



13 DAILY MOBILITY EXERCISES

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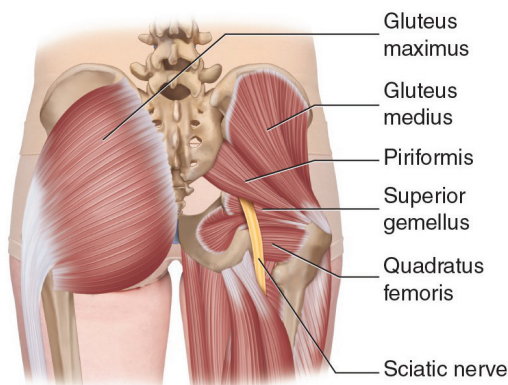
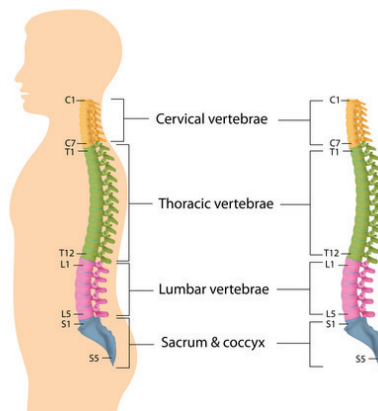
Why Daily Mobility Exercises?

Whether you're an athlete or someone who sits at a desk all day, lack of mobility can cause stiffness and pain now, and bigger problems down the road. PTSMC Clinicians recommend daily mobility exercises because almost everyone has some amount of daily movement dysfunction, whether it is due to vocational strain (i.e. poor postural performing desk work/computer work or whole body strain from prolonged manual labor) or due to motor imbalances with performance of recreational activities/sports. This is especially true for CrossFit and HIIT workouts for individuals who may not be wholly balanced in terms of motor recruitment and stability. Most people do not necessarily have symptoms until enough stress and strain has been placed upon an area of dysfunction, and daily mobility activities can help to counteract this mounting dysfunction to avoid injury, strain and symptoms which can sideline any of the above activities. A physical therapist or movement specialist can assess and diagnose movement dysfunction to help prescribe a more specialized mobility program to address specific impairments.

Common Areas of Mobility Issues Covered in This Packet

Spine

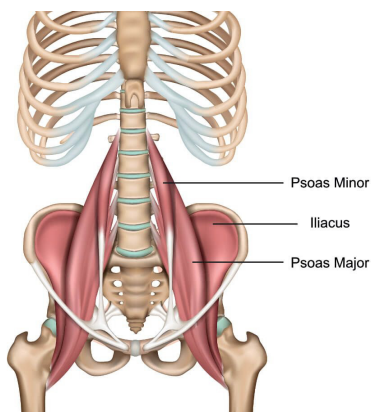
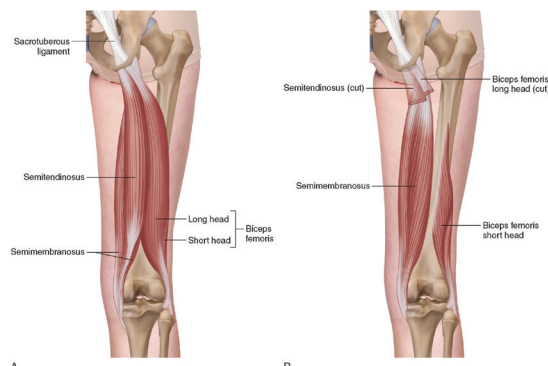
The spine provides structural and nervous system support. It's made up of 34 bones that keep the body upright and allows us to bend and twist. The spine has 3 sections: Cervical Spine (7 cervical vertebrae) in the neck area, Thoracic Spine (12 thoracic vertebrae) in the mid-back area, and Lumbar Spine (5 lumbar vertebrae) in the low back area. The sacrum and coccyx are at the bottom of the spine and consist of several vertebrae fused together.



Gluteal Muscles & Piriformis

The gluteal muscles consist of the Gluteus Maximus, Gluteus Medius, and Gluteus Minimus. The Piriformis is a small muscle located beneath the Gluteus Maximus that externally rotates the hip. The piriformis can become tight due to vigorous exercise.

Hamstrings
The hamstrings consist of the Semimembranosus, Semitendinosus and Biceps Femoris. The Hamstrings can become tight from playing sports, working out, and/or sitting for prolonged periods of time.



Hip Flexors

Hip Flexor refers to the Iliacus, Psoas major muscles (also called the Iliopsoas), and the Rectus Femoris (one of the quadriceps muscles). They function to bring the knee towards the chest and bend at the waist. They can become tight when sitting for prolonged periods of time as you remain in a hip flexed position.

LEGS

GLUTE BRIDGE/HIP THRUSTS

Lay on back with knees bent and feet lifted off floor. Drive through heels pushing legs into floor so you feel glute muscles tightening. This movement is important to maintain hip mobility and strength, especially for people working from home on the computer. Prolonged sitting places your hips/back in a flexed position, and if we don't come out of that position throughout the day, over weeks/months our hips and back can tighten up and cause difficulty doing the activities we enjoy. This is also a great warm-up to do before lifting weights or running, as it engages our glutes/hamstrings which provide a lot of the power needed for these activities.

