when evaluating sexual function and reproductive function.



0.897 nmol/l

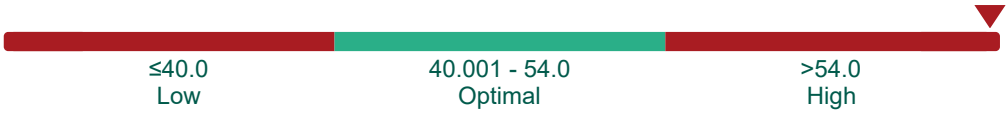
Full Blood Count

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

184 g/l

Haematocrit



58.6 %

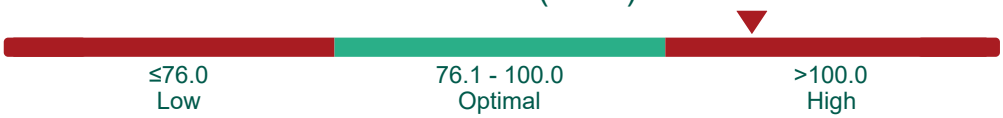
Mean Cell Haemoglobin (MCH)

32.1 pg

Mean Cell Haemoglobin Concentration (MCHC)

314 g/l

Red Blood Cell Mean Cell Volume (MCV)



102.1 fl

Red Blood Cell Count

5.74 10^{12}/L

Basophil Count

0.01 10^{9}/L

Eosinophil Count

0.16 10^9/L

Lymphocyte Count

1.69 10^9/L

Monocyte Count

0.36 10^9/L

Neutrophil Count

2.79 10^9/L

White Blood Cell Count

5.01 10^9/L

Platelet Count

205 10^9/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

17.8 µmol/l

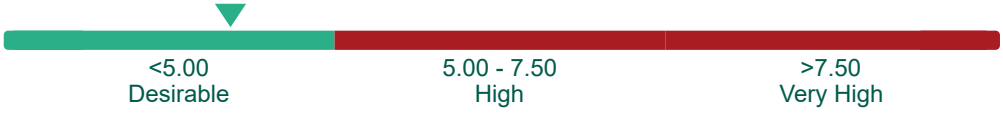
Ferritin

77.76 µg/l

Heart Health

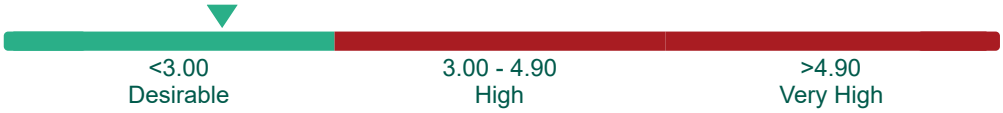
A major contributing factor to heart disease is the gradual accumulation of fat and cholesterol within blood vessel walls, a process known as atherosclerosis. Cholesterol is a fatty substance that is vital for the normal functioning of the body. However, too much cholesterol is damaging and the risk 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



3.41 mmol/l

LDL Cholesterol



1.97 mmol/l

HDL Cholesterol

1.04 mmol/l

Total Cholesterol / HDL Cholesterol Ratio

3.28 -

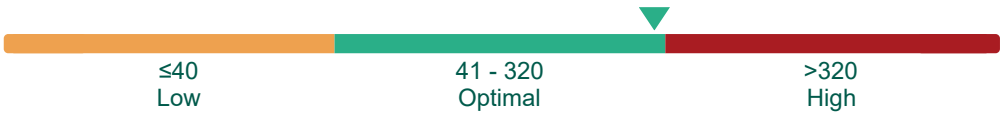
Non HDL Cholesterol

2.37 mmol/l

Triglycerides

0.92 mmol/l

Creatine Kinase



311 U/l

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, chronic kidney disease and acute kidney injury. Kidney Health helps evaluate the filtering ability of the kidneys and can indicate how well the kidneys are functioning.

Creatinine

68 µmol/l

Estimated Glomerular Filtration Rate (eGFR)

108 ml/min/1.73m²

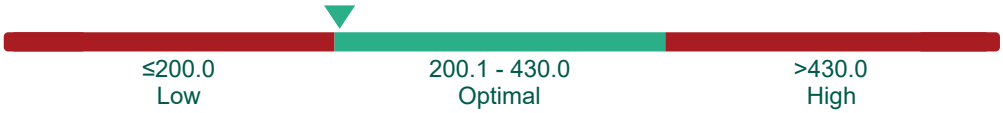
Total Protein

69.8 g/l

Sodium

140.8 mmol/l

Uric Acid



203.1 µmol/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. 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 help evaluate the function of the liver.

