



Agilitas Sports

Health Screening Report

Glossary and explanation of terms

Your Results – Explained

Thank you for choosing to have our health screening. I hope you found the experience interesting and useful.

The following report features all your results from the scan, giving details of your body composition , hydration status, cellular health, metabolic health and physiology.

All content within your health assessment is provided for general information only and should not be treated as a substitute for medical advice of your own doctor or healthcare professional. The information provided is not used to prescribe, diagnose or treat a health problem or disease and we always recommend that you consult your GP if you are concerned about your health.

Some of the readings are very straight forward and easy to understand, whereas others might be go over your head a little.

Where this is the case, we have provided you with more information and a full explanation of what your results mean and steps that you can take to improve them for your next scan.

Your Data - how we store and use it

We use your data to produce your personalised health report and in the future we can also provide you with comparison results which is great for motivation. Data is stored on hard drive and protected by Norton Security. Should you wish us to remove your data please email us at agilitassports@gmail.com and we will do so within 2 days.

What are “Trends?”

On every report, for most of your analysis results, you’ll notice a “trend” graph.

If this is your first report, the graph will not mean a huge amount as there is only one value that will feature on each graph.

However, overtime, as you accumulate reports following subsequent re-tests, the trend graphs will begin to paint a far clearer picture of the improvements to your body composition and physiology.

The “Trend Graphs” you’ll be able to track include trends of your:

- B.M.I.
- Water distribution (intra-cellular and extra-cellular water)
- Wellness marker
- Blood pressure and heart rate.

If you have access to recent blood tests from your GP, such as cholesterol and blood glucose, please let us know as these can also be added to your report and made available as a Trend Graph.

Glossary & Explanation of Terms

Body Composition

Some of the terms in the following report might not make a huge amount of sense, so please refer back to this page to help give you an explanation of what they mean and how they are relevant to your health.

Body fat

Your body fat reading is the total amount of subcutaneous (fat under the skin) and visceral (fat covering the organs) in your body.

The report will give you an accurate weight (kg) of your total body fat as well as an overall percentage. The accuracy of this reading is high provided you followed all of the pre-test guidelines.

Healthy vs. Unhealthy Levels Of Fatness For Males & Females Of Different Ages				
Sex	Fatness	BF%: Age 20-39	BF%: Age 40-59	BF%: Age 60-79
Male	Underfat	<8%	<11%	<13%
	Normal	8 to 20%	11 to 22%	13 to 25%
	Overfat	20 to 25%	22 to 28%	25 to 30%
	Obese	>25%	>28%	>30%
Female	Underfat	<21%	<23%	<24%
	Normal	21 to 33%	23 to 34%	24 to 36%
	Overfat	33 to 39%	34 to 40%	36 to 42%
	Obese	>39%	>40%	>42%

Body Lean

Your "Body Lean" reading is the total weight of your muscle, bone and water. These readings should stay relatively constant for every test, with the exception of those subjects who are trying to build muscle mass through weight training.

Dry Lean

Your "Dry Lean" reading is the total weight of your muscle and bone. These readings should again stay constant for every test and as this reading excludes information about your water status, it should even more constant than your Body Lean reading - especially during the aging process.

Basal Metabolism

This reading is obtained from the information gathered about your muscle mass. In short, the higher your muscle mass and the more active you are, the higher your basal metabolism. This reading provides you with the number of calories you need every day to meet your resting energy requirements.

Activity Metabolism

Your activity metabolism is the amount of energy your body needs to meet the activity level you stated that you do at the time of the test. In short, the more active you are the higher your activity metabolism reading will be.

Glossary & Explanation of Terms

Hydration

Total Body Water (TBW)

Your TBW reading is the total amount of water your body holds. Your results will give you a reading in litres (l) and what percentage of your body weight is water. "Normal" levels are also provided so you can see if you are within a normal range. A further breakdown of your TBW is then provided - your ECW and your ICW.

Extra- Cellular Water (ECW)

Your ECW reading is given as a percentage of your TBW. Again, a "normal" range is provided, so that you can check that your ECW levels fall within a normal and healthy range. ECW is always less than your ICW.

If your ECW levels are on the high side, it could indicate ill health, water retention (common in women at certain times of the month), certain medications, over-hydration at time of the scan or that your diet is excessively high in sodium.

Intra- Cellular Water (ICW)

Like your ECW reading, your ICW reading is given as a percentage of your TBW.

A "normal" range is given so you know if you fall within a healthy or unhealthy range. Out of the two values, it is your ICW which is a key indicator of your health.

A good analogy is to imagine your cells as grapes. Cells should be well shaped, full and well hydrated. A well hydrated cell indicates good cellular health and will show up in your report as falling within the "normal" range or in some cases, even well above "normal"

If your cells are unhealthy, malnourished and dehydrated however, your report will indicate that your ICW levels are well below the "normal" range.

