

# The Most Important Muscle in Your Body

## Meet the Psoas

By Nancy Botting

**MANY THERAPISTS** believe that the psoas muscle is the most important muscle in the body. The psoas muscle helps to flex the hip in standing, walking and running, and to flex the spine over the legs in sitting, cycling, canoeing or kayaking. It is a long cylindrical muscle (on average 16" in length), deep within your core and is often also described as the "thickest" muscle of the body. In animals it is the "tenderloin". It is a long and lean muscle due to its constant action and contraction with most daily movements. So, the psoas has a number of diverse functions. It is a prime mover as well as a dynamic stabilizer, making it a key factor in optimal lumbar/pelvic and lower body movements. Why then, is it often overlooked as a key contributor to many common problems?

The number of potential problems caused by the psoas shortening is quite astonishing. These can include: low back pain, sacroiliac pain, sciatica, disc problems, scoliosis, hip degeneration, knee pain and even breathing or digestive problems. Mechanically, when out of balance the psoas can also lead to biomechanical problems like excessive pelvic tilt, leg length discrepancies, kyphosis (rounded mid back), and exaggerated lumbar lordosis.

This powerful muscle starts along the sides of all of your lumbar spine vertebra, descending down through your diaphragm, across the front of the left and right sides of the pelvic/hip area and inserts into the upper inner thigh. The bilateral psoas muscles are the only muscles that connect your upper body to your lower body.

When the muscle becomes contracted due to overuse injury, poor posture, prolonged sitting, it can alter the biomechanics of the entire spine and be responsible for referred pain down the front of the thigh and vertically along the lower to mid spinal column. Trigger points can be found in the lower abdomen, just

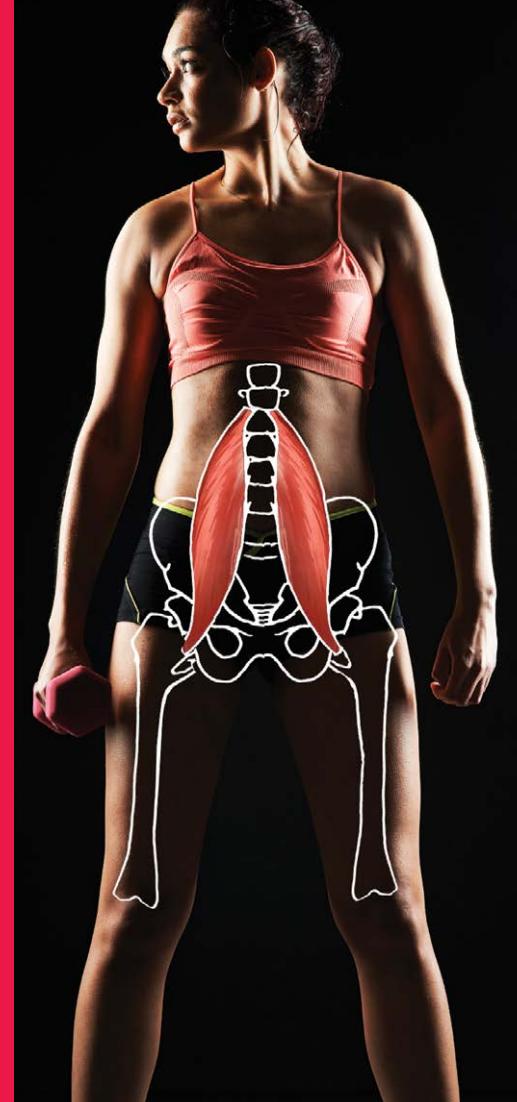
inside the concave portion of front of the pelvis or at the insertion point in the upper inner thigh. Frequently deep vertical lower back muscles such as the erector spinae or quadratus lumborum develop trigger points, as well as the piriformis, gluteals and hamstrings.

The psoas can torque your spine to the right or left, pull it forward and twist the pelvis into various distortions. Frequently one psoas will shorten and pull the spine and/or pelvis to your dominant side. The distortions of the spine and pelvis can also show up as a short or long leg. It can also pull the spine downward, compressing the facet joints and the intervertebral discs of the lumbar spine. Chronic asymmetrical pressure can cause the discs to degenerate at a faster rate, making them thinner and less flexible. This makes the discs more susceptible to bulging or tearing, especially with twisting and bending movements in sports such as golf or tennis.

### What keeps the psoas in contraction?

The psoas can stay contracted because of postural habits and repetitive trauma or overuse. The way we stand, walk and sit can distort the psoas. If we walk or stand with our chin in an overly forward position the muscle will tighten. Sitting through much of the day like this can cause the muscle to shorten to keep us bio-mechanically balanced in our chairs. Over time we develop a "normal" way of holding the psoas that is dysfunctional.

Until the psoas is either manually released or stretched on a regular basis, the muscle may stay contracted and go into further shortening which can lead to compensatory spasm in many of the structures mentioned above. The goal should be to lengthen the muscle first and then work on strengthening it in an eccentric or lengthened position.



### A Simple Correction Exercise

On your back, bend your knees with your feet hip width apart and your arms out to the side in a V shape. Palms facing up toward the ceiling and back of arms pressing into the floor. Draw your shoulders away from your ears keeping the tips of your shoulder blades down. Tuck your chin and flatten your lower back to imprint your entire spine flat into the floor.

Inhale as you bend one hip and knee toward your chest filling your lungs with air. Exhale through your mouth as you extend this leg out straight into the air to stretch your hamstring. Feel your anterior rib cage come together, and your naval draw inward as you continue to exhale and lower this straight leg to the floor. The goal is to lower the straight leg keeping your lower back flat to the floor. This will lengthen psoas with spine and pelvis stabilized, using the weight of your leg as the resistance to strengthen psoas as well. Eight to 10 repetitions per side is recommended.

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