10/9/25, 7:09 AM Result Report



## **PEAK INSIGHTS 70**

Patient Name: John Doe

Age: 44

Sex assigned at birth: M

Date Of Birth: 24/07/1981

Result Id: 688c9e891dba23aaa852e1fc

Assigned Doctor: Lola Doctor

Date: October 09, 2025

# Haematology

TEST NAME	REFERENCE RANGES & COMMENTS	VALUE	STATUS	
Basophils	0 - 0.1	0 x10 9/L	NORMAL	0 - 0.1 ×10 9/L
Eosinophils	0 - 0.4	0.06 ×10 9/L	NORMAL	0 - 0.4 ×10 9/L
Haematocrit	0.380 - 0.500	0.455 L/L	NORMAL	0.380 - 0.500 L/L
Haemoglobin	130 - 170	145 g/L	NORMAL	130 - 170 g/L
Lymphocytes	1.2 - 3.65	2.27 ×10 9/L	NORMAL	1.2 - 3.65 ×10 9/L
MCHC	300 - 350	319 g/L	NORMAL	300 - 350 g/L
Mean Cell Hb	27.0 - 33.0	30.3 pg	NORMAL	27.0 - 33.0 pg
Mean Cell Volume	81 - 98	95 fL	NORMAL	81 - 98 fL
Monocytes	0.2 - 1.0	0.4 ×10 9/L	NORMAL	0.2 - 1.0 x10 9/L
MPV	7.00 - 13.00	11 fL	NORMAL	7.00 - 13.00 fL

TEST NAME	REFERENCE RANGES & COMMENTS	VALUE	STATUS	
Neutrophils	2.0 - 7.5	3 ×10 9/L	NORMAL	2.0 - 7.5 ×10 9/L
Platelets	150 - 400	217 ×10 9/L	NORMAL	150 - 400 ×10 9/L
Red Blood Cells	4.40 - 5.80	4.79 ×10 12/L	NORMAL	4.40 - 5.80 ×10 12/L
Red Cell Distribution	11.5 - 14.4	12.9 %	NORMAL	11.5 - 14.4 %
White Blood Cells	3.0 - 10.0	5.8 ×10 9/L	NORMAL	3.0 - 10.0 x10 9/L

# **Kidney Function**

TEST NAME	REFERENCE RANGES & COMMENTS	VALUE	STATUS	
Creatinine	59 - 104	97 umol/L	NORMAL	59 - 104 umol/L
eGFR	General: >60 > 60 unless evidence of CKD	80 mL/min/1.73m2	NORMAL	>60 mL/min/1.73m2
Sodium	133 - 146	143 mmol/L	NORMAL	133 - 146 mmol/L
Urea	2.5 - 7.8	6.2 mmol/L	NORMAL	2.5 - 7.8 mmol/L

# **Liver Function**

TEST NAME	REFERENCE RANGES & COMMENTS	VALUE	STATUS	
Albumin	35 - 50	45 g/L	NORMAL	35 - 50 g/L
ALP	30 - 130	101 IU/L	NORMAL	30 - 130 IU/L
ALT	<50	29 U/L	NORMAL	<50 U/L

TEST NAME	REFERENCE RANGES & COMMENTS	VALUE	STATUS	
AST	<50	31 U/L	NORMAL	<50 U/L
GGT	8 - 61	21 U/L	NORMAL	8 - 61 U/L
Globulin	19 - 35	28 g/L	NORMAL	19 - 35 g/L
Total Bilirubin	<24	11 umol/L	NORMAL	<24 umol/L
Total Protein	60 - 80	73 g/L	NORMAL	60 - 80 g/L

# **Bone Screen**

TEST NAME	REFERENCE RANGES & COMMENTS	VALUE	STATUS	
Calcium	2.15 - 2.5	2.5 mmol/L	NORMAL	2.15 - 2.5 mmol/L
Corrected Calcium	2.15 - 2.5	2.4 mmol/L	NORMAL	2.15 - 2.5 mmol/L
Uric Acid	200 - 430	296 umol/L	NORMAL	200 - 430 umol/L

