

Pilates and Back Pain

Low back pain is becoming an increasingly costly problem in the western world. It is the most common cause of disability in those aged less than 45 years. It has been shown that when people injure their backs for the first time, the pain settles within four weeks in approximately 90% cases. However, the recurrence rate following the first episode is extremely high, with 60-80% of people suffering a recurrence within a year following the initial injury.

The high rate of back pain recurrence can be attributed to a wastage and subsequent lack of protection from two important stabilising muscles which become inhibited following the initial back injury. The Multifidus muscle normally functions to control fine and precise movements of individual vertebral segments, while the Transversus Abdominus muscle acts as a natural brace for the lower back. Without the protection from these deep local stabiliser muscles, the stability of the lumbar spine is reduced. Therefore the increased motion, which can now occur within the lumbar spine, increases the spines' vulnerability to re-injury.

In people with low back pain who have lost the protective function of Multifidus and Transversus Abdominus, global muscles, which are not designed for stability, attempt to protect the spine. These more superficial muscles increase the pressure on the lumbar spine and can consequently amplify a persons' back pain.

Research has shown that **Multifidus and TA do not recover spontaneously after back injury**. Despite superficially appearing fully recovered after an initial phase of pain, the muscle system does not recuperate. The person is therefore more likely to re-injure their back unless specific exercises are performed to retrain these important muscles to function correctly again. The Pilates Method is an excellent way of re-training the core stability muscles to function accurately, effectively reducing the chance of recurrence.