

## Core vs. Six Pack Abs – Who's Got Your Back?

I'm sure many of you have found yourself in envy staring at the latest fitness magazine, wondering how did they get such bulging 6 pack abs, and how can I get them as well? That however, is not the question you should be asking. The real question should be: Is there a difference between abdominal strengthening and core stabilization? The answer is yes. I'm sure many of you have wondered, "What is the best core/ab routine to supplement my regular sport or activity," and, "will incorporating core exercises into my program really improve my athletic performance?"

There are 4 major abdominal muscles: the external obliques, internal obliques, transverse abdominus, and the bulging 6-pack known as rectus abdominus, all of which help the spine flex, bend, extend, twist, and various coupled motions in between. Classic sit-ups and crunches have shown to nearly isolate the rectus abdominus, assisting in the development of stronger looking abdominals. But is this a good thing? In small doses, yes. Repeated sit-ups can result in a dominant, over-developed rectus abdominus muscle group, hence neglecting other important core stabilizing muscles. Within that exercise, the spine has to attenuate increasing compressive and shear forces while flexing up and down. This can place excessive amounts of undesired stress through the discs between your vertebrae, which has the potential to lead to or exacerbate some low back injuries.

Other key core muscles include the quadratus lumborum, multifidi, and erector spinae, which comprise most muscles of the back. When the abdominals and back muscles work together to help resist motions of the lumbar spine it is called core stabilization. All these muscles together are the foundation of posture, coordination of movement, and balance in daily function and sport. With most sports, the lumbar spine is constantly being checked to maintain a neutral posture. The concept of core stabilization is to support your trunk and spine while moving your extremities. The lumbar spine anatomy suggests we were built for more stabilization than for mobility, which is a reason why many low back and other sport related injuries occur when the spine is loaded in an end range position. How many can recall a moment bending down and twisting to pick something up and throwing out your back? Where were your precious 6-pack muscles then?

So next time when contemplating over the means to a more bulging set of rock-hard abs, consider integrating the whole corset of musculature that surrounds your spine. It will not only assist in more defined abs, but also a healthier, stronger, and more coordinated spine. For examples of core stabilizing exercises it is best to consult your physical therapist or medical doctor.

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