# **Vitamins**

TEST NAME	REFERENCE RANGES & COMMENTS	VALUE	STATUS	
Active B12	37.5 - 150	87 pmol/L	NORMAL	37.5 - 150 pmol/L
Serum Folate	8.83 - 60.8	16.9 nmol/L	NORMAL	8.83 - 60.8 nmol/L
Vitamin D (25 OH)	General: 50 - 200  Optimal 75-200  Adequate 50-<75  Insufficient 25 -<50  Deficient <25	109 nmol/L	NORMAL	50 - 200 nmol/L

# Lipids

TEST NAME	REFERENCE RANGES & COMMENTS	VALUE	STATUS	
Apolipoprot B\X2F\Apolipoprot A	<1	0.56 ratio	NORMAL	<1ratio
Apolipoprotein A1	1.04 - 2.02	1.58 g/L	NORMAL	1.04 - 2.02 g/L
Apolipoprotein B	0.66 - 1.33	0.89 g/L	NORMAL	0.66 - 1.33 g/L
Chol:HDL ratio	<4	3.13 ratio	NORMAL	<4 ratio
Cholesterol	General: 0 - 5.0  Desirable: <5.2mmol/L. In primary prevention, lipid results should be assessed in tandem with other risk factors to estimate cardiovascular disease (CVD) risk.  NICE recommend using the QRISK3 calculator.	4.98 mmol/L	NORMAL	0 - 5.0 mmol/L
HDL	>1.1	1.6 mmol/L	NORMAL	>1.1 mmol/L
HDL Cholesterol ratio	>20	31.9 %	NORMAL	>20 %
LDL	<3	3.1 mmol/L	ABOVE NORMAL	<3 mmol/L
Non HDL Cholesterol	<4	3.39 mmol/L	NORMAL	<4 mmol/L
Triglycerides	General: <1.7  Experts advise a non-fasting triglyceride level below 2.3mmol/L. Fasting triglyceride (10-14 hours) should be below 1.7mmol/L	0.7 mmol/L	NORMAL	<1.7 mmol/L
VLDL	0.1 - 1.7	0.3 mmol/L	NORMAL	0.1 - 1.7 mmol/L

# **Biochemistry**

TEST NAME	REFERENCE RANGES & COMMENTS	VALUE	STATUS	
СК	39 - 308	364 U/L	ABOVE NORMAL	39 - 308 U/L
CRP (High Sensitivity)	0.00 - 5.00	0.38 mg/L	NORMAL	0.00 - 5.00 mg/L
Ferritin	General: 30 - 400  Ferritin is the most useful indicator of iron deficiency, but also an acute phase reactant and may be elevated in malignancy, chronic inflammation, liver damage and iron overload	166 ug/L	NORMAL	30 - 400 ug/L
HbA1c	General: 20 - 42  Non-diabetic 20 - < 42  Prediabetes 42 - < 48  Diabetes >= 48  Good control 48 - 59	36 mmol/mol	NORMAL	20 - 42 mmol/mol
Iron	5.8 - 34.5	19.6 umol/L	NORMAL	5.8 - 34.5 umol/L
Magnesium	0.7 - 1.0	0.9 mmol/L	NORMAL	0.7 - 1.0 mmol/L
PSA - Non Symptomatic	General: <2 For Symptomatic patients please refer to NICE guidelines on: https://www.nice.org.uk	0.38 ng/mL	NORMAL	<2 ng/mL
TIBC	45 - 81	70 umol/L	NORMAL	45 - 81 umol/L
Transferrin	2.0 - 3.6	2.8 g/L	NORMAL	2.0 - 3.6 g/L
Transferrin Saturation	20 - 50	27.9 %	NORMAL	20 - 50 %

