

Know your numbers

What are the right numbers for you to live by?

With so much conflicting information out there on height, weight, what to eat when, different diets and self proclaimed fitness gurus popping up on social media preaching a variety of information all claiming to be the best, it's easy to see how you can get confused.

However there are some numbers you should pay attention to as they provide a good general guide to health. Each of the below has guidelines indicating good general health:

- Body Mass Index
- Hip-to-Waist Ratio
- Blood Cholesterol
- Blood Pressure
- Exercise Levels

Body Mass Index (BMI) uses your height and weight to calculate if you're at a healthy body weight, it provides a number of how much you weigh by m². A BMI of 20 would translate as 25kg/m². You can measure your BMI using the following equation:

$$\text{Weight in Kilograms (kg)} \div (\text{Your Height in Metres})^2$$

BMI takes into account variations between individual body shape and size, it is independent of age and sex. It produces a standardised number that tells you if you are a healthy weight for your height. BMI is split into the following groups:

Less than 18.5	Underweight
18.5 to 24.9	Healthy weight
25 to 30	Overweight
30 to 35	Obese Class 1
35 to 40	Obese Class 2
40 and over	Morbidly Obese

If you are classed as overweight or above it increases your risk of certain health problems such as type 2 diabetes, coronary heart disease certain types of cancer including breast and bowel, and stroke. It can also affect your quality of life and lead to mental health issues including anxiety and depression.

Your Ethnic origin combined with BMI may also affect your risk of certain health conditions, for example those who are of Asian origin may have a greater risk of health problems below BMI 25.

BMI doesn't differentiate between muscle and fat, so you may be a fit individual who takes part in physical sports such as rugby or football and may have a higher lean muscle mass, meaning you're categorised as overweight or obese. BMI is not the only factor in deciding obesity, it is just an indicator used alongside other tools to provide an overall picture.

You could combine BMI with your waist-to-hip ratio (WHR) to provide a better overall picture of health. This is used to measure how much body fat is stored around your midsection, as not all excess weight is the same when it comes to health risks. People who store more weight around their midsection are at a greater risk of developing heart disease, type 2 diabetes and even a greater risk of a premature death.

The World Health Organisation has given these guidelines and risk categories:

Health Risk	Women	Men
Low	0.8 <	0.95 <
Medium	0.81 – 0.85	0.96 – 1.0
High	<0.86	<1.0

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To measure you WHR:

- Use a tape measure to check the distance around the smallest part of your waist, just above your belly button. This is your waist circumference.
- Then measure the distance around the largest part of your hips – the widest part of your buttocks. This is your hip circumference.
- Divide your waist circumference by your hip circumference to get your WHR

Blood cholesterol can be split into three groups – Total, HDL and LDL. Total is the total level of cholesterol in your blood and ideally it should be no more than 5 mmol/L. LDL-cholesterol (Low density lipoproteins) are the bad cholesterol and readings should ideally be below 3mmol/L. HDL-cholesterol (High density lipoproteins) or good cholesterol should have a minimum reading of 1mmol/L.

If your Total or LDL readings are too high or HDL reading is too low this could leave you at greater risk to various health problems that include atherosclerosis, heart attack, stroke, coronary heart disease as well as increasing the risk of developing a blood clot somewhere in your body.

Blood pressure is the measure of force that your heart uses to pump blood around your body and is measured in mmHg. You have two readings, the first (systolic) is the measurement when your heart contracts, the second (diastolic) is taken when your heart relaxes.

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 is often associated with an unhealthy lifestyle, including low exercise levels, excess alcohol intake, smoking and being overweight. If this isn't identified or is left untreated it can increase your risk of developing coronary heart disease or kidney disease. Low blood pressure can be a side effect of certain medications or could be a symptom of an underlying health condition, these could include dehydration or heart failure.

The good news is that exercise and a healthy balanced lifestyle are able to improve all of these numbers. Exercise has been proven to reduce blood pressure, decrease excess body fat – thus reducing your BMI and WHR, reduce blood cholesterol levels and decrease your blood pressure.

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How much exercise should you be aiming for?

National guidelines state that you should aim to complete 150 minutes a week of moderate exercise, this equates to 30 minutes a day for 5 days out of 7. Moderate exercise is described as activity that elevates your heart rate above resting, it increases your core body temperature and your breathing rate. This could be going for a brisk walk with the dog, taking the stairs to the office or at the shopping centre.

You should also include resistance training in your exercise routine, this will improve your skeletal muscle strength, improve your bone density and your posture. By doing so you will decrease the risk of any MSK issues from developing such as postural related issues, in addition to preventing osteoporosis and reducing the risk of injury.

Increasing your activity levels also has other benefits upon your body, it reduces your risk of developing heart disease, type 2 diabetes, cancer and the risk of having a stroke.

What you should aim for:

- Activity Target – 150 minutes moderate exercise per week
- BMI – 18.5 – 24.9
- WHR – 0.8 < (Women) 0.95 < (Men)
- Blood Pressure – 90/60mmHg – 120/80mmHg
- Total Blood Cholesterol – 5 mmol/L <

So there you have it, no more confusion – aim for this and you will see your health improve significantly!

References

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