Hip Bridge (right): Feet and back on floor, bench, or table.

Hip Thrust (below): Back elevated on bench/table and feet on floor.



PRONE QUAD STRETCH WITH STRAP

Lay face down with a strap or towel wrapped around your ankle. Use the strap or ankle to pull your foot closer to your butt. You should feel a stretch in your quad muscles. Avoid arching your back by tucking your tailbone beneath you.



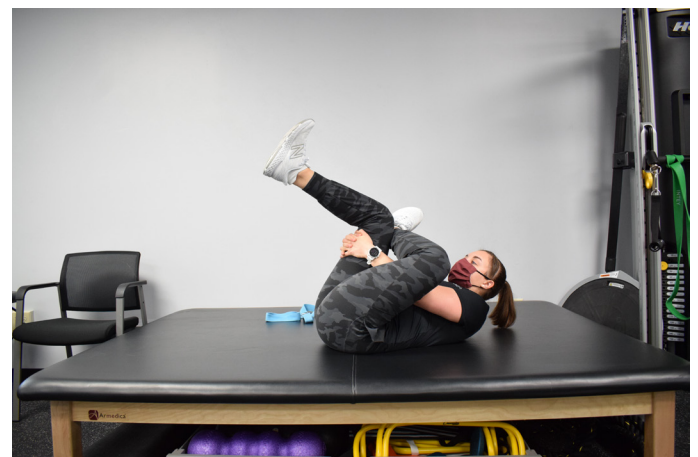
HAMSTRING STRETCHES

One side-effect of the pandemic is that people are sitting more. This causes the hamstrings to be in a shortened state all day, so it's important to stretch the hamstrings to improve length. Because the muscle isn't being utilized at its natural length, the muscle will physically shorten. Muscles don't maintain their healthy length inherently, instead they change length to adapt to the position and length at which they are most accustomed to being at. With the increase in 9-5 desk jobs, this presentation has become more prominent in the clinic, and so performing regular hamstring stretches can help to prevent that muscle from shortening.



HIP FLEXOR STRETCH

Another muscle that becomes physically shortened when seated due to the hips being bent is the hip flexor, a two-joint muscle crossing both the hip and knee. Over time, if the seated position is maintained (weeks to months) the hip flexors will go through what we call adaptive shortening. To stretch the hip flexor, place one foot forward and extend the other leg with the top of the foot on the floor. Squeeze your glutes and gently rock forward.



PIRIFORMIS STRETCH

Laying on your back with your knees bent, cross one foot over opposite knee and pull knee in toward chest to feel stretch in opposite hip. Alternatively, if unable to achieve this position, cross foot over and pull knee toward opposite shoulder to feel stretch in outside/back of hip.

TORSO

CHILD'S POSE

Start on your hands and knees and gently shift your hips back. Try to keep your big toes together and sit on your heels. Drive your knees out and extend your arms. This stretches out the spine as well as the hips and thighs.



QUADRUPED ROCK BACKS

Start on your hands and knees (making a table, per say, with your body). Rock back and try to "sit" on their heels. This exercise is very effective at opening the lumbar facet joints which will in turn take pressure off of the spine and relieve "tight" or "stiff" symptoms.



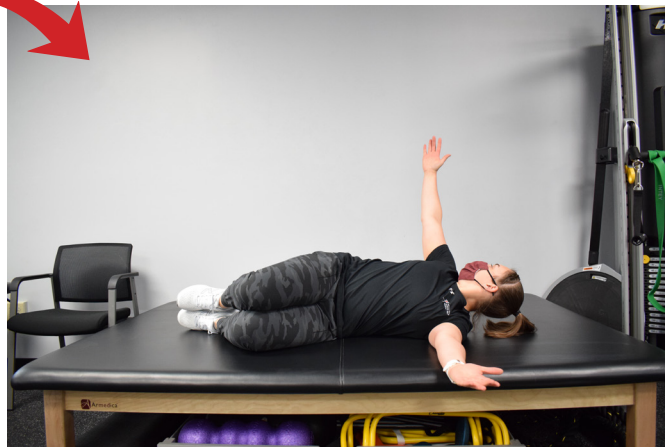
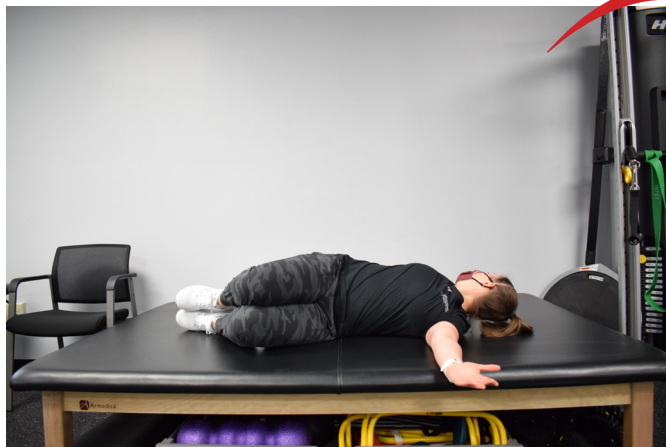
CAT/CAMEL STRETCH