# **Thyroid Function**

TEST NAME	REFERENCE RANGES & COMMENTS	VALUE	STATUS	
Anti-Thyroglobulin Abs	<115	16 IU/mL	NORMAL	<115 IU/mL
Anti-Thyroidperoxidase abs	<34	11.2 IU/mL	NORMAL	<34 IU/mL
Free T3	3.1 - 6.8	5.3 pmol/L	NORMAL	31- 6.8 pmol/L
Free T4	12.0 - 22.0	17.7 pmol/L	NORMAL	12.0 - 22.0 pmol/L
TSH	0.27 - 4.20	1.67 mIU/L	NORMAL	0.27 - 4.20 mIU/L

# Hormones

TEST NAME	REFERENCE RANGES & COMMENTS	VALUE	STATUS	
Cortisol (Random)	General: 73.8 - 507.0 6am - 10am 166 - 507 4pm - 8pm 73.8 - 291	366 nmol/L	NORMAL	73.8 - 507.0 nmol/L
DHEA-Sulphate	1.2 - 8.98	6.05 umol/L	NORMAL	1.2 - 8.98 umol/L
Free Androgen Index	24 - 104	56 ratio	NORMAL	24 - 104 ratio
Free- Testosterone(Calculated)	0.2 - 0.62	0.484 nmol/L	NORMAL	0.2 - 0.62 nmol/L
FSH	1.5 - 12.4	3.6 IU/L	NORMAL	1.5 - 12.4 IU/L
LH	1.7 - 8.6	3.3 IU/L	NORMAL	1.7 - 8.6 IU/L
Oestradiol	41 - 159	113 pmol/L	NORMAL	41 - 159 pmol/L
Prolactin	86 - 324	375 mIU/L	ABOVE NORMAL	86 - 324 mIU/L

TEST NAME	REFERENCE RANGES & COMMENTS	VALUE	STATUS	
SHBG	18.3 - 54.1	51 nmol/L	NORMAL	18.3 - 54.1 nmol/L
Testosterone	8.64 - 29	28.4 nmol/L	NORMAL	8.64 - 29 nmol/L

lola Dr. Lola Doctor

#### **Doctor's Review**

Hi John,

Generally a good set of bloods with little change from previously. In short - apart from a drop in your B12 and folate which suggests you may have stopped a supplement, there are no significant changes.

To go through the results - your full blood count is stable, with no anaemia or evidence of infection.

Your kidney function has improved. As I think mentioned before, this is very sensitive to your fluid intake, and use of supplements like creatine can interfere with it.

Your liver function test and calcium are normal. Your B12 and folate have dropped but remains in the normal range have you perhaps stopped a supplement?

Your vitamin D has fallen into the ideal range of about 75-120.

Your cholesterol profile remains stable, and I would not consider any of the apparent changes to be significant.

Your CK remains a little elevated. As mentioned previously, we can see this with exercise, but if you are taking a statin or have noted aches in the arms and legs then you may wish to discuss further with your doctor.

Your diabetes screen and thyroid profile are normal, and the iron profile shows no evidence of deficiency or overload. Your PSA also remains low subject to the same comments about symptoms as previously.

The marginally elevated prolactin is unlikely to be of any significance given the lack of progression and almost certainly reflects stress or exercise as causes. As I think mentioned before, various medications (such as some

antidepressants) can also increase prolactin.	
Finally, your free (available to use) testosterone and the rest of your sex hormone profile is normal.	
Best wishes	
Dr Lola Doctor	

## **Historical Trends**

Track your biomarker changes over time (8 results analyzed)

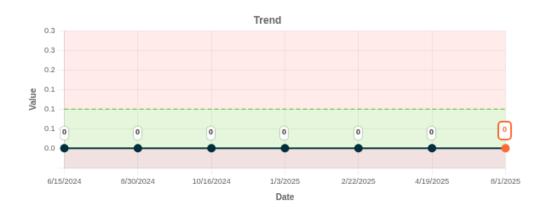
## Haematology

## **Basophils**

Reference Range:

0 - 0.1

**△** Invalid Data Points (excluded):



## **Eosinophils**

Reference Range:

0 - 0.4

**▲ Invalid Data Points (excluded):** 

3/1/2024: Clotted



#### Haematocrit

Reference Range:

