



Why does my low back hurt when I do sit-ups? Am I doing something wrong or should I avoid them?

Experiencing low back pain during sit-ups or crunches is a common issue. If sit-ups are bothering your back then there are a number of other exercises that can be used as an alternative to strengthen the core. The fact is that sit-ups use more of the hip flexor muscles—which attach between the thigh bones and lower back (lumbar spine) than the actual rectus

abdominus (the “six pack” muscle). Since the hip flexors attach to the front of the lumbar spine, if they become overworked or over-tightened they can create an anterior (forward) pull on the lumbar vertebrae which might be the reason for the discomfort. Another reason for the low back soreness might be the fact that doing sit-ups on the hard ground pushes the spine into the ground while it is being flexed during the sit-up, this could cause additional pressure on the posterior portion of the spine another reason for avoiding this movement.

Since sit-ups focus on the movement of spinal flexion and use only a few muscles (the rectus abdominus, the external obliques and hip flexors) in the front region of the mid-section, then consider selecting other exercises that use muscles on both the front and back sides of the core. If your back only bothers you when doing sit-ups, it is wise to skip that exercise and choose others that will strengthen the entire core as opposed to one specific area.

Other exercises that can strengthen the core and help alleviate low back pain include:

- Front plank
- Side plank
- Glute bridge

This is a great exercise for the hip extensor muscles (gluteus maximus) and also is an active stretch of the hip flexors, the glutes and abs work on opposite sides of the pelvis so it is extremely efficient to work both sides together

- Standing lift (hay bailer)

This is an excellent exercise for strengthening the hips, core, shoulders and back together at the same time

Finally, if your back does get better and feel stronger and you would like to try to do sit-ups again, then we highly recommend using a stability ball. A ball provides support for the curvature of the lumbar spine allowing a full range-of-motion while reducing the pressure on the vertebrae that is created when flexing the spine on the hard ground. Additionally, using the stability ball for crunches requires engaging the glutes and hips for support, so it allows the use of more muscles at the same time.