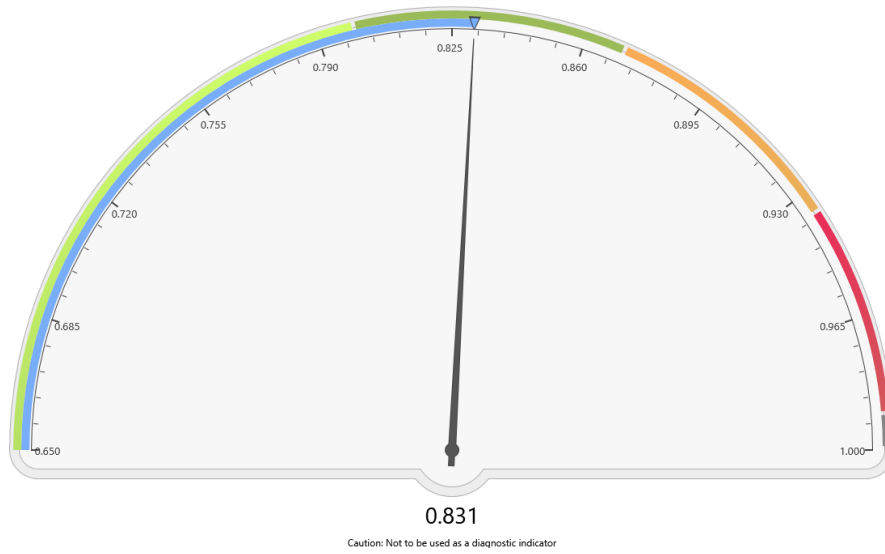
Of all the test results, it is your ICW level and associated tests (phase angle and wellness marker) which tells you the most about the integrity of your cells and the quality of your cellular health.

If your ICW levels are low, it is strongly advised that you review the quality of your diet by improving your nutrition and mineral intake, increase the amount of water you drink on a daily basis and review your weekly exercise regime.

ICW is a key indicator of the quality of your health. Do not ignore the results.

Wellness Marker

Wellness Marker



Normals of Wellness Marker

Extremely healthy - 0.600-0.799

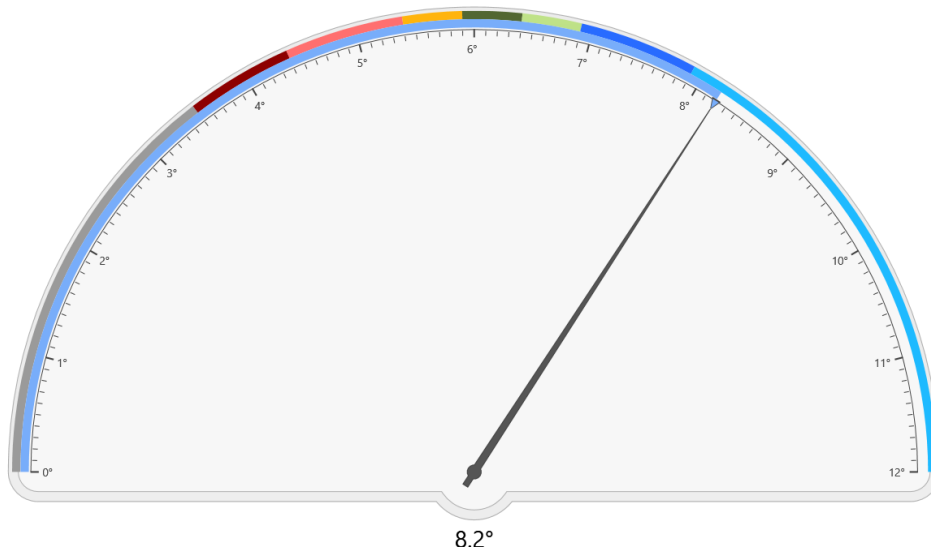
Normal - 0.800-0.870

Caution - 0.871-0.935

Illness - 0.936 -0.990

Severe Illness - 0.991-0.999

Phase Angle (50 kHz)



Normals of Phase Angle

Outstanding - 7.5-12.0

Very good - 6.4 - 7.5

Good - 5.9 - 6.4

Satisfactory - 5.4 - 5.9

Sufficient - 4.9 - 5.4

Unsatisfactory - 3.9 - 4.9

Poor - 3.0 - 3.9

Extremely Poor - 0.0 - 3.0

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Phase Angle

Your Phase Angle reading is the direct measurement of the integrity of your cell membranes and how well they function - a measurement of your body's overall health.

When illness or malnutrition occurs, the voltage of the cell membrane is altered, which is picked up as a lower Phase Angle.

- A LOW phase angle is an indicator of cell membrane breakdown and inability of cells to store energy.
- A HIGH phase angle indicates that the membranes of the cells are intact and body cell mass (BCM) is high.

IMPORTANT: Every individual will have their own 'normal' phase angle and what might be a low value for one person, could be a completely normal value for another.

So, whatever value your assessment shows to be your Phase Angle, it is used as a control and changes are monitored over time to track recovery of illness or use as preventative marker before onset of illness occurs.

What's a good Phase Angle?

As a general guide, if your Phase Angle is above 5, your cell health is good. There is room for improvement if it's 5 or so, but anywhere near 10 and your cellular health is exceptional.

