

CORE MUSCLES

You will hear the term 'core' muscles used a lot these days. It may not be clear exactly what 'core' means. Core muscles are specific muscles intended to stabilise the spine in a corset – like way, and give over all control to the muscular system of the entire body.

Core / tonic muscle are deep within and function as our internal scaffolding. They should be switched on 24/7 with a low amount of tone for longevity of activation. If we try to activate these too vigorously, we inevitably just end up bracing our whole body, and recruit the bigger prime moving muscles.

The superficial muscles which are responsible for big movements and mobility are known as phasic muscles , which should be used accordingly – switched on and off in phases – not switched on all the time for postural support.

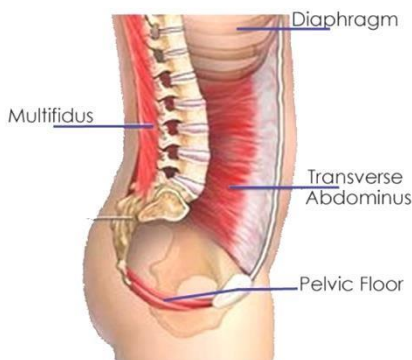
These specific functional differences do not always occur as intended due to issues such as altered biomechanics, trauma, surgery, poor strength etc. Resulting in our core muscles going on a holiday. The outcome sees the big moving muscles beginning to over compensate, overactive and inevitably attempt to take on the role of the postural core muscles, which is not their job. In this instance, we start noticing biomechanical dysfunction, tight over used muscles, and a musculoskeletal system which is not operating in a harmonious way – all leading to pain and aberrant sensation.

TONIC / LOCAL CORE MUSCLES

Transversus Abdominus (TA), Lumbar Multifidus, Pelvic Floor (PF), diaphragm (accessory CORE muscles = glut med/min).

OVERACTIVE PHASIC / GLOBAL MUSCLES

Iliopsoas (hip flexors), Piriformis (deep buttock), All superficial lumbar, thoracic and neck muscles, hamstrings, adductors, superficial abdominal (rectus abdominal, internal and external obliques).



Think of the core as an internal cylinder with the following components

LID= Diaphragm

ANTERIOR WALL= TA

POSTERIOR WALL = Multifidus

BASE= PF

ACTIVATION OF CORE (BI = breath in, BO = breath out)

- Lay on the ground (not bed, too soft) bend knees, find neutral spine : arch / flatten / arch / relax into position to maintain the small curve in the lower back so at any time you can slide a silk scarf under one side and out the other. Maintain throughout core exercise, never flatten the back to the ground.
- Stay relaxed! If you feel yourself bracing anything – butt, neck, back, legs etc, relax relax relax – imagine lying on a hot sunny beach somewhere. If you need fingertip feedback for muscle activation place them gently on the inside of the hip bones
- Take a relaxed B.I (thinking wide breath into base of lungs) and as you B.O gently activate core using **YOUR** cue :
 - 1) elevate the core by imagining lifting the elevator from ground up to level 2. B.I relax again, B.O activate again
 - 2) draw the turtle head into the shell. B.I relax again, B.O activate again
 - 3) green pea gentle suction up the straw. B.I relax again, B.O activate again
 - 4) magnets drawing together from hip bone to hip bone. B.I relax again, B.O activate again
- Attempt approx. 5 mins of this AM and PM