



Work out your maximum Heart Rate (beats per minute: BPM)
 $220 - \text{your age} = \text{Max BPM}$
 Your ideal training zone is 70%-80% of this number.

How to find your Pulse

There are two main spots for taking your pulse. Every time the heart beats it pushes blood through the arteries. The arteries expand and contract to allow the blood to flow, this creates a beat which is measured.

Spot 1: Radial Pulse
 Using your second and third fingers press on the wrist when the palm is facing up, following along the thumb line. Press lightly to feel the beat.

Spot 2: Carotid Pulse
 Place your thumb on your chin and swing your two fingers onto the side of the neck. On each side of the neck there is a groove where you can feel for the beat.

Count the number of beats in 15 seconds, now multiply the answer by 4 to get your BPM.

Spot 1:



Spot 2:



Diet can affect your health and fitness. A healthy diet can help to prevent cancer. Healthy foods can also help maintain a healthy weight.

FACTORS THAT AFFECT HEALTH AND FITNESS

Environment can also affect your health and fitness. Access to clean air and clean water are two basic bodily needs. Without them, your body will wither and decline.

Age affects your health and fitness because as you become older, your body becomes weaker

Exercise affects your health and fitness in a good way. Your muscles start to produce more CO₂ as they work harder. To get rid of the extra CO₂ you start to breathe deeper and faster. Your heart rate increases to pump more oxygen around the body. Your arterioles widen to stop your blood pressure increasing. When your muscles contract they squeeze blood back towards your heart. Your heart contracts even stronger to pump more blood with each beat.

Principles of training- S.P.O.R.T & F.I.T.T

The acronym **SPORT** can be used to remember the main principles:

Specificity (S) - training must be **relevant** to the **individual** and their **sport**.

Progressive overload (P and O) - training frequency, intensity, time or type (FITT - see below) must be **increased** over the training period to ensure that the body is pushed beyond its normal rhythm.

Reversibility (R) - systems **reverse** if training stops or is significantly reduced or injury prevents training from taking place.

Tedium (T) - athletes need variety in their training to prevent boredom but also some types of overuse injuries such as strains or even stress fractures.

The acronym **FITT** can be used to remember the principles

Frequency—how often you exercise

Intensity—how hard you work during exercise

Time—how long you exercise during each session

Type—what exercise you do



5 components of fitness

Muscular Endurance:

Muscular endurance is how many times you can move weight without getting exhausted.

Muscular Strength:

Muscular strength is the amount of force you can put out or the amount of weight you can lift.

Cardiovascular Endurance:

Endurance fitness is the ability of your heart, lungs and blood vessels to give you enough energy to do activities for a longer period of time. Good endurance fitness is a sign that your heart and lungs are strong and able to meet the demands of increased activity.

Body Composition:

The proportion of fat and fat free mass in the Body. Those with a higher proportion of fat Free mass in relation to body fat have a healthier body composition

Flexibility

Flexibility is the amount of movement you have around a joint, like your knee or hip. Being flexible helps you have safe and healthy joints and muscles. Since not all joints are the same, just because you're flexible in one joint doesn't mean you'll be flexible in others.