

Myths of Core Stability

I worked as an Exercise Therapist (kinesiologist) at a large rehabilitation centre in Alberta before I became a chiropractor. Part of my role was to develop for our clients a daily core stability program. At that time Dr. Stuart McGill, a professor of spine biomechanics at the University of Waterloo, was spreading his message about how to prevent low back injuries and improve performance. Dr. McGill's advice was very different from what was being practiced in most fitness centres, pilates studios and rehab clinics. I had the good fortune to participate in a seminar led by Dr. McGill, who is considered one of the top authorities on low back injuries and rehabilitation.

While schooling to become a chiropractor, I had the opportunity to train further with Dr. McGill. In all this time, his message has been consistent. He has authored two groundbreaking books: a textbook called *Low Back Disorders* and a must-have book for exercise and rehab professionals called *Ultimate Back Performance*. He is interviewed frequently and has videos on YouTube. Yet, the personal training and fitness industry has been surprisingly slow to disseminate his message.

As a chiropractor, I frequently see new patients suffering from low back pain. One of the first things I ask them is what core stability exercises they do. A surprising number show me the Superman exercise or sit-ups. It is a myth that exercises involving flattening the back and sucking in the abs will activate the TRANVERSE ABDOMINIS. I immediately let these patients know that despite their efforts these exercises may be exacerbating their problem and placing themselves in an unstable position. It is my job to help patients understand how to stabilize their entire torso while activating some of the larger surrounding muscles: the obliques, glutes and rectus abdominis.

Despite the varied approaches being used to develop "core stability," very few are scientifically based. Dr. McGill's recommendations are based on science. The exercises are designed to produce a lot of muscle activation, without stressing the spine. These exercises are sometimes known as the "big 3". Even very weak or injured patients can safely and effectively do these exercises in their scaled down version. So, if you hear your fitness instructor tell you to "suck your belly button to your spine," take it as a warning sign that your instructor might not be knowledgeable about science based exercise. Some exercises have been done the same way for a long time, but that doesn't make them effective or safe.

This 4-minute video of Dr. McGill discussing core stability myths is well worth your time if it stops you from injuring your back.