



# The PLANK

## Is It Really The World's Best Abdominal Exercise?

So what does the plank actually do? It is referred to as a '**super stiffness exercise**'. It generates stiffness in all the abdominal wall muscles to create a rigid core between the rib cage and the pelvis. It also requires the muscles between the shoulder blades and the pelvic girdle muscles to fire.

If done properly it will also strengthen the long spinal muscles from the neck to the pelvis as well as the hamstrings. Creating this super muscle stiffness, it limits the compressive forces associated with sit ups or hanging leg lifts.

The biomechanics of the exercise are quite obvious. Without some 'stiffness' in the muscles at the front of the body (as in abdominals) the body would sag under its own weight between the pivot and support points, being the elbows and the feet. It thus requires a considerable degree of holding capacity in these muscles to generate the stiffness to prevent the spine arching into extension. But is that all it trains?

Many other muscles are also trained in this exercise and as a result, many other muscles can 'cheat' and compensate for weaker abdominals. If this occurs, then you are simply training your muscles with ability and neglecting the dysfunctional weak muscles. Before describing how other muscles work in this exercise (especially in cheating), let's firstly describe the 'perfect' plank exercise.

The elbows are placed directly under the shoulders and the ankles are kept at a 90 degree bend. You can draw a straight line from the shoulders, through the hips, through the knees and through the ankles. This line will clearly slope downwards considering that the ankles are lower than the shoulders. But there shouldn't be any 'breaks' in this straight line. The most important pre-requisite however is that the pelvis is kept in 'neutral tilt'. This means that the natural curve of the lumbar spine is maintained. It neither over-arches or as commonly seen, is not overly flat or even rounded (flexed or posterior tilt of the pelvis).

We are born to cheat so the body will look for the most economical way to maintain a task with minimal effort. Cheating can be seen if the butt starts to stick out more or if the spine starts to arch too much, or if the knees bend or if rest head on hands. If performed incorrectly, then the 'plank' may possibly recruit as many muscles as the deadlift. The only difference is that the deadlift is a good rehab exercise whereas a poorly performed plank is not a good rehab exercise.

Holding a plank 2-3 minutes is quite a feat of stability. Most people start at 15 to 45 seconds, then build up to one minute planks. Come on in and ask your physical therapist about the worlds best ab exercise.

***"It generates stiffness in all the abdominal wall muscles to create a rigid core between the rib cage and the pelvis."***



PHYSICAL THERAPY  
- & -  
INJURY SPECIALISTS

*Staying Active for WORK. SPORT. LIFE.*

**303-757-1554**

3601 S. Pearl St, Englewood, CO 80113  
9570 S. Kingston Ct, Englewood, CO 80112  
For more info: [www.denverptis.com](http://www.denverptis.com)