Start in the same table position as Quadruped Rock Backs. Push your mid-back (thoracic spine) towards the ceiling as high as you can, followed by "shallowing" out your back in the exact opposite direction. This exercise is very effective at mobilizing the thoracic spine, which will in turn decrease stress placed through the low back, the neck, and the shoulders. You should be able to bend over, extend backwards, and rotate your spine much easier following this exercise.



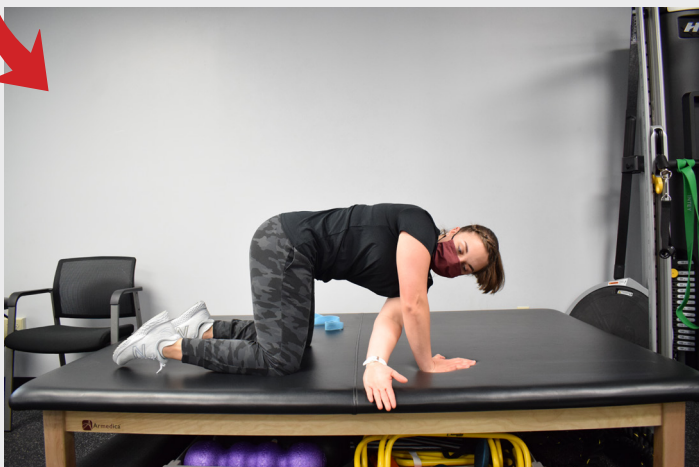
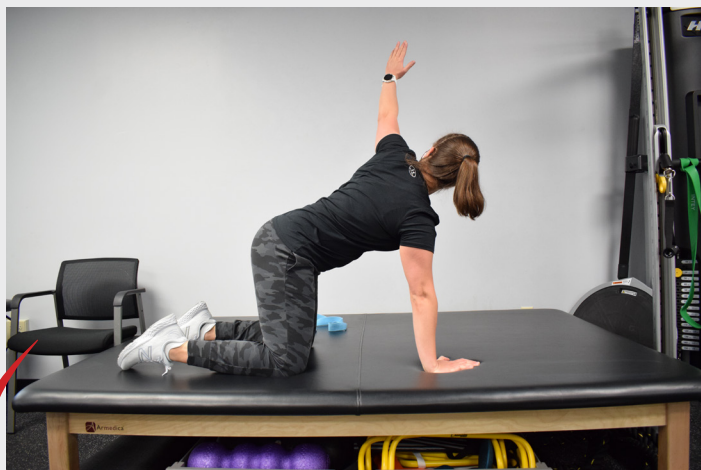
SIDE-LAYING THORACIC ROTATION

Lay on one side with hips and knees bent to 90 degrees. Start with top hand at your knees and rotation up and back as shown on diagonal plane of motion, keeping head forward. Feel a stretch through mid-back and front of shoulder. Hold 10 seconds then release and repeat. Repeat on opposite side.



THREAD THE NEEDLE

This helps to stretch the back and open the shoulders. Start on all fours and extend your left arm all the way to the ceiling, opening up your chest. Slide your left arm towards the mat right behind your right arm.



SEATED THORACIC EXTENSION W/ BALL

Start in a seated position with a ball in the curvature of lower back. Round upper/mid back (thoracic spine) over the ball, keeping head in neutral and pivot spine over the ball to increase mobility in upper back.

SEATED THORACIC ROTATION

With prolonged sitting or cell phone use, our thoracic spine is constantly in a flexed position. When your spine is stuck in a flexed position, rotation becomes more difficult, and potentially painful. This has functional implications, such as driving a car, indoor cycling or playing golf pain-free. A stiff thoracic spine can also influence biomechanics at your neck as well as low back, which are two of the most frequent locations for injury. Performing this mobility drill will redistribute disc and facet joint pressure, allowing you to move and perform better. Start sitting tall with shoulders down and back. Rotate to one side until you feel a stretch in your upper back and hold. Repeat on other side.



PRONE PRESS UP

We naturally spend so much time bending forward either to pick something up or to sit; yet, we rarely bend backwards, which helps maintain spine mobility. By performing a prone press-up, being sure not to engage the glutes, you're self-mobilizing the lumbar spine and encouraging the natural curvature of the low back, which can be lost when we sit all day with poor posture or frequently bend forward. Bending backwards has many benefits in maintaining full range of motion in the spine. Lie on your stomach with your hands down around your shoulders. Press up so that you're now resting on your elbows. To make it even more challenging, press down and extend your elbows completely so that only your hands are on the surface.

