

# Core Strength

## What is core strength and stability?

**Core strength is the ability of the trunk to support the effort and forces of the arms and legs so the muscles and joints can work in their strongest, safest and most effective position.**

In simple mechanical terms a strong stable base is needed for any lever system to work. In this case the muscles of the torso stabilise the spine to provide a solid foundation for movement in the arms and legs.

### Benefits of core training

Your body is constantly challenged to react to its environment, whether you are working out or simply living your life. A strong, stable core has far reaching results:



Greater capacity for speed generation - whether running, throwing, skiing or sprinting.



More efficient use of muscle power.



Decreased injury risk.



Increased ability to change direction.



Improved balance and muscular co-ordination.



Improved posture.



Improved performance.



Allows one to do more with less effort.



Aesthetic benefit of toning the body's natural 'corset'.



**In a nutshell, your body can function more effectively with less risk.**

# Core Strength

## What is core strength and stability?

### Core training

Approximately 80-90% of the adult population suffer from lower back pain (lumbar -sacral dysfunction). Treatment for this condition varies, however core stabilisation exercises are now often used for rehabilitation and prevention of low back pain.

The idea of training these muscles is to create support for the spine before movement. When the spine is supported before movement it helps to reduce shear force and compression during movement.

The main concept of core training involves using multiple muscles in a co-ordinated movement, rather than isolating a specific muscle as in most weight lifting. Stability exercises focus on working the deep muscles of the entire torso.

**Becoming aware of movement and bringing the protection of the spine back under conscious control is an important part of core training.**



Those new to exercise or who have not been physically active for a long time may have poor movement patterns. Challenging the body to exercise in an unstable environment (using a Swiss ball or closing the eyes) increases the recruitment of motor units involved in the movement and results in more effective movement patterns.

### Training

A fitness advisor can incorporate the right core training activities into your exercise plan. They will also be able to check your technique and discuss with you the appropriate frequency, repetitions and progressions.