0.380 - 0.500

**▲ Invalid Data Points (excluded):** 



## Haemoglobin

Reference Range:

130 - 170

**▲ Invalid Data Points (excluded):** 

3/1/2024: Clotted



## Lymphocytes

Reference Range:

1.2 - 3.65

**⚠ Invalid Data Points (excluded):** 



#### **MCHC**

## Reference Range:

300 - 350

#### **▲ Invalid Data Points (excluded):**

3/1/2024: Clotted



## Mean Cell Hb

#### Reference Range:

27.0 - 33.0

#### **▲ Invalid Data Points (excluded):**



#### Mean Cell Volume

Reference Range:

81 - 98

**▲ Invalid Data Points (excluded):** 

3/1/2024: Clotted



## Monocytes

Reference Range:

0.2 - 1.0

**▲ Invalid Data Points (excluded):** 



#### **MPV**

#### Reference Range:

7.00 - 13.00

#### **▲ Invalid Data Points (excluded):**

3/1/2024: Clotted



## **Neutrophils**

#### Reference Range:

2.0 - 7.5

#### **▲ Invalid Data Points (excluded):**



#### **Platelets**

Reference Range:

150 - 400

**▲ Invalid Data Points (excluded):** 

3/1/2024: Clotted



#### **Red Blood Cells**

Reference Range:

4.40 - 5.80

**▲ Invalid Data Points (excluded):** 



#### **Red Cell Distribution**

Reference Range:

11.5 - 14.4

**▲ Invalid Data Points (excluded):** 

3/1/2024: Clotted



## **White Blood Cells**

Reference Range:

3.0 - 10.0

**▲ Invalid Data Points (excluded):** 



## **Kidney Function**

## Creatinine

#### Reference Range:

59 - 104 umol/L



#### eGFR

#### Reference Range & Comments:

>60 mL/min/1.73m2

• > 60 unless evidence of CKD



## **Sodium**

Reference Range: 133 - 146 mmol/L



## Urea

Reference Range: 2.5 - 7.8 mmol/L



## **Liver Function**

#### **Albumin**

Reference Range: 35 - 50 g/L



## ALP

Reference Range: 30 - 130 IU/L



## ALT

Reference Range: <50 U/L



## **AST**

Reference Range: <50 U/L



## **GGT**

**Reference Range:** 8 - 61 U/L



## Globulin

**Reference Range:** 19 - 35 g/L



## **Total Bilirubin**

Reference Range: <24 umol/L



## **Total Protein**

Reference Range: 60 - 80 g/L



## **Vitamins**

#### **Active B12**

Reference Range:

37.5 - 150 pmol/L



#### **Serum Folate**

Reference Range:

8.83 - 60.8

**△** Invalid Data Points (excluded):

3/1/2024: Haemolysed



## Vitamin D (25 OH)

#### Reference Range & Comments:

50 - 200 nmol/L

- Optimal 75-200
- Adequate 50-<75
- Insufficient 25 -<50
- Deficient <25



## **Bone Screen**

#### Calcium

Reference Range: 2.2 - 2.55 mmol/L



#### **Corrected Calcium**

Reference Range: 2.2 - 2.55 mmol/L



## **Phosphate**

#### Reference Range:

0.80 - 1.50 mmol/L

## **△** Invalid Data Points (excluded):

4/19/2025: Too old



## **Uric Acid**

Reference Range:

200 - 430 umol/L



## Lipids

## Apolipoprot B\X2F\Apolipoprot A

Reference Range: <1 ratio



## **Apolipoprotein A1**

Reference Range: 1.04 - 2.02 g/L



## Apolipoprotein B

Reference Range: 0.66 - 1.33 g/L



## **Chol:HDL ratio**

Reference Range: <4 ratio



#### Cholesterol

#### Reference Range & Comments:

0 - 5.0 mmol/L

- Desirable: <5.2mmol/L. In primary prevention, lipid
- results should be assessed in tandem with other risk
- factors to estimate cardiovascular disease (CVD) risk.
- NICE recommend using the QRISK3 calculator.



