

# Back Stabilization Exercises

## **Straight Leg Raise using Psoas Muscle (on your back)**

- Turn on the transversus abdominus muscle by consciously thinking about bringing your pelvis together. Try to isolate this muscle initially, avoiding using your abs, gluts, leg, or other accessory muscle. You won't be able to feel this muscle once you start other muscle movement
- Pull your belly button to your spine. Keep this pulled in the whole time.
- Gently pull one of your hips into its socket. This action requires the use of the psoas muscle. This is a subtle motion. If your pelvis moves in order to perform this motion, you are using other muscles besides the psoas. You may be able to feel the psoas as it passes from the pelvis to your leg, it should pop out when it is engaged. Once engaged, lift your leg slowly up off the ground 6-8 inches initially. Bring your leg down and without letting go of pulling the hip into the socket, pull the other hip into its socket and raise it 6-8 inches. The idea is that you can alternate raising each leg for 2-4 minutes keeping both psoas working the entire time.
- While doing the exercise, place both hands into the small of your back. Monitor the pressure that you feel as the legs are raised and lowered. The pressure should remain the same on both hands throughout the exercise. If you notice that it isn't, it means that your pelvis is rocking. Correct this by pulling your abdominal muscles down towards your spine.
- Gradually increase the range of motion that your legs raise off the ground. The key is to control the motion the whole way and to do the exercise slowly enough that you don't skip the areas that are injured.

## **Multifidus Stabilization, Bridge Exercise (on your back)**

- Bend your knees keeping your feet flat on the ground. Slowly arch your back. Reverse this arch (flattening your back). Using your gluts, slowly roll up to bridge position one vertebrae at a time. Do this slowly and pay attention to areas where you get "stuck" or have pain. Make the effort to control the motion at each vertebral segment. In the bridge position, your whole body should be aligned. Your knees should be extending away from you.
- Avoid arching your back to get to the end of motion. Your body should be straight. This is a hip extension exercise.

## **Rotational Exercise (on your back)**

- Bend your knees and hips to 90 degrees. Your body should be in sitting position with only your back on the ground. Start to rotate your hips and legs to one side. Your back on the opposite side may follow your legs and come off the table. The goal of this exercise is to use your back stabilization muscles to rotate your pelvis/legs back towards mid-line, one vertebra at a time. This exercise is more difficult the further that you rotate. Only rotate as far as you have control (this may differ from side to side).
- The tendency for some people is to extend their mid back when they rotate, avoid this by rotating less.

**ALL EXERCISES WILL BE BENEFITTED BY BREATHING DOWN AND OUT TO FILL THE LOWER LUNGS.  
Set up the exercise initially by taking a deep breath before initiating movement.**

**CONTACT HEALTH & WELLNESS IF YOU HAVE  
ANY ADDITIONAL QUESTIONS OR CONCERNS.**



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