

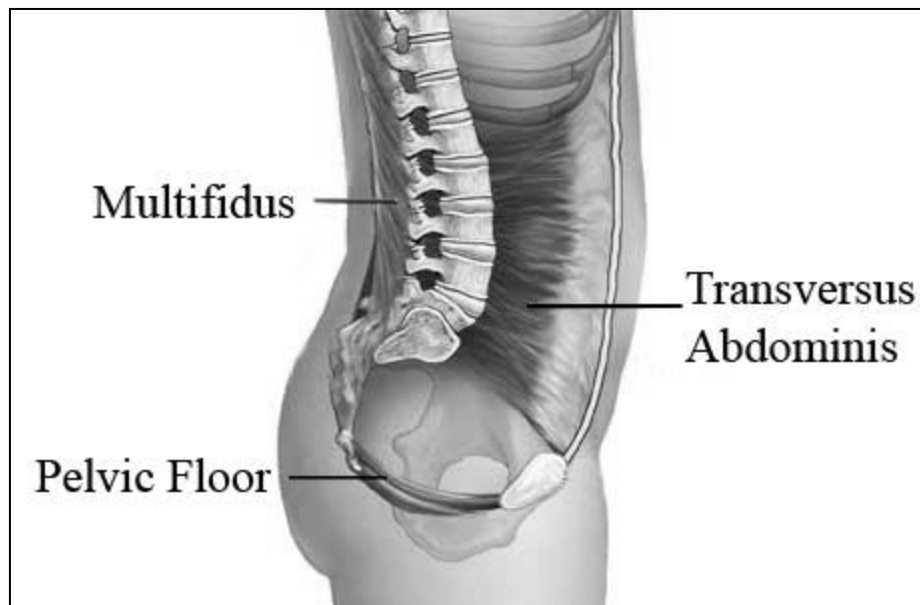
Anatomy - The Inner Unit

The “***Inner Unit***” is a very special group of muscles that are the true basis for effective core stability. They work together to control the spine and pelvis in a gentle way.

The Inner Unit can be inhibited by pain so must be specifically retrained after any back injury. This includes back pain, pelvic pain (period pain) or pain from surgery (such as having your appendix taken out).

All of these muscles are classed as ***Postural Muscles*** and are made up of mostly ‘slow twitch’ muscle fibres. Any training for these muscles must be performed slowly, held for longer periods of time and repeated many times.

The Inner Unit is made up of the following muscles...

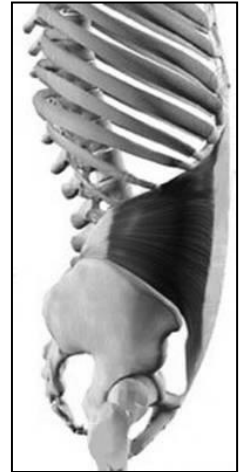


The Diaphragm

The diaphragm is the driver of good core control and is situated at the top of the core unit. It brings about the gentle stretch needed in the pelvic floor and TrA to allow them to contract effectively. This is why good gentle belly breaths are essential for good core activation.

Transversus Abdominis (TrA)

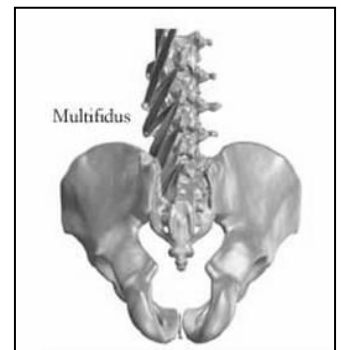
TrA is the true, deep abdominal muscle. This muscle wraps around the mid section like a corset. The fibres lie horizontally. When this muscle activates it does not move the spine in any way but narrows the waist slightly. It gently tightens the ‘fascia’ or fibrous sheaths that attach into the spine, stabilizing it. If there is pain in a specific area of the spine, one isolated band of this muscle may switch off, creating instability at one or two joints.



The Deep Back Muscles (Multifidus)

There are several small deep back muscles however the main one that we will talk about today is called Multifidus.

While the name is sometimes hard to remember these tiny muscles are very important in core stability, especially in hypermobile people. If they are not working well, the bigger back muscles will get overloaded and sore.



The Pelvic Floor

These muscles help to control when we go to the bathroom but also control our core stability! They are linked to the deep abdominals and deep back muscles and help to keep tension in the pelvis. (These are very important muscles for pregnant women!)