## HDL

## Reference Range:

>1.1 mmol/L



## **HDL Cholesterol ratio**

Reference Range: >20 %



## LDL

Reference Range: <3 mmol/L



## Lipoprotein (a)

#### **Reference Range & Comments:**

<75 nmol/L

- Lipoprotein (a) >75 nmol/L is associated with increased
- cardiovascular risk.



#### Non HDL Cholesterol

#### Reference Range:

<4 mmol/L



## **Triglycerides**

#### Reference Range & Comments:

<1.7 mmol/L

- Experts advise a non-fasting triglyceride level below
- 2.3mmol/L. Fasting triglyceride (10-14 hours) should
- be below 1.7mmol/L. .



## **VLDL**

#### Reference Range:

0.1 - 1.7 mmol/L



## **Biochemistry**

## CK

#### Reference Range:

39 - 308

#### $\underline{\Lambda}$ Invalid Data Points (excluded):

3/1/2024: Haemolysed



## **CRP (High Sensitivity)**

Reference Range:

0 - 5 mg/L



#### **Ferritin**

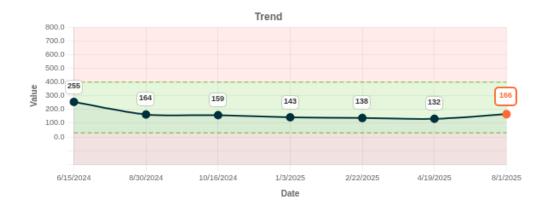
#### Reference Range & Comments:

30 - 400

- Ferritin is the most useful indicator of iron deficiency,
- but also an acute phase reactant and may be elevated
- in malignancy, chronic inflammation, liver damage and
- iron overload

#### **▲ Invalid Data Points (excluded):**

3/1/2024: Haemolysed



## HbA1c

#### Reference Range & Comments:

20 - 42

- Non-diabetic 20 < 42
- Prediabetes 42 < 48
- Diabetes >= 48
- Good control 48 59

#### **▲ Invalid Data Points (excluded):**

3/1/2024: Clotted



#### Iron

### Reference Range:

5.8 - 34.5 umol/L



## Magnesium

#### Reference Range:

0.7 - 1.0 mmol/L



## **PSA - Non Symptomatic**

#### Reference Range & Comments:

<2 ng/mL

- For Symptomatic patients please refer to NICE guidelines
- on
- https://www.nice.org.uk



# **TIBC**

## Reference Range:

45 - 81

# $\boldsymbol{\vartriangle}$ Invalid Data Points (excluded):

3/1/2024: Haemolysed



# **Transferrin**

## Reference Range:

2.0 - 3.6 g/L



## **Transferrin Saturation**

Reference Range:

20 - 50

**▲ Invalid Data Points (excluded):** 

3/1/2024: Haemolysed



# **UIBC**

Reference Range:

22.3 - 61.7

UIBC

Invalid marker - excluded from trends analysis

All data points are invalid

# **Thyroid Function**

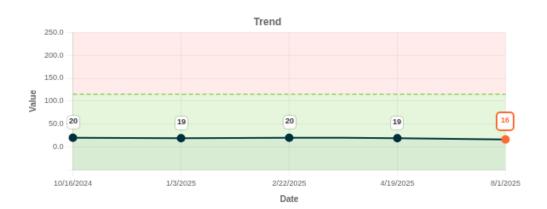
# **Anti-Thyroglobulin Abs**

Reference Range:

<115

**▲ Invalid Data Points (excluded):** 

3/1/2024: Insufficient



# Anti-Thyroidperoxidase abs

Reference Range: <34 IU/mL



## Free T3

# Reference Range:

3.1 - 6.8

## **▲ Invalid Data Points (excluded):**

3/1/2024: Insufficient



# Free T4

## Reference Range:

12.0 - 22.0

## **▲ Invalid Data Points (excluded):**

3/1/2024: Insufficient



# **TSH**

## Reference Range:

0.27 - 4.20

# $\boldsymbol{\vartriangle}$ Invalid Data Points (excluded):

3/1/2024: Insufficient



## **Hormones**

## Cortisol (Random)

## Reference Range & Comments:

73.8 - 507.0

- 6am 10am 166 507
- 4pm 8pm 73.8 291

## **▲ Invalid Data Points (excluded):**

3/1/2024: Insufficient



# **DHEA-Sulphate**

Reference Range:

