

Intro

We spend more time sitting than in any other posture throughout the day, even more than sleeping. However, sitting for prolonged periods contributes to kyphosis, a condition where the upper back is rounded forward (think, slouching or hunched shoulders) and which is linked to decreased shoulder range of motion. And in turn, poor shoulder mobility is also often linked to painful conditions such as shoulder impingement syndrome and rotator cuff injuries.

Reduced range of motion in any joint leads to compensations in movement. Think of this as “cheating” - overusing one muscle to make up for the fact that another cannot complete a task. We “cheat” whenever we have pain in our joints, particularly whenever we have shoulder pain plus a rounded upper back, and then try to reach overhead.

In this article, we'll address how improving thoracic mobility helps relieve shoulder pain, as well as why having an excellent range of motion in both joints leads to pain-free movement overall.

Why is thoracic mobility important in relieving shoulder pain?

When our thoracic region is overly flexed (i.e. kyphosis), the shoulder capsule has a tendency to rotate inward - imagine caveman arms where the back of our hands face forward rather than outward to the sides. That inward rotation effectively “blocks” the overhead and backward parts of our range of motion, making it significantly harder to reach overhead to get an object from a high shelf or reach behind us to put on our seatbelt in a car.

For a fun experiment to demonstrate that, try this: round out your upper back like a cat. Then, rotate your arms forward so you look like a caveman. Next, try to reach overhead. Does your arm stop short, maybe at around a 60-degree angle or less? Now, stand up as tall as you can and rotate your shoulders back, pulling your shoulder blades back and down. Try to reach overhead again. You should be able to get all the way overhead, or at least much closer. This experiment does a great job at demonstrating how closely linked our thoracic mobility is to our shoulders and their range of motion.

How does improving thoracic mobility affect shoulder pain?

Having excellent thoracic mobility allows full access to shoulder flexion and overhead movements, like reaching for an object on a high shelf or doing a pull-up. Without this additional obstacle of tight or restricted thoracic muscles, your shoulder has access to more of its full range of motion without having to “borrow” from another set of muscles.

What kind of thoracic exercises are best for relieving shoulder pain?

Since kyphosis rounds our upper back and shoulders forward and up (the caveman position), our goal in these exercises is to rotate our shoulders back and down, and extend and lengthen our spine.

Exercises to improve shoulder pain

Here is a list of thoracic mobility exercises that can be incorporated into a workout. These exercises are particularly effective when used as part of a warm-up prior to a workout that includes overhead push or pull movements, like an overhead press or pull-up.

Child’s Pose on a Bench

In this exercise, you’ll use a table or bench to assist in placing your arms overhead at your maximum range of motion. You’ll then practice lifting your arms off the table or bench to try to expand that range of motion.

Start by either sitting into Child’s Pose in front of a bench, or if it’s uncomfortable on your knees and feet you can modify this exercise standing in front of a table at hip height. Hinge at your hips, keep your spine long, and elevate your arms as high overhead as you comfortably can, but stay in a pain-free range of motion. Place your forearms on the bench or table with your thumbs facing up. Brace your deep abdominals to hold your spine and trunk stable throughout the exercise. Staying in your hip hinge/Child’s Pose, lift your arms off the table/bench, even if it’s only a quarter inch. Your goal here is twofold: to engage your rear shoulder and upper back muscles (which are often underused due to kyphosis-related dysfunction), and to regain shoulder function in an overhead position.

Perform this exercise four to six times slowly, focusing on only moving the arms while keeping the rest of the body stable. Your goal is to stay in a pain-free range of motion while expanding that range.

Rotisserie Chicken Drill

In this exercise, you'll work from a hands-and-knees/quadruped position to isolate and rotate your thoracic spine while holding your arm behind your back to keep your chest open.

Start by getting into a hands-and-knees position on a well-cushioned mat. If this is uncomfortable for your knees, you can do this bent over a chair or table with one hand down for support. Keeping your spine long, tuck your pelvis under slightly so your lumbar spine and pelvis are in a neutral position. You should feel your deep abdominals engage, and you should feel stable and secure. Place one hand behind your back, resting the back of your hand on your sacrum or tailbone. Inhale, rotating your torso, arm, and shoulder but keeping your hips square to the floor. Hold the position for a few seconds, and on each exhale try to rotate a little further and lengthen your spine a little more. Imagine yourself as a rotisserie chicken rotating around a spit (your spine, in this case). You can also do this drill with your hand behind your head to isolate more of your cervical and upper spinal region.

Perform this exercise for about 10 seconds on each side. Your goal is to isolate and rotate your thoracic spine while opening and stretching the front of your shoulders.

Pilates Flight

In this exercise, you'll extend your thoracic spine from a supported position on the floor, and rotate and lift your shoulders into extension. Doing so will open the front of your body, relieving tension and soreness across the front of your shoulders.

Start by lying prone/face down on the floor. Tuck your pelvis under slightly, pressing your pubic bone firmly into the floor so your pelvis and lumbar spine are in a neutral position. You should feel your deep abdominals engage and your torso should feel supported and secure. Lengthen your spine by reaching the crown of your head as far up as you can, then lift your thoracic spine off the floor by hinging at your bottom rib. Now, rotate your shoulders back so your palms face up towards the ceiling, squeezing

your shoulder blades back and down. Imagine you're flying through the air. Hold this position for a few seconds, then slowly release back to your starting neutral position.

Perform this exercise for five to ten seconds on each side. The goal is to open the front of your shoulders and chest as much as possible while bringing the thoracic spine into full extension.

When and how often should I do exercises to relieve shoulder pain?

The short answer is, as often as you feel comfortable doing so, provided you aren't causing further pain to your shoulders. As a general rule, flexibility training can safely be done daily and when done more frequently provides the best results. As with any new exercise regimen, check with your doctor and/or physical therapist first before proceeding.