

# Core Stabilization Program

Back pain is the second leading cause for visits to the physician's office. Often you can learn to manage your own symptoms with use of a home exercise program that will target the "core" muscles. The core is comprised of four components that need to work together to provide stability for your spine to protect your back. The four components are: (1) the deepest abdominal muscle called the transverse abdominus, (2) the deepest back muscles called the multifidi, (3) the muscles in the floor of your pelvis and (4) the diaphragm. The exercises listed below will help you to use each of these components to help support your spine, in an effort to alleviate your pain. Be patient and make sure to perform these exercises daily to reap the highest benefit.

## **(1) How to Engage the Transverse Abdominus:**

Lie on your back and bend your knees as seen in the picture. Place your hand gently in the inside edge of your hip bone (kind of like you are placing your hand in the pocket of your jeans). Take a deep breathe allowing the belly to rise as you intake the air. **DO NOT LET YOUR SHOULDERS RAISE UP TOWARDS YOUR EARS.** Slowly exhale and imagine you are drawing your belly button down through you to contact the surface you are lying on. You should feel a small amount of tension develop underneath your fingertips. This is the transverse abdominus muscle firing. If you feel too much tension as if your fingertips are being pushed up this is incorrect. Try again and feel for a drawing inward of the fingertips. Once you feel as if you have found the correct contraction, challenge yourself to hold this for 10 seconds, while still taking normal shallow breaths.



## **(2) Tummy Tightening with Marching:**

Perform exercise (1). While maintaining the abdominal contraction slowly "march" the right leg up and down approximately 1-2 inches off the surfaces. Repeat with the left leg. Repeat the whole activity 10 times



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### **(3) Tummy Tightening with Heel Slide:**

Perform exercise (1). While maintaining the abdominal contraction slowly slide the right foot forward 1-2 inches and return to the starting position. Repeat with the left leg. Repeat the whole activity 10 times.



### **(4) Pelvic Tilt:**

Start in the same position as exercise one. Slowly roll the pelvis up towards the ceiling while flattening your back to the surface you are lying on. Hold this position for 10 seconds. Repeat 10 times.



### **(5) Small Bridge:**

Start in the same position as exercise one. Feel where your ribcage ends. Your ribcage will need to maintain contact with the surface throughout the entire exercise. You will start by performing the pelvic tilt from exercise (4) and then continue by elevating the buttocks up off the surface as far as you can before the ribcage would come off the surface. Your buttocks should be no more than 3-5 inches from the surface. Hold this position for 10 seconds, repeat 10 times.



Line marks bottom of ribcage

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### **(6) Opposite Arm and Leg Superman Lifts**

Lie on your stomach with your forehead supported on a towel roll to keep the nose elevated from the surface for breathing. Bring arms up overhead. Slowly lift up the right arm and left leg towards the ceiling. Hold 10 seconds and return to the starting position. Repeat with the left arm and right leg. Only lift up approximately 1-2 inches. Repeat the whole activity 10 times.



### **Recommended Use:**

Times per day:	1	2	3		
Days per week:	1	2	3	4	5