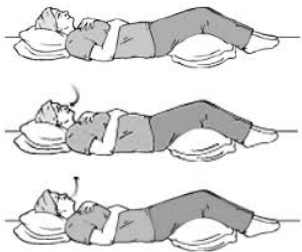


## POSTURAL RETRAINING EXERCISES

These are a general sampling of common exercises used to help improve posture and movement patterns. We recommend you sign up for Anteo (the “PT in your pocket” app) if you need instruction and more active guidance; or if you need specific, prescribed exercises for a condition or injury. ***The content here is for general informational purposes only – proceed at your own risk.***



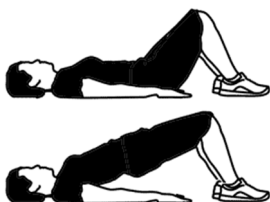
**SUPINE BREATHING:** Proper breathing is the foundation for movement. When you breathe using your diaphragm, the muscle designed for optimal respiration, you properly pressurize your core and create a solid base for powerful, efficient movement. Lay on your back with your knees bent and your feet flat on the floor or table. Place one hand on your chest and the other hand on your stomach. Picture a balloon in your stomach that will expand out symmetrically while you inhale and deflate while you exhale. Comfortably inhale and exhale. The hand on your stomach should rise significantly more than the hand on your chest.



**Core 360 Belt:** This belt provides feedback to increase awareness of proper, diaphragmatic breathing. The Core 360 ([core360belt.com/](http://core360belt.com/)) helps you achieve optimal diaphragm breathing and core pressurization. The Core 360 belt has 4 pressure points that will wrap around your core, with 2 in the front along the transverse abdominis/obliques and 2 in the back along the latissimus dorsi, just lateral to the erector spinae. When you inhale using your diaphragm, all 4 points will gently press into your core as you expand in all directions. When you exhale, the points' pressure will decrease.



**Pelvic Tilt:** This activity creates mobility and symmetry while pumping fluid and nutrients to the discs & spinal joints in the lower back. Lay on your back with your knees bent and your feet flat on the floor. In a slow and controlled manner, gently press your low back into the floor or table. Your pelvis will gently tip backwards as you do so. Breathe normally, do not hold your breath. Slowly relax and come back to neutral position.



**Supine Bridge:** Your spinal extensor muscles need to be 30% stronger than the flexors. By learning to activate your core and related muscles, body awareness and stabilization will improve. Lay on your back with your knees bent and your feet flat on the floor or table. Apply even pressure on your feet, pressurize your core (see above), and slowly raise your hips. Only raise up to your comfort level; do not push into pain. You should feel activation in the erector spinae muscles located in the lower back, as well as the glutes and (somewhat) the hamstring muscles. Do not hold your breath. Slowly and symmetrically lower your hips back down. **WARNING:** This exercise may make some patients with lumbar stenosis WORSE.

**Knee to Chest:** Stretching is important to promote proper flexibility and range of motion in the hips, while opening up space for the nerve roots in the lower back. Lay on your back with your legs flat, neck neutral. Slowly bend one knee up and wrap your hands around your knee, while keeping the opposite leg straight. Lightly hug your knee and hold for a gentle stretch. Slowly bring your leg down and repeat on the other side.



**Cat Cow (aka Cat – Old Horse):** Just like with pelvic tilts, this activity supports mobility and symmetry while pumping fluid and nutrients to the discs & spinal joints in the lower back. Position on your hands and knees on the floor with your hands stacked under your shoulders and your knees stacked under your hips, creating a 90° angle at each joint. Inhale and slowly arch your back up like a string is pulling your upper back to the ceiling (like a stretching cat does), while dropping your head down. Exhale and slowly drop your low back down like the “old horse,” while gently lifting your head up. Transition slowly through these two positions – always without pain.



**Boat Pose:** The erector spinae muscles run parallel to the spine from the base of your skull to the tailbone. Even activation of these muscles will aid in body awareness, postural control, and power. Your spinal extensor muscles need to be 30% stronger than the flexors (see supine bridge). Lay on your stomach with your arms to your side and your palms down (if possible). Keep your neck in a neutral alignment with your head parallel to the floor. Slowly and gently lift your chest, shoulders, and upper torso off the floor – without excessively looking up or straining the neck. Slowly lower your upper torso back down to the floor and relax your shoulders.

**Hip Hinge:** Hip hinging is essential to proper sitting (getting in/out of a car, on-off the toilet, etc.) and lifting (a weight, a box, a child, anything). Begin with your feet comfortably at shoulder width in a stable stance. Keeping a small dip (“lordosis”) in your lower back, “hinge” at your hips (NOT in your low back), bringing your pelvis backwards with the “hinge” at your hips. Your pelvic bone should drift back (posterior) along with your butt (glutes) as you hinge at the hips. Be sure your knees do NOT drift in front of your toes. Squat/sit in a controlled manner, until you’re either seated or your thighs are parallel to the floor. You will feel an activation in your quads as you control yourself down into a seated position, but the focus is your powerful glutes (butt muscles) – NOT the smaller back muscles. The motion should be powerful, controlled, and (with some training) natural. When you rise back up to stand, activate your glutes, always hinging at the hips. Standing should be a mirror image of sitting. Make sure your weight remains evenly distributed between your feet. Rocking on your toes or heels will cause you to be unstable. Keep your head up, looking to or above the horizon. Control any excess knee drift (especially side-to-side). As a training tool to further activate the glutes, you can use a band to create slight inward pressure on the thighs, forcing you to activate your glutes to keep your knees apart and aligned.