0.91 - 6.76 umol/L



# Free Androgen Index

Reference Range: 24 - 104 ratio



# Free-Testosterone(Calculated)

Reference Range: 0.16 - 0.47 nmol/L



# **FSH**

Reference Range: 1.5 - 12.4 IU/L



# LH

Reference Range: 1.7 - 8.6 IU/L



# Oestradiol

Reference Range: 41 - 159 pmol/L



# **Prolactin**

Reference Range:

86 - 324 mU/L



# **Prolactin**

Reference Range: 86 - 324 mIU/L



# **SHBG**

Reference Range: 20.6 - 76.7 nmol/L



## **Testosterone**

### Reference Range:

6.68 - 25.7 nmol/L



## **Understand Markers**

## Haematology

Involves the study of blood and its disorders. Blood tests in this category can help diagnose conditions like anemia, infections, hemophilia, and blood cancers.

## • Basophils

 $Least\ common\ type\ of\ white\ blood\ cell,\ involved\ in\ inflammatory\ reactions\ and\ allergic\ responses.$ 

## Eosinophils

White blood cells involved in allergic reactions and fighting parasitic infections.

### Haematocrit

The volume percentage of red blood cells in blood; abnormal levels can indicate conditions like anemia or dehydration.

## • Haemoglobin

 $\label{thm:condition} A \ protein \ in \ red \ blood \ cells \ that \ transports \ oxygen; \ abnormal \ levels \ may \ indicate \ anemia \ or \ polycythemia.$ 

## • Lymphocytes

A type of white blood cell involved in immune responses; levels can vary with viral infections or immune disorders.

# • MCHC

Measures the concentration of hemoglobin in a given volume of packed red blood cells. Indicates how concentrated the hemoglobin is in the cells.

## Mean Cell Hb

Average amount of hemoglobin per red blood cell. Useful in diagnosing anemia types.

## Mean Cell Volume

Measures the average volume of red blood cells in a sample. Used to diagnose types of anemia.

## Monocytes

 $\label{eq:Allower} \mbox{A large type of white blood cell that fights infections and supports immune processes.}$ 

### • MPV

The average size of platelets, important for diagnosing bleeding or thrombotic disorders.

### Neutrophils

A type of white blood cell that fights bacterial infections; abnormal levels may indicate infection or inflammation.

### Platelets

Platelets are critical for blood clotting. Abnormal levels can lead to bleeding disorders or thrombosis.

#### Red Blood Cells

Cells that transport oxygen from the lungs to the body; abnormal counts may indicate anemia or polycythemia.

### • Red Cell Distribution

Measures the variation in red blood cell size; abnormalities can indicate anemia, heart disease, or other conditions.

#### · White Blood Cells

Immune system cells that protect against infection and foreign invaders; abnormal levels may indicate infection or inflammation.

### **Kidney Function**

A group of blood and/or urine tests in which we are checking for amounts of certain substances released by the kidneys. By that, we can evaluate the functional capacity of the kidneys and important parameters of the human body such as hydration/dehydration, metabolism, respiratory and heart condition, etc.

#### Creatinine

A waste product from muscle metabolism, filtered by the kidneys; elevated levels may indicate kidney dysfunction.

#### eGFR

A calculated measure of kidney filtration rate, reflecting overall kidney function.

#### Sodium

An electrolyte essential for nerve and muscle function and fluid balance in the body.

#### Urea

A waste product from protein metabolism, reflecting kidney function when levels are abnormal.

