

## Visceroptosis

Visceroptosis is an extremely common dysfunction especially in women. This is when the deep abdominal wall is too weak to support the organs. The weight of the organs slowly adds pressure to the intestinal tract and it then can prolapsed. This can shut down many functions within the body and is a major form of stress within the body. Correcting any imbalance in the core will assist in fixing this common problem in woman.

## Back Pain

The most common source of back pain can be traced to muscle imbalance in the abdominal structure. With proper corrective strengthening exercises for any imbalance you have in the core you can minimize or remove back pain related to Core Imbalance.

## To activate the TVA

To activate the deep abdominal wall, draw the belly button towards the spine, at the same time pull up through the pelvic floor like trying to stop urination in mid stream. Hold for 10 secs and repeat often.

This will not strengthen this muscle greatly as there is more involved, but it will teach the brain to activate this very important muscle that stabilizes our spine.



Fitness  function



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Michelle Owen C.H.E.K. Practitioner Level 3, C.H.E.K. NLC Level 2

# The Core

Core Stability is becoming a more frequently used word in the health, fitness and the sporting industries. But when I look around at the quality of training that presents itself, I can see that training the "Core" it is a very misunderstood subject.

## What is the Core?

If you take away your arms, legs and your head, you are basically left with the core - your back and abdominals. The Core is the only thing that joins our upper body to our lower body. Although the rib cage houses and protects all of the major organs in the upper thorax, it is the four layers of abdominal muscle that support and protect the viscera (organs) of the lower thorax. These four muscle layers wrap around the entire abdomen in multiple directions. When working properly they also assist in supporting good circulation and healthy organ function.

Another major function of the abdominal wall is to stabilize our spine. The Core is the foundation for all our movement.

## Let's take a look at the deeper layers of Abdominal Wall.

The deepest layer is the Transverse Abdominals. It runs horizontally just like a weight belt and is in fact is our own natural weight belt. Its connection is in the low back or thoracic-lumbar fascia in more technical terms, and Transverse Abdominals are the main stabilization of the lumbar spine region of your spine providing they are stable and functioning properly.

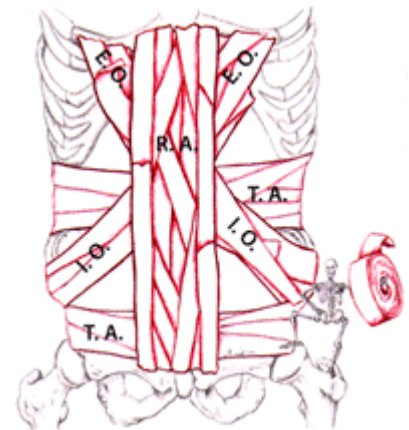
The next layers of the Abdominal Walls are the External and Internal Oblique Muscles. These muscles run diagonally across your trunk. Their job is to rotate our trunk and assist in side bending movements.

Then on the top layer we have Rectus Abdominals which is the top layer of the abdominal wall. You can often here it referred to as the "wash board" or "six packs". This section of the Abdominal Wall is like a shield to protect our organs. They are one big sheath of muscle that attaches from the upper ribs and xiphoid process right down to the pelvic bone. It has two different neural functions, driven by two different nerves, so when the upper abdominal moves the

lower acts as a stabilizer and you have the reverse when the lower is being worked or moving.

This muscle is commonly trained inadequately and too often with poor quality crunch style exercises. In the Core, the Rectus Abdominals are considered the outer unit of the abdominal wall. When over trained or tight, this muscle can pull people into a round shoulder forward head posture (see posture and pain newsletter on website, February 2006).

As you can see from the picture below, the many layers of abdominal wall wrap around our trunk in many directions, just like a package that has been wrapped for a long journey.



The core has eight different neural functions and as such this makes it a very complex area. What that means is that there are eight different nerves that facilitate the control and function of the core from the Brain.

To properly train the core / abdominal wall properly you should first be **assessed** to determine where the weaker portions of it are. You can not determine a proper course of training and strengthening without a proper, clinical assessment to determine the correct course of action to correct imbalances and apply the right training methods.

From my years of testing abdominal function I more often than not see weakness in the T.A. (transverse abdominal), the Lower portion of rectus abdominal and the internal oblique. This is a general observation and there is always exceptions to this with different postural positions and other imbalances within the person.

Quite often the upper rectus abdominal although not always strong is usually stronger than the deeper layers that support our spine. If the deep layers of the abdominal wall do not function, then there will be limited, poor or even no support for the spine. This amongst other postural positions creates pain too many degrees in people.

This in turn places different stress on our limbs and can reflect the imbalance in pain and or discomfort anything from the neck, shoulder, hip, knee and ankles can all be affected if the spine is not stabilized by the core. You could relate this to the trunk of a tree. If the trunk is weak the branches will not get the required support and they themselves could not be strong.

Once assessed the weak portions of abdominal wall should be isolated to gain neural function (teach the brain how to operate them again). Once this is achieved it is extremely important to integrate these muscles into all our functional movement patterns and exercises. In every day life no muscles work alone so it is not optimal to train them this way.

Functional training can be related to big patterns that mimic human movement. This type of training should integrate the body as a whole and not isolate it into little areas. The only time that certain muscles should be isolated is when there is weakness in a particular area e.g.: transverse abdominals would be trained alone to start so the brain knows how to control and operate it. Then it must be integrated into bigger patterns at a level that the brain can still control and built up slowly into strength. If you train with more load than a weak muscle can handle other muscles just try and do the job, this creates more dysfunction and imbalance within the body.

Remember you are only as strong as your weakest link.