Alanine Aminotransferase (ALT)

55 U/l

Alkaline Phosphatase (ALP)

58 U/l

Gamma-Glutamyltransferase (GGT)

36.9 U/l

Total Bilirubin

9.34 µmol/l

Albumin

41.9 g/l

Globulin

27.9 g/l

Ferritin

77.76 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

41.9 g/l

Iron

17.8 µmol/l

Folic acid

6.8 µg/l

Vitamin B12

871 ng/l

Vitamin D

59 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.

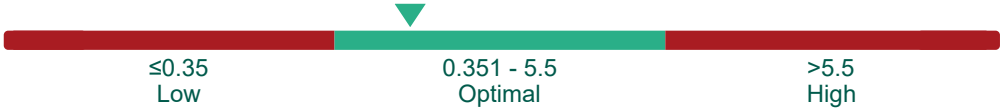
C-Reactive Protein (CRP)

0.5
mg/l

Thyroid Health

The thyroid gland plays an important role in controlling the body's metabolism by producing hormones. 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)



1.52 mIU/l

Free Thyroxine (FT4)

17.6 pmol/l

Free Tri-iodothyronine (FT3)

6.03 pmol/l

Anti-Thyroglobulin Antibody (Anti-Tg)

26 IU/ml

Anti-Thyroid Peroxidase Antibody (Anti-TPO)

40.2 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.

Cortisol

318 nmol/l

Dehydroepiandrosterone Sulphate (DHEAs)

5.1 µmol/l

Follicle Stimulating Hormone

<0.30 U/l

Oestradiol

72.2 pmol/l

Luteinising Hormone

<0.3 U/l

Progesterone

<0.16 nmol/l

Prolactin

199 mIU/l

Testosterone

40.3 nmol/l

Sex Hormone Binding Globulin

41.9
nmol/l

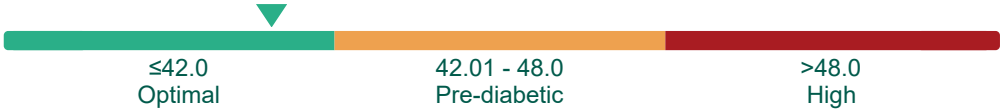
Free Testosterone

0.897
nmol/l

Other

Additional tests.

HbA1c



33.88 mmol/mol

Total Prostate Specific Antigen (TPSA)

0.55 µg/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
Full Blood Count			
Haemoglobin	**184**	g/l	≤130.0 Low 130.1 - 180.0 Optimal >180.0 High
Haematocrit	**58.6**	%	≤40.0 Low 40.001 - 54.0 Optimal >54.0 High
Mean Cell Haemoglobin (MCH)	**32.1**	pg	≤27.0 Low 27.1 - 32.0 Optimal >32.0 High
Mean Cell Haemoglobin Concentration (MCHC)	**314**	g/l	≤320.0 Low 320.1 - 360.0 Optimal >360.0 High
Red Blood Cell Mean Cell Volume (MCV)	**102.1**	fl	≤76.0 Low 76.1 - 100.0 Optimal >100.0 High
Red Blood Cell Count	**5.74**	10^{12}/L	4.51 - 6.5 Optimal
Basophil Count	**0.01**	10^9/L	≤0.01 Low 0.02 - 0.1 Optimal >0.1 High
Eosinophil Count	**0.16**	10^9/L	0.05 - 0.4 Optimal
Lymphocyte Count	**1.69**	10^9/L	1.01 - 3.5 Optimal
Monocyte Count	**0.36**	10^9/L	0.21 - 0.8 Optimal
Neutrophil Count	**2.79**	10^9/L	2.01 - 7.5 Optimal
White Blood Cell Count	**5.01**	10^9/L	4.01 - 10.0 Optimal
Platelet Count	**205**	10^9/L	151 - 450 Optimal
Iron Status			
Iron	**17.8**	µmol/l	5.9 - 34.5 Optimal
Ferritin	**77.76**	µg/l	20 - 300 Optimal
Heart Health			
Total Cholesterol	**3.41**	mmol/l	<5.00 Desirable
LDL Cholesterol	**1.97**	mmol/l	<3.00 Desirable
HDL Cholesterol	**1.04**	mmol/l	≤1.55 Low >1.55 Desirable
Total Cholesterol / HDL Cholesterol Ratio	**3.28**	-	≤5.0 Desirable
Non HDL Cholesterol	**2.37**	mmol/l	≤4.0 Desirable