#### **Liver Function**

These are groups of blood tests that provide information about the functional capacity of the liver. The liver processes blood and breaks down balances, creates the nutrients (carbohydrates, fat, and proteins), and also metabolizes drugs into forms that are easier to use for the rest of the body. The liver also: - Synthesise proteins for the blood - Synthesise the cholesterol and special proteins to help carry fats through the body - Converts excess glucose into glycogen for storage (glycogen can later be converted back to glucose for energy) - Regulates blood levels of amino acids, which form the building blocks of proteins - Process hemoglobin for use of its iron content (the liver stores iron) - Converts ammonia to urea (urea is an end product of protein metabolism and is excreted in the urine)

### Albumin

The primary protein in blood plasma, maintaining fluid balance and transporting hormones, vitamins, and drugs throughout the body.

### • ALP

An enzyme found in the liver, bile ducts, bones, and kidneys; elevated levels may indicate liver or bone disorders.

### • ALI

An enzyme in the liver that breaks down proteins; elevated levels often indicate liver damage.

### • AST

An enzyme found in the liver, heart, and muscles; elevated levels may indicate liver, heart, or muscle damage.

## • GGT An enzyme

An enzyme primarily in the liver and bile ducts; elevated levels may indicate liver or bile duct damage.

### • Giopuiin

A group of proteins in blood plasma essential for liver function, blood clotting, and immune defense.

### • Total Bilirubin

 $A \ yellow \ pigment \ in \ blood \ formed \ from \ red \ blood \ cell \ breakdown; \ elevated \ levels \ may \ indicate \ liver \ dysfunction.$ 

## • Total Protein

The sum of proteins in blood plasma, including albumin and globulin, supporting various bodily functions.

### **Bone Screen**

Is a group of blood tests that are used to diagnose or assess your bone health status. We can evaluate bone density and the risk of osteoporosis, a condition that weakens bones and makes them more likely to break.

### • Calcium

A mineral stored in bones, vital for nerve, heart, and muscle function.

### Corrected Calcium

A calculated value that adjusts serum calcium based on albumin levels, providing a more accurate measure of calcium status.

### • Uric Acid

A waste product from purine breakdown; elevated levels may indicate kidney dysfunction or gout.

## **Vitamins**

A group of organic molecules that are essential for normal growth and metabolism and are essential in small quantities because they cannot be made by our organism.

#### Active B12

Measures holotranscobalamin, the active form of vitamin B12, supporting blood cell production, nerve function, and DNA synthesis.

### Serum Folate

Known also as Vitamin B9, essential for DNA synthesis and protein metabolism.

#### • Vitamin D (25 OH)

A fat-soluble vitamin essential for bone health, calcium absorption, and immune function, synthesized via sunlight exposure.

### Lipids

A group of blood tests that measures the amount of certain fat molecules is called lipids. The group includes three measurements of your cholesterol levels and a measurement of your triglycerides. With these parameters (plus a few others such as smoking, alcohol intake, obesity, etc) we can evaluate first the risk of cardiovascular diseases like heart disease, and stroke and second the type of person's lifestyle (athletic, non-athletic, etc)

### • Apolipoprot B\X2F\Apolipoprot A

Ratio of Apolipoprotein B to Apolipoprotein A, used to assess cardiovascular risk and monitor lipid management.

### Apolipoprotein A1

Apolipoprotein A1 is the main protein component of HDL (high-density lipoprotein) and is important for cholesterol transport and cardiovascular health

### • Apolipoprotein B

Apolipoprotein B is the primary protein of LDL (low-density lipoprotein) and VLDL (very-low-density lipoprotein), serving as an important marker for cardiovascular risk.

### · Chol:HDL ratio

The cholesterol ratio, calculated by dividing total cholesterol by HDL cholesterol, helps assess heart disease risk and monitor lipid management effectiveness.

#### Cholesterol

A fatty substance produced by the liver, essential for cell membranes but harmful in excess.

#### • HDL

High-density lipoprotein cholesterol, which may reduce cardiovascular disease risk when elevated.

### • HDL Cholesterol ratio

The HDL Cholesterol Ratio is calculated by dividing HDL cholesterol by total cholesterol, reflecting the proportion of good cholesterol.

