

Transversus Abdominis

Step 1: Isolation of Transversus Abdominis – Train before you Strengthen

Lie on your back or side with your spine in a neutral posture, (gentle curve anterior in your lumbar spine).

Gently isolate a contraction of transversus abdominis by:

- Thinking about gently closing the muscles around your rectum and then connect the rectum to the back of the pubic symphysis.
- Thinking about the muscles around your urethra / vagina or the muscles that draw your testicles up and then gently and slowly lift the urethra, vagina or testicles up and forward into your abdomen.
- Imagining a line connecting the inside of your two hip bones in the front of your pelvis. Think about connecting along this line.



Breathe in and on the breath out contract the transversus abdominis with your image. No actual movement of the hip, pelvis or spine should occur. The isolated contraction of transversus abdominis will feel like a light, *deep* tension under your fingertips, not a contraction that pushes the fingers out.

Hold the contraction for 3- 5 seconds and then release without becoming rigid, and continue to breathe. Repeat 10 times 3 – 4 times per day to start.

Step 2: Strengthen the co-activated Core

Once you can isolate the transversus abdominis, practice this isolation in many different positions – i.e. sitting, standing, bending over etc. Once you can turn the muscle on easily you can progress to the following exercises. Each progression below begins with a good core contraction (which includes transversus abdominis) and this connection should be held throughout the movement.

Remember to MOVE WITH YOUR BREATH - Exert with exhalation, breathe in to rest or hold.

In side lying

1. While maintaining your connection to core (lifting the pelvic floor gently), keep your ankles together and lift your top knee (only as high as you can control without breath holding), by focusing on turning your inner thigh outwards. Return your knee.
2. While maintaining your connection, keep your ankles together, lift your top knee (as in #2), and then lift your ankle. Return your ankle and then your knee.
3. While maintaining your connection, keep your ankles together, lift your top knee, then your ankle, then extend your leg, then flex your leg, return your ankle and finally your knee.

Lying on your back with your knees and hips flexed:

1. Slowly let your right knee move to the right, keeping your low back and pelvis level. Return to the center and repeat with the left.
2. Slide the right foot along the floor, straightening the knee. Slide the foot back towards the hip, and repeat with the left. Be sure that the floor supports the weight of the leg and that the foot does not lift off of the floor. Try putting a plastic bag around your foot to help it slide easily.
3. Lift the right foot off the floor keeping the knee bent. Don't hold your breath and don't bulge your lower abdomen. Return the foot to the floor and repeat with the left foot.
4. Lift the right foot off the floor and then straighten the leg only as far as you can control your core with a proper strategy. Slowly bend the knee and return the foot to the floor. Repeat with the left leg.
5. Lift the right foot off the floor and then the left foot off the floor. Alternate leg extensions making sure a proper strategy for core stabilization is used. Exert with exhalation, breathe in to rest or hold.

With all these exercises maintain the leg lift for 10 seconds, build to 3 sets of 10 reps before moving on.

Step 3: Incorporate into Other Activities

The final step is to remember to use the core during regular life activities. Each time you get out of the chair, lift, bend or reach, this local stabilizing system should be working at a low level. The goal is to teach the body to resume its normal stabilization strategy of connecting to the core BEFORE movement begins.