

Training methods

Strength : **Muscular strength** is the amount of force a muscle can produce in a single effort.

Dynamic strength exercise is any exercise that involves joint movement. ... When performing **dynamic** exercises, like the push up or a squat for example, it's important to move through what's called the full range of motion (ROM). It involves concentric and eccentric contractions.

Static strength is the ability to apply a force where the length of the **muscle** does not change and there is no visible movement at a joint. It involves static contraction.

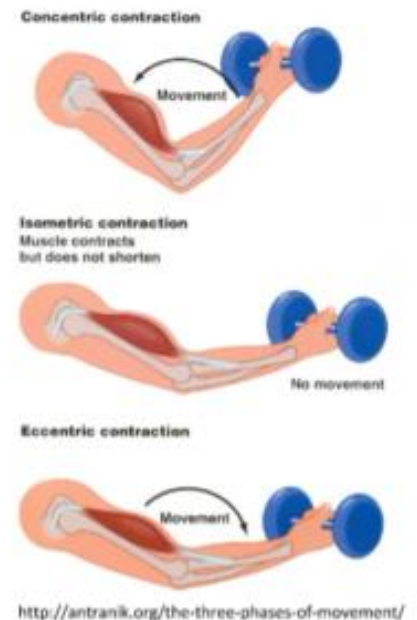
Static Muscular Endurance A **muscle's** ability to remain contracted for a long period. This is usually measured by the length of time you can hold a body position. It is also called **isometric endurance**.

Dynamic Muscular Endurance A **muscle's** ability to remain dynamically working for a long period. This is usually measured by the length of time you can hold the same move. It is also called **dynamic endurance**.

Concentric contraction : A concentric contraction is a type of muscle activation that causes [tension](#) on your muscle as it shortens. As your muscle shortens, it generates enough force to move an object. This is the most popular type of muscle contraction.

How static contraction works can be deduced by its name (elementary my dear Watson). Let's think about it for a second: 'static' – meaning still/motionless, and 'contraction' – meaning to tense the muscles and use them. So the idea then in static contraction is simply to force your muscles to work without actually moving.

An **eccentric** (lengthening) muscle **contraction** occurs when a force applied to the muscle exceeds the momentary force produced by the muscle itself, resulting in the forced lengthening of the muscle-tendon system while contracting



Maximal muscular strength is the ability of a **muscle** or **muscle** group to generate **maximal** force. One repetition **maximum**, measured in kilograms, is a commonly used measure of **muscular strength**.

What is Muscle Power?

Sports Definition: the ability to exert a maximal force in as short a time as possible, as in accelerating, jumping and throwing implements.

While strength is the maximal force you can apply against a load, power is proportional to the speed at which you can apply this maximal force.

What is Speed?

Sports Definition: Speed is the ability to move quickly across the ground or move limbs rapidly to grab or throw.

Different types of training video

<https://exercise.trekeeducation.org/resistance-training/what-is-resistance-training/>

More or different definitions

<https://community.plu.edu/~chasega/terms.html>

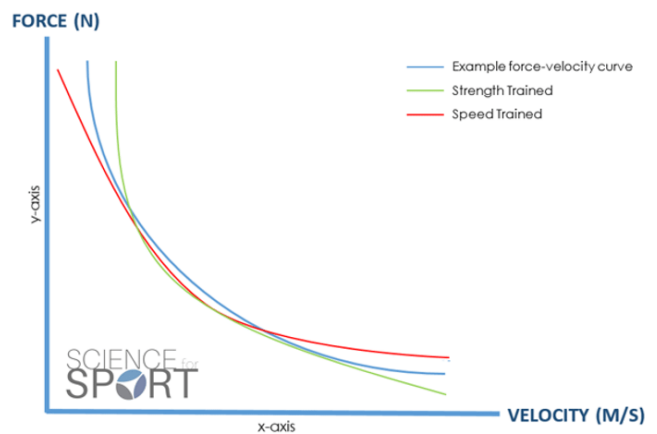
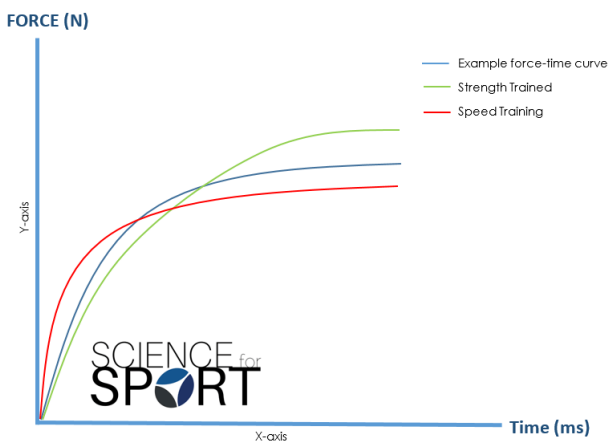


Figure 3. Force-velocity curve after training specific elements.

Maximal Strength

