

THE DEEP MUSCLES OF THE TRUNK AND BACK PAIN

One of the key elements to decreasing back pain is to have strong deep abdominal and low back muscles which can support the lumbar spine. There are four layers of abdominal muscles. The superficial muscles are strengthened by doing sit-ups and rotations of the trunk as they move the trunk on the pelvis. The deep layer of abdominals, the transversus abdominis muscle, and the deep back muscle, the multifidus, are postural muscles and contract all the time when moving our limbs and our trunk. These muscles act as a natural corset around the trunk and are vital for proper stability of the trunk. They work in conjunction with the pelvic floor muscles and the diaphragm.

When one injures their back, the deep muscles of the trunk (mentioned above) become inhibited and can't contract adequately. This will create a muscle imbalance around the trunk and the larger muscles will try to take over the task of the deeper muscles. This will lead to increase muscle contractions around the trunk, spasm and limited movements. Overload of the low back structures will occur and this can eventually create back pain. Whether one suffers from back pain, sciatica or disc herniation, the deep muscles will often become inhibited, weakened and deconditioned. A specific program of exercises to recruit the deep muscles of the trunk is an utmost priority when dealing with back problems. Research has shown that specific exercise programs for the deep muscles of the trunk decreases back pain and prevents recurrences. If you have a history of recurrences of back pain or you want to avoid getting any other bouts of back pain, you should contact a physiotherapist so that your condition can be thoroughly evaluated and you can be taught a proper exercise program.