



CORE STABILITY AND LOWER BACK PAIN

Training obviously focuses on visible muscle groups mainly in the arms and legs. While these muscles are required for activities like walking up stairs, running, jumping and lifting, what is often overlooked is an understanding that these muscles need a solid base to pull from for them to be effective. This solid base is the body core and the training of core stability develops this.

The ability of your trunk to support your everyday functional activities enables your muscles and joints to perform at their safest and most effective position. Core stability is now used widely in sport for prevention of injury; improve balance, coordination, and increase speed / power.

Your core is your back, pelvis and shoulder girdle. The pelvic girdle functions, using your abdomen and gluteals (bottom) muscles working to maintain this position relative to the spine. If the wrong muscles are used to transfer the forces through this core area of your body or the appropriate muscles work but are weak the body will try to compensate. It is when the body tries to compensate that it loses efficiency that leads to a loss of posture and strength. This loss of core strength and poor posture predisposes the individual to injuries especially lower back pain.

The muscles that are responsible for the transfer of the force between your limbs that stabilise your central body (core) are essential for optimal body function and back care. It doesn't matter how much weight training you do on your arms, legs you can only be as strong as your weakest link and if your core is weak you are predisposing yourself to injuries and long term back pain.

Core stability not only decreases the risk of sustaining back injuries but also improves balance, muscular coordination, the ability to develop power this is all very important and is required especially when lifting objects or bending forwards. This is when so many back injuries occur. Therefore by adding core stability exercises into your weekly schedule you can not only prevent possible back problems but also improve your overall physical performance.

There is a misconception regarding your abdominal muscles, although the abdominals are one of the key stabilisers in the trunk they are often trained by doing sit ups and crunches. Doing sit-ups trains the abdominals as mobilisers, which creates motion as opposed to training the abdominals as stabilisers which would support and hold your trunk and help transfer forces through moving limbs.

Exercising on an unstable base like an exercise ball helps to stimulate the core stabilisers and wake them up. Through inactivity, sedentary life style or previous back injuries the core stabilisers become weak and often are not easily recruited. With regular stimulation and mental focus your core stability will improve and those muscles that have been inactive will over a period of time start to activate automatically.

If you have back pain or have not exercised on a regular basis you should consult your GP or local chartered physiotherapist before carrying out any exercise.

Mark Saunders Chartered Physiotherapist
Director Physio4Life Limited