#### LDL

A type of cholesterol associated with increased cardiovascular disease risk when elevated.

## Non HDL Cholesterol

Total cholesterol minus HDL, representing cholesterol types linked to cardiovascular risk.

### • Triglycerides

A type of fat in the blood; high levels may increase the risk of cardiovascular disease.

## **Biochemistry**

Are a group of blood tests used for the evaluation of the state of important organs of the human body as the liver, kidneys, and heart.

### • CK

An enzyme found primarily in skeletal muscles and the heart, used to diagnose and monitor muscle injuries and diseases.

## • CRP (High Sensitivity)

 $A \ sensitive \ marker \ of \ inflammation \ linked \ to \ cardiovascular \ risk, \ even \ in \ healthy \ individuals.$ 

### • Ferritin

A protein reflecting the body's iron stores; abnormal levels may indicate iron deficiency or overload.

## HbA1c

A measure of hemoglobin bound to glucose, reflecting average blood sugar levels over the past 2-3 months.

### • 11 011

Measures serum iron, mostly bound to transferrin, essential for red blood cell production and oxygen transport.

### • Magnesium

A mineral essential for muscle and nerve function, blood pressure regulation, and heart rhythm stability.

## • PSA - Non Symptomatic

A protein produced by the prostate, used as an indicator of prostate size and function in men.

### TIBC

Total iron-binding capacity, reflecting the blood's ability to bind iron via transferrin.

## Transferrin

A protein that binds and transports iron in the blood, critical for iron metabolism.

### • Transferrin Saturation

The percentage of transferrin saturated with iron, used to diagnose iron deficiency or overload.

### **Thyroid Function**

Blood tests are used to check whether your thyroid is working normally. The thyroid gland is responsible for regulating many processes, such as metabolism, energy generation, and mood.

### • Anti-Thyroglobulin Abs

Autoantibodies that target thyroglobulin, which can lead to conditions like Hashimoto's thyroiditis.

### • Anti-Thyroidperoxidase abs

Autoantibodies that attack thyroid peroxidase, an enzyme in the thyroid gland, associated with thyroid disorders like Hashimoto's thyroiditis.

#### • Free T3

The active form of T3, a thyroid hormone that enters tissues to regulate metabolism.

#### Free T4

The active form of thyroxine (T4), a thyroid hormone regulating metabolism, heart rate, and body temperature.

#### TSL

Thyroid-stimulating hormone, produced by the pituitary gland to regulate thyroid function.

#### **Hormones**

Are important organic molecules that act like messengers in the body. After being made in one part of the body they travel through the blood to organs. They work mainly slowly and affect many different processes, including: Growth, Development, and Metabolism.

#### · Cortisol (Random)

A steroid hormone from the adrenal glands that regulates metabolism, immune response, and stress, and helps maintain blood pressure and cardiovascular function.

## • DHEA-Sulphate

A hormone precursor to testosterone and estrogen, found in both men and women.

#### • Free Androgen Index

The Free Androgen Index (FAI) calculates the ratio of total testosterone to sex hormone-binding globulin (SHBG), helping assess androgen status.

### • Free-Testosterone(Calculated)

Estimates the biologically active form of testosterone in the blood, providing insights into hormonal health and function.

#### • FSH

A hormone regulating sexual development; in women, it controls the menstrual cycle and egg production, and in men, sperm production.

### • LH

A hormone regulating sexual development; in women, it triggers ovulation, and in men, testosterone production.

### Oestradio

The primary female sex hormone, crucial for reproductive health, puberty, and menopause; also present in men.

### • Prolactin

A hormone that stimulates milk production during and after pregnancy; abnormal levels may affect fertility.

### • SHBG

 $Sex\ hormone-binding\ globulin,\ produced\ mainly\ in\ the\ liver,\ binds\ sex\ hormones\ in\ the\ blood.$ 

## Testosterone

A key male hormone regulating sex drive, muscle mass, and sperm production; also present in females in smaller amounts.