

Stage I - Lumbar Stabilization Exercises

Gaining voluntary control of the inner core muscles (transversus abdominus and multifidus) is an important first step toward spinal stability.

Exercise #1 - Lay on your back with both knees bent and your feet flat on the floor. Keep a slight curve in the low back and do not perform a pelvic tilt.

Place your fingers over the front of your pelvic bones, where a small bony protuberance can be felt. Slide your fingers about 1-1.5" toward the midline. (Figure 1) You are now feeling the area of the transversus abdominus muscle.

- Draw in a deep breath
- Exhale and hold your breath out
- Contract the transversus abdominus muscle by pulling the lower abdominal muscles in toward the spine. Think of pulling a spot that is 2" below your naval downward and toward the spine. The movement should cause a slow drawing in and down of the naval. Do not pull your abdominal muscles up and under you ribs (Figure 2)
- Resume breathing for 10 seconds, while holding the muscles tight
- Relax and repeat 10 times, 2-3 times daily



Figure 1 – Proper finger placement



Figure 2 - Incorrect technique

TIP: If you experience difficulty locating and contracting the transversus abdominus muscle, try the following. While placing your fingers as seen in Figure 1, perform a Kegal contraction (tighten the muscles that stop a urine stream and bowel movement). The transversus abdominus muscle can be felt to contract beneath your fingers. After gaining control over the transversus abdominus muscle, it is important to practice contracting it without performing a Kegal contraction.

Exercise #2—While performing your normal activities of daily living, always maintain a light contraction of the transversus abdominus (25-30% of your maximum capacity). Before more strenuous activities, always tighten the muscle fully.