AlgaeCal

Exercises for Osteoporosis of the Spine

Seated External Rotation (for Rotator Cuff)

Why the seated external rotation?

This exercise primarily works your rotator cuff. Now, the rotator cuff is a group of muscles and tendons that stabilize your shoulder joint. But your spine, particularly the thoracic section, plays a role in the positioning of the shoulder joint too. And it seems that pain in the shoulder can be caused by a combination of rotator cuff and spinal issues.

If you have a slouched spine, you'll notice that your shoulders are more rounded and pushed forward too. So the aim of this exercise is to improve the mobility and strength of both your shoulders and your spine!

Here's how to do the exercise:

- 1. Sit in your chair with your spine nice and straight, your shoulders tall, and your feet planted on the ground about shoulder-width apart.
- 2. Hold a dumbbell in each hand in front of your chest. You want to keep your elbows touching your sides throughout the exercise.
- 3. Push your arms out to the side, while keeping your elbows touching your sides. You should feel some slight pressure in your shoulders as your shoulder blades come together when the weights move away from your body.
- 4. Face forward throughout the exercise and keep your neck straight.
- 5. Slowly bring your arms back to the starting position.
- 6. Repeat the action 8 times for one set, and complete 3 sets in total. Take a short break (around 30 seconds) between each set.

Tailor the exercise to you: If you're just starting out with exercises for osteoporosis of the spine, you don't need a lot of weight to reap the benefits. In fact, you can start out using two tin cans from your kitchen cupboards for this exercise if you don't have dumbbells or would rather start cautiously (just make sure the cans weigh the same amount). When you feel the exercise is becoming too easy, try upping the weight for a little extra resistance.

Low Dumbbell Row

Why the low dumbbell row?

The low dumbbell row primarily works the latissimus dorsi muscles. The latissimus dorsi, or "lats" as they're commonly referred to, are the broadest muscles in your back. They fan from the back of your arm to your lower spine on either side of your back.

Having strong lats is great for your spine because your lats assist in bending from side to side (like peering around a corner) and arching your spine (like bending over to pick something up off the ground).

Here's how to do the exercise:

- 1. Place your left hand palm down on a bench or chair, with your left knee and lower leg also resting on the bench/chair about 8 inches or so further back.
- 2. Plant your right foot on the floor, and hold a small weight in your right hand (palm facing you) with your arm fully extended towards the floor.
- 3. Keeping your spine straight, lift the weight up towards your body until your upper arm is parallel with the floor and your elbow is pointing straight out behind you. Focus on lifting the weight with the muscles in your back and shoulders rather than your arms.
- 4. Slowly extend your arm back to the starting position.
- 5. Repeat the action 8 times on each side for one set, and complete 3 sets on each side in total. Take a short break (around 30 seconds) between each set.

Tailor the exercise to you: Again, you don't need a lot of weight to reap the benefit with this exercise. It's much more important to perfect the technique of the exercise before you start adding more weight. And always keep your back nice and straight.

Tip: If you can, perform the exercise in front of a mirror so you can see whether your technique and posture are correct. If you don't have a mirror, get one of your friends or family members to film you performing the exercise and dissect your technique after.

Triceps Pushback

Why the triceps pushback?

As the name suggests, the triceps pushback primarily works your triceps – the muscles at the back of your arms.

But at the end of the kickback motion, your elbows are extended, which means your arms, and the weights, are supported by your posterior deltoid muscles. These are the muscles at the back of your shoulders. Strong posterior deltoids help you lift your arms up by your sides and behind you comfortably, and research shows shoulder exercises help to improve shoulder flexion, pain and function in women with osteoporosis. Plus, your posterior deltoids are important for good posture!

Here's how to do the exercise:

- 1. Stand straight with a dumbbell in each hand with your palms facing behind you.
- 2. Slightly bend your knees and lean forward so that your upper body is at about a 50-degree angle. Bring your dumbbells level with the bottom of your buttocks and keep your back flat.
- 3. Push both dumbbells back behind yourself and bring your shoulder blades together towards your spine.
- 4. You don't need to push the dumbbells back too far, just enough to feel the strain in your middle to upper back.
- 5. Aim to lift your weights just clear of your bottom and then bring them back to the starting position.
- 6. Repeat the action 8 times for one set, and complete 3 sets in total. Take a short break (around 30 seconds) between each set.

Tailor the exercise to you: Beginners may find it more comfortable to do this exercise from a kneeling position. To do this variation, kneel on a yoga mat with your left foot flat on the mat and your right knee on the mat with your right leg out behind you. Lean forward slightly while keeping your back straight, and complete steps 3 to 6 as outlined above.

Superwoman/Superman

Why the superwoman/superman?

This exercise is one of my all-time favorites! The superman/superwoman is fun to perform and works your erector spinae muscles, which makes it a great exercise for strengthening your back and improving your posture. See, the erector spinae muscles are a set of muscles that run vertically alongside your vertebral column (spine) offering support and stability.

One of the biggest muscles in the erector spinae group is the iliocostalis muscle which is located near the base of your spine. So, giving it a work out is a great way to strengthen your lower back and help reduce

any niggling pain in the area. In fact, research shows the superwoman/superman exercise (alongside other exercises) is effective for reducing back pain! Plus, lifting your head during the exercise helps to strengthen your neck and the cervical section of your spine too.

Here's how to do the beginner variation of the exercise:

- 1. Lie on a yoga mat with a pillow under your hips and a rolled towel supporting your forehead.
- 2. Extend your body and place your arms down by your sides.
- 3. Bring your arms up and stretch them out in front of you as if you were flying.
- 4. Lift your head up off the towel but keep looking down toward the floor.
- 5. Hold this pose for three seconds, then lower your head back down to the towel and return your arms to your sides.
- 6. Repeat the action 8 times for one set, and complete 3 sets in total. Take a short break (around 30 seconds) between each set.

Tailor the exercise to you: When you feel comfortable with the beginner variation of the superman/superwoman, you can try the intermediate variation. This variation is similar, but you lift your legs during the exercise too. This little modification works those back muscles a little harder, and also brings your core muscles into play too! You can see how to perform the intermediate version of the superman/superwoman exercise below.

Please note: To protect your spine during exercise, you should aim to lengthen your spine and steer clear of any major curving.

Here's how to do the intermediate variation of the exercise:

- 1. Lie on a yoga mat with a pillow under your hips and a rolled towel supporting your forehead.
- 2. Extend your body and place your arms down by your sides.
- 3. Bring your arms up and stretch them out in front of you as if you were flying.
- 4. Lift your head up off the towel but keep looking down toward the floor. At the same time, lift your legs up off the floor and tense your buttocks.
- 5. Hold this pose for three seconds, then lower your head back down to the towel, return your arms to your sides, and lower your legs back down to the mat.
- 6. Repeat the action 8 times for one set, and complete 3 sets in total. Take a short break (around 30 seconds) between each set.