

body matters

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Spinal Stability: sit-ups are not the answer!



The spine is inherently unstable and relies on the activation of the deep trunk muscles to stabilise it. If these muscles are ineffective or inhibited (as can happen after an episode of back pain), the spine is more at risk of injury (Think of a sailing ship's mast without the rigging to support it). Regular training of the deep core muscles can help prevent episodes of pain. It also has the added benefit of making the waist trimmer!

Background

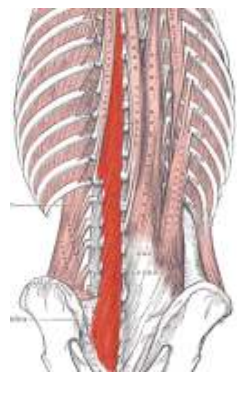
Attached to the spine are a number of muscles (the deep core) which act like an active corset to stabilise the spine and pelvis, reducing the likelihood of back pain. If these muscles are inhibited after an episode of back pain, they need to be re-educated to help prevent recurrence. Specific core stability exercises or pilates are good ways of working your deep core. Those who perform heavy tasks, or sports at a competitive level will need higher levels of core stability training.

Anatomy

The main muscles which are involved in stabilising the lumbar spine (low back) are lumbar multifidus and transversus abdominis (see below)



Transversus abdominis



Multifidus (back view)

Rationale for specific deep core training

Doing lots of sit-ups or crunches will not give you good core stability. These exercises primarily work the more superficial muscles, such as rectus abdominis (six-pack muscles). They also work the muscles at a high force load, so that the muscle fatigues quickly. The deep core muscles work at LOW intensity, but, if working correctly, do not fatigue. A good thing, when you consider that they are responsible for maintaining your posture. Specific core stability training, as prescribed and taught by a physiotherapist, or pilates, when performed correctly, will encourage correct activation of these stability muscles.

For our basic core stability programme, please go to www.ruislipphysio.com/Newsletter/ExerciseSheetRP.pdf or download a copy from www.ruislipphysio.com

