

Corrective Exercise Programming for Shoulders

Always create a program for shoulders for balance to improve sports performance, functional fitness, and healthy posture.

Remember to always consider the full shoulder girdle. It includes four joints and 17 key muscles. Among them: the rhomboids in the upper back, the levator scapulae that run through the back and side of the neck, the latsissimus dorsi, rotator cuff muscles and the pectorals of the chest. In order to address the health of any one of these, all must be assessed.

What are you most likely to see? A combination of inflexibility and overactive and underactive muscle groups. This leads to a rounded posture and poor range of motion, which sets the stage for a litany of problems. The imbalances are uncomfortable and can easily lead to injury. We need balanced strength in the shoulders in all planes of movement.

What the Science Says About the Side Effects of Slouching

The shoulders-rolled-forward effect of too much time hunched over your desk (also associated with overactive pectorals and anterior deltoids) can do more than give you a slouched look. Studies have connected poor posture to:

- **Depression.** A 2012 San Francisco State University study published in the journal *Biofeedback* found that a slouched posture can increase feelings of depression.
- **Higher stress.** Harvard Business School researchers have found that people who slouch have lower testosterone levels and higher cortisol levels than people who stand in more powerful poses—both of which are signs of stress.
- **Low confidence.** The same study found that slouched posture—and the associated hormonal shifts—also leads to low self-confidence.

The good news is that research has shown that standing in a more erect, open position (straight and tall with hands on hips, for example) for as little as two minutes can create positive changes in mood and stress levels. Specifically, it can increase testosterone by about 20% and decrease cortisol by about 25%. Posture matters—in more ways than you think.

General Shoulder Suggestions

Imagine. In walking, focus on the crown of the head staying tall. In swimming, the client can imagine that he/she is being pulled to the other end of the pool by the crown of the head.

Change the exercise plan. A lot of the postural issues stem from a lack of shoulder—particularly posterior—strength. While most people tend to focus their exercises on pectoral and biceps work, that actually exaggerates poor posture and leads to upper-crossed syndrome.

Find balance. Balanced strength is what makes shoulders look good and perform at their peak. Your assessments will find where clients lack balance. It generally means developing and strengthening posterior deltoids and traps (middle and lower) and rhomboids. This can help bring everything back into alignment and out of the hunch.

Don't work through pain. Muscles may burn or feel sore, but joints should never hurt or pinch. If a client comes to you with that kind of pain, don't proceed—it could be a sign of impingement, an irritation of the rotator cuff or bursa that, with repeated irritation, could require medical intervention.

Work the chain. It all comes back to the kinetic chain and the relationship between your shoulders and the rest of your body. Many people have tight pectoral muscles, which pull them into a rounded shoulder position. Be sure to stretch the pectoral muscles. Stabilization is also fundamental for alignment, proper posture and strength.

Isometrics for retractors, depressors, spinal extensors, rhomboids, and general core stabilization are good to include.

Be ready to show. Clients with shoulder imbalances aren't always aware of when they're in or out of alignment. So, if they're struggling with their position during a session, take a short video to quickly show them how they look. "They'll say 'It doesn't feel that way.' But then it's amazing how quickly they adapt to the correct position. Putting up a plumb line is another idea for creating improved postural awareness with clients. They simply line up on one side of the plumb line to correct their forward head position, retract shoulders and line up with hips and ankles.

What to Do

So how do you build the strong shoulders your clients need?

- Relax the Tissue
- Stretch the Tissue
- Strengthen the Tissue

Relax the Tissue: Rolling shoulders up, back and down can help to relax the trapezius muscles. The Aquastretch technique, Trap Release, is effective for relaxing the traps. The practitioner stands behind the client, placing the soft part of their hand on the client's shoulder. The practitioner cues the client to roll their shoulders up and back and down. Each time the client rolls their shoulders down, the practitioner presses their hand down on the client's shoulder, using 3-5 pounds of pressure.

Stretch the Tissue: Stretching the pecs using the PNF stretch technique can be very effective in releasing tight muscles. The client places their hands behind their head, elbows out to the side.

The practitioner places their hands on the anterior aspect of the client's elbow and gently pulls back to stretch the pecs. In that position the practitioner cues the client to press their elbows forward, while the practitioner resists movement, which contracts the pecs. This is held for 6 seconds. The client releases the contraction and the practitioner is able to pull the elbows back further to enhance the pec stretch. This can be repeated 2-3 times. This is the PNF Contract/Relax technique.

Strengthen the Tissue – Painfree strengthening with good scapular control is recommended.

Exercise Examples

Upper-Trap Movements (elevation / depression)

The upper trapezius muscle runs from your scapula up to the base of your skull, and is responsible for lifting your shoulder blades. Any type of shrugging movement will target your upper traps, whether you use dumbbells, a barbell, cable machine or a machine designed for shrugging. Lift your shoulders straight up, pause briefly, then lower them again -- there is no need to roll your shoulders forward or backward.

Retraction Exercises (ad/abduction, horizontal ad/abduction, external/internal rotation)

The middle portion of your trapezius muscle and your rhomboids -- the diamond shape muscles in your upper-back -- work to pull your shoulder blades together. These muscles are worked during rowing movements, such as cable, barbell or dumbbell rows, but you can target them even more by performing scapular retractions.

Downward Rotation Exercises

Your mid traps, as well as your levator scapulae also perform downward rotation of your scapula. This is the movement that occurs when your shoulder blades move in and down. A prime example of this is during chin-ups or lat pull-downs. When performing these movements, focus on pulling your shoulder blades down and back on each repetition.

Designing Sessions That Include Corrective Exercise

When incorporating corrective exercises into programs, it is important to select exercises that will have the most impact. The results of your musculoskeletal assessments will guide you to make the most appropriate exercise selections.

To achieve the maximum benefit from corrective exercises, clients must perform them on a regular basis. Coach your clients to perform corrective exercises for homework. Help them remember what to do by providing written instructions documenting exercise-technique cues, frequency and duration. You can also take pictures of your clients performing their exercise(s)

and insert these photos into personalized homework folders. This is a nice way to brand your corrective-exercise services and encourage your clients to adhere to their homework program.

References

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