

The Core to your Core

"Strengthen your core!" "You have a weak core!" "Your core is very important!"

These are all phrases we have heard throughout our life. Whether it's from the media, your gym teacher, or even your physiotherapist (hello!), we are always told about how important the core is to our bodies. We've all heard about this mysterious "core", but what exactly is it? And why is it so important?



What is the Core

The core is a group of muscles that provide support for your spine. Most people think of the "abs" as the core, but that's only one aspect of it! There are 2 groups of muscles that make up the core: the inner core, and the outer core.



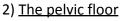


The Inner Core

The inner core are the muscles that surround your spine. They are deep within your body, and hard to control. When there is a dysfunction within this group, it usually presents itself as low back pain. This is because the motor control of these muscles may be altered, which hinders their ability to support your spine with movement. The four muscles of the inner core include:

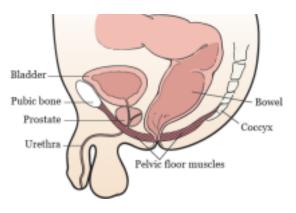
1) The diaphragm

The diaphragm is an important muscle for breathing. When you take a deep breath in, the diaphragm flattens, which increased pressure on the spine. This is why you always hear about the importance of breathing while strength training! Improper breathing coupled with improper lifting techniques can lead to spinal injuries!



The pelvic floor is the group of muscles within your pelvis that basically prevent your organs from falling out of your nether-regions. These muscles prevent you from accidentally urinating when you are sneezing or coughing. When these muscles are strong, they provide a snug home for the spine.





3) <u>The multifidus</u>

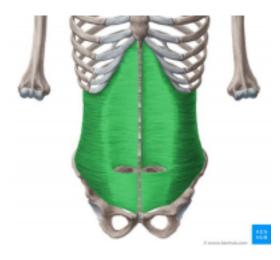
The multifidus is a group of spinal muscles that directly attach to the spine. Although small, they help stabilize the spine from segment to segment. This helps prevent disc issues from occurring.





4) The transversus abdominus

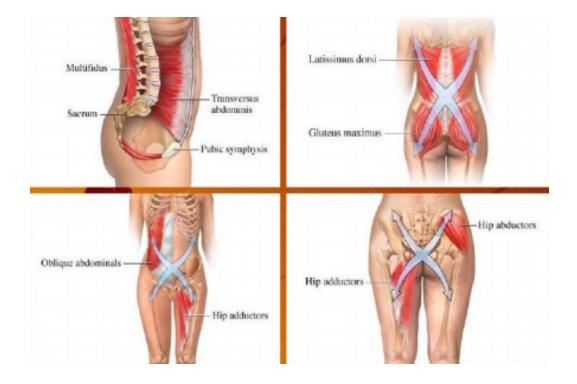
The transversus abdominus is a muscle that lays on the front of your belly between your two hip bones. When this muscle is strong, it acts as a corset for the spine.



The Outer Core

When people think of the core, they tend to think of the outer core muscles. These are the larger muscles that are easily visible to the naked eye. Some of the biggest outer core muscles include:

Rectus abdominus
Spinal erectors
Gluteus maximus
Gluteus medius/minimus
Hip adductor muscles
Latissimus dorsi
Oblique muscles
Quadratus lumborum





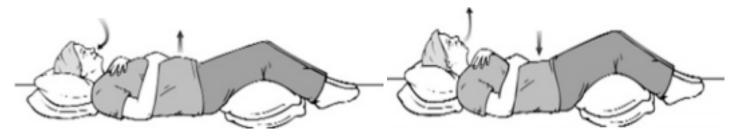
These muscles form "sling systems" that function together to provide further support to the spine. These muscles are the easiest to strengthen. Because of this, they tend to be over strengthened while the inner core muscles tend to get forgotten about. This can lead to an imbalance, which can also cause pain!

Exercises for the Core

Below are some very basic exercises for your core muscles. Remember, if these exercises cause pain or worsen your condition, stop doing them!

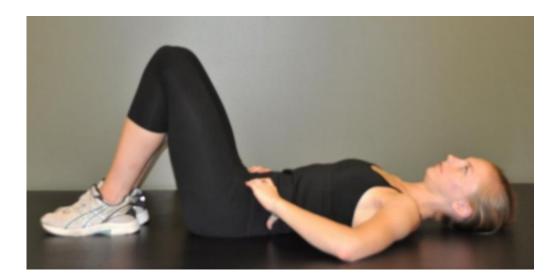
1) Deep breathing (for the inner core)

Laying on your back, with your knees bent and feet flat on the ground, place one hand on your belly. Take a deep breath in, directing the airflow towards the hand on your belly. Your belly should expand outward as you breathe in. Breathe in for 3 seconds, hold for 1 second, and then exhale for 6 seconds. Repeat 10 times. Discontinue if feeling lightheaded.



2) TA activation (for the inner core)

Laying on your back, with your knees bent and feet flat on the ground, place your hands on either side of your pelvis. Imagine there is a string between the two bones and contract your belly to bring the bones together. Repeat 10 times.





3) Mini crunches (for the outer core)

Laying on your back, with your knees bent and feet flat on the ground, contract your belly to bend your upper body up towards the sky. You may put your hands behind your head to support your neck, however the arms should not pull on your head. Repeat 10 times.



4) Glute bridges (for the outer core)

Laying on your back, with your knees bent and feet flat on the ground, contract your bum. Drive your heels into the surface you're laying on to thrust your hips up. Hold for 3 seconds. Repeat 10 times.



What Next?!

If you are experiencing spinal pain and suspect the core muscles may be the cause, book an appointment with a physiotherapist! Together we will work on strengthening these muscles to give your spine the support you need. Email us a <u>informphysio12@gmail.com</u> for more information!