Test	Result	Units	Reference Range
Heart Health			
Triglycerides	**0.92**	mmol/l	≤2.3 Desirable
Creatine Kinase	**311**	U/l	41 - 320 Optimal
Kidney Health			
Creatinine	**68**	µmol/l	64.1 - 104.0 Optimal
Estimated Glomerular Filtration Rate (eGFR)	**108**	ml/min/1.73m²	≥60 Satisfactory
Total Protein	**69.8**	g/l	64.1 - 83.0 Optimal
Sodium	**140.8**	mmol/l	133.1 - 146.0 Optimal
Uric Acid	**203.1**	µmol/l	200.1 - 430.0 Optimal
Liver Health			
Alanine Aminotransferase (ALT)	**55**	U/l	<55 Normal 55 - 200 Moderately raised >200 High
Alkaline Phosphatase (ALP)	**58**	U/l	31 - 120 Optimal
Gamma-Glutamyltransferase (GGT)	**36.9**	U/l	10.1 - 71.0 Optimal
Total Bilirubin	**9.34**	µmol/l	≤21.0 Optimal
Albumin	**41.9**	g/l	35.1 - 50.0 Optimal
Globulin	**27.9**	g/l	23.1 - 35.0 Optimal
Ferritin	**77.76**	µg/l	20 - 300 Optimal
Nutritional Health			
Albumin	**41.9**	g/l	35.1 - 50.0 Optimal
Iron	**17.8**	µmol/l	5.9 - 34.5 Optimal
Folic acid	**6.8**	µg/l	3.1 - 26.8 Optimal
Vitamin B12	**871**	ng/l	≤197 Low 198 - 771 Optimal >771 High
Vitamin D	**59**	nmol/l	50 - 375 Sufficiency
Infection & Inflammation			
C-Reactive Protein (CRP)	**0.5**	mg/l	≤5.0 Optimal
Thyroid Health			
Thyroid Stimulating Hormone (TSH)	**1.52**	mIU/l	0.351 - 5.5 Optimal
Free Thyroxine (FT4)	**17.6**	pmol/l	11.91 - 21.6 Optimal

Test	Result	Units	Reference Range
Thyroid Health			
Free Tri-iodothyronine (FT3)	**6.03**	pmol/l	3.11 - 6.8 Optimal
Anti-Thyroglobulin Antibody (Anti-Tg)	**26**	IU/ml	≤115.0 Optimal
Anti-Thyroid Peroxidase Antibody (Anti-TPO)	**40.2**	kU/l	≤34.0 Optimal >34.0 High
Hormonal Health			
Cortisol	**318**	nmol/l	139 - 690 Optimal
Dehydroepiandrosterone Sulphate (DHEAs)	**5.1**	µmol/l	1.3 - 9.0 Optimal
Follicle Stimulating Hormone	**<0.30**	U/l	≤1.5 Low 1.51 - 12.4 Optimal >12.4 High
Oestradiol	**72.2**	pmol/l	41.5 - 159.0 Optimal
Luteinising Hormone	**<0.3**	U/l	≤1.7 Low 1.8 - 8.6 Optimal >8.6 High
Progesterone	**<0.16**	nmol/l	≤0.47 Optimal
Prolactin	**199**	mIU/l	86 - 324 Optimal
Testosterone	**40.3**	nmol/l	≤6.68 Low 6.681 - 25.7 Optimal >25.7 High
Sex Hormone Binding Globulin	**41.9**	nmol/l	20.61 - 76.7 Optimal
Free Testosterone	**0.897**	nmol/l	≤0.141 Low 0.142 - 0.541 Optimal >0.541 High
Other			
HbA1c	**33.88**	mmol/mol	≤42.0 Optimal
Total Prostate Specific Antigen (TPSA)	**0.55**	µg/l	≤3.1 Optimal