

# Is the primary control the same thing as core stability?

An extract from **Sean Carey's** book, 'Alexander Technique in Everyday Activity', gives an AT perspective on a familiar fitness trope.

Is the primary control the same thing as core stability? The term core stability, which refers to the corset of muscle and connective tissue that encircles the spine and gives it support, has become a global buzzword. However, it means something entirely different from Alexander's rather less well known idea of the primary control, that a certain use of the head and the neck in relation to the rest of the body improves general coordination.

Core Stability, and associated ideas such as core strength and core conditioning, rose to prominence after a theory was proposed by a team of researchers at the University of Queensland in the mid-1990s: That the delayed firing of specific abdominal and back muscles - transverse abdominis and multifidus respectively - is a cause of chronic low back pain. A treatment programme was then devised for patients using real-time ultrasound monitoring that activated these muscles under medical supervision. It's a procedure still in use today.

Much to the surprise of the original researchers, however, a technique of drawing the navel towards the spine, preceded by lifting the pelvic floor, in an attempt to activate transverse abdominis, a practice known as 'zip and hollowing' or 'hollowing in', was taken up by a wide variety of practitioners, including many Pilates instructors and personal trainers. Amongst the latter group, for example, it has become fashionable to get clients to sit on a Swiss ball, pull in the belly button and perform abdominal crunches, or to press the back against the floor, hollow the stomach and move one spinal segment at a time while doing sit-ups.

## **Core misinterpretation?**

Thankfully this practice has not gone unchallenged. Physical therapist Carolyn Richardson, who coined the term "core stability", says: "I have found that for the fitness industry it is often a poor instruction that is often misinterpreted or carried out badly. It's easily done incorrectly by people holding their breath or rounding their backs because they are sucking in their muscles so far." World-renowned spine biomechanics expert Stuart McGill goes further. "The idea has reached trainers and through them the public that the core means only the abs," he observes. "There's no science behind that idea. If you hollow in, you bring the muscles closer to the spine, and you reduce the stability of the spine."

## **Questioning assumptions about stability and balance**

Research on spinal loading forces using both computer models and test subjects in the laboratory, has also resulted in McGill questioning the now widely-held assumption that transverse abdominis or multifidus play a central role in stability and balance. Instead, he emphasises the significance of the

way in which all the muscles of the torso as well as those that connect with the limbs bind and work together. I agree.

So while there's no doubt that the vast majority of the population in sedentary societies suffer from atrophy of the torso and other muscles, it's clear that focusing directly on a particular muscle or muscle groups interferes with the efficient working of the body as a whole. More specifically, from an Alexander Technique perspective, if you directly draw in at any point in the abdominal area in order to develop 'core strength' you're misusing your flexor and extensor muscles, which are now functioning at less than optimal length. In short, you're interfering with your general coordination and functioning, including your ability to breathe efficiently. Hollowing in will also narrow your field of attention because you're trying to feel it out rather than looking out.

### **Dynamic activities for improved muscle tone**

It's much better to develop strength throughout the whole musculature by activating a better working of the eyes and the head, neck and back relationship, and then put a muscular demand of some sort on the system by performing an activity.

That will spread the load equally throughout your body's framework by engaging the anti-gravity musculature, but with the least amount of effort possible while preserving muscular elasticity.

If you want to develop better muscle tone you can use any of the more dynamic Alexander positions of mechanical advantage, such as monkey, squatting, rotating backward and forward from the hip joints in a chair, going on to the toes, or using the wall with the most efficient working of the primary control and limbs that you can. All these activities will help to prevent muscle atrophy, caused by the loss of red muscle fibres or through habitual muscle shortening (or both) in a way that's impossible to achieve through conventional exercise regimes.

### **Strength through walking**

Also never underestimate the usefulness of a thoughtful but purposeful walk in creating and maintaining muscular strength and flexibility. Start slowly and then when well-coordinated increase your speed of travel. While walking you will want to maintain a thought of releasing up through the middle of your torso into the head around eye level and allow yourself to spin freely around the spinal axis.

To sum up: the Alexander Technique does not teach 'core stability' but is concerned with whole body stability, strength and conditioning through learning a better use of the head, neck and back relationship, and an improved kinaesthetic sense. Alas, unless you're putting this into practice while working as a full-time athlete or dancer, you probably won't end up with six-pack abs. Nevertheless you will certainly have learned a skill-set that has major implications for your long-term health and well-being.