If your Phase Angle is below 5 however, your cell health may need to be addressed by improving your nutrition and lifestyle. As explained, even if you have a low Phase Angle you may well be in good health but just naturally have a low Phase Angle. Subsequent tests and improvements (where necessary) of nutrition and lifestyle etc. will prove this however and with improvements in diet, lifestyle and exercise habits, an increase in Phase Angle is often seen.

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Wellness Marker

Your “Wellness Marker” reading is essentially a ratio of the time it takes currents to travel around your cells and through your cells.

Body cells are “non-conductive” at a low frequency of 5 kHz and restrict the flow of current. High Impedance values are then measured in the human body.

At the higher frequency of 50 kHz, the body cells become more conductive and a lower Impedance value is measured.

The integrity and health of your cells can then be characterised by the ratio between measured impedance values at 50 kHz and 5 kHz. This ratio is also called the Wellness Marker.

- A VERY HEALTHY Wellness Marker value, often seen in fit and athletic people is around 0.800 or lower.
- A NORMAL Wellness Marker value demonstrating good health is around 0.845.
- AN UNHEALTHY Wellness Marker value, often seen in those who are chronically dehydrated, unwell and make poor lifestyle choices is a value higher than 0.900.

Improving your Wellness Marker

If you are disappointed or surprised at your Wellness Marker value, it’s advised that you sit down and review your nutritional, lifestyle and exercises habits.

Often, simply improving the quality of your diet by eating more fresh whole foods, reducing your alcohol intake, drinking more water and exercising more frequently will help to significantly improve both your Phase Angle and Wellness Marker values.

The importance of your cellular health has been stressed several times through this report and the Wellness Marker along with your Phase Angle is an excellent way to give you an analysis of your cell health.

If you’d like more advice on how to improve your cellular health through nutrition, we are here to help. If we feel you require more specific nutritional advice, we can direct you to professionals who specialise in these areas and provide you with bespoke nutritional guidance.

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Physiology Report

Heart Rate

This is the number of times your heart beats per minute at rest. Normal values are between 60-85 beats per minute. Lower resting heart rate indicate a strong and healthy heart.

Blood Pressure

This is the pressure of the blood in your circulatory system. With each heart beat a higher pulse of pressure is forced around the system, this is systolic pressure. In the lulls between heart beats a lower pressure is exerted, diastolic pressure.

As a general guide:

- ideal blood pressure is considered to be between 90/60mmHg and 120/80mmHg
- high blood pressure is considered to be 140/90mmHg or higher
- low blood pressure is considered to be 90/60mmHg or lower

High blood pressure

High blood pressure is often related to unhealthy lifestyle habits, such as smoking, drinking too much alcohol, being overweight and not exercising enough.

Left untreated, high blood pressure can increase your risk of developing a number of serious long-term health conditions, such as coronary heart disease and kidney disease.

Lung Function

This tells us how well our lungs are working.

- PEF is the maximum speed of air as someone exhales as hard as possible after filling their lungs completely.
- FEV1 is the volume of air that can be forcefully expelled within 1 second.

Cholesterol

Cholesterol is a fatty substance known as a lipid and is vital for the normal functioning of the body. It's mainly made by the liver, but can also be found in some foods.

Having an excessively high level of lipids in your blood (hyperlipidemia) can have an effect on your health

High cholesterol itself doesn't usually cause any symptoms, but it increases your risk of serious health conditions for example narrowing of arteries, heart attack, stroke and arterial disease.

What causes high cholesterol?

Many factors can increase your chances of having heart problems or a stroke if you have high cholesterol.

These include:

- **an unhealthy diet** – in particular, eating high levels of [saturated fat](#)
- **smoking** – a chemical found in cigarettes called acrolein stops HDL transporting cholesterol from fatty deposits to the liver, leading to narrowing of the arteries (atherosclerosis)
- having [diabetes](#) or [high blood pressure \(hypertension\)](#)
- having a family history of **stroke** or **heart disease**

There's also an inherited condition called familial hypercholesterolaemia, which can cause high cholesterol even in someone who eats healthily.

Fasting glucose

This is the level of sugar in your blood after refraining from eating or drinking for 8 hours. High levels of fasting glucose may indicate diabetes.

Non-Fasting glucose

This is the level of blood sugar whilst undertaking normal eating and drinking.

NICE recommended target blood glucose level ranges

Target Levels by Type	Upon waking	Before meals (pre prandial)	At least 90 minutes after meals (post prandial)
Non-diabetic*		4.0 to 5.9 mmol/L	under 7.8 mmol/L
Type 2 diabetes		4 to 7 mmol/L	under 8.5 mmol/L
Type 1 diabetes	5 to 7 mmol/L	4 to 7 mmol/L	5 to 9 mmol/L
Children w/ type 1 diabetes	4 to 7 mmol/L	4 to 7 mmol/L	5 to 9 mmol/L

*The non-diabetic figures are provided for information but are not part of NICE guidelines.

Grip Strength as measured by a grip dynamometer.

Flexibility the range of movement in the back and hamstrings as measured in the sit and reach test.