



Keller Therapeutics

Of Newburyport

Rotator Cuff

Strengthen and Stretch

The best defense against damage to the rotator cuff (or any other) muscles is to ensure they are strong and long.

Why Strengthen?

Every movement requires muscle strength. One might say that muscle strength is the size of the force generated when a muscle contracts; that is, muscle strength determines how much you can lift, push, or pull. Maintaining muscle strength over the long term is an essential component of your good health.

Equally important is that the strength of muscles on each side of your body be balanced. If some back muscles are stronger on one side than the other then you will probably be bent to the strong side.

The best way to strengthen a muscle is to contract it while providing some resistance to the contraction.

Why Stretch?

Muscles and their associated tendons are neurologically complex, but extremely simple in function. Muscle knows how to do one thing, and one thing only, and that is to contract, become shorter. In so doing it moves the bones in the body allowing us to perform amazing movements.

If muscles are chronically contracted (hypertonic) they have little leeway to contract further when they're needed.

This is the important function of stretching, lengthening: to keep muscles as long and relaxed as they can be so that when you need them to move some bones they have plenty of room to do.

How to Do.

The exercises below are intended to strengthen the rotator cuff muscles, and to leave them lengthened.

For strengthening I recommend a total of 30 repetitions of each exercise in batches of 10, but you must be the judge of what you can do. Start slow, and increase pressure as you feel comfortable; don't overwork these muscles. It's better to do 10 repetitions every day than to do 30 once a week.

For stretching, I suggest holding each stretch for 30 seconds, resting briefly, and repeating the stretch two to four times. Again, don't overdo the stretch. A light stretch is better than none at all, and as the muscle lengthens over a period of days, you may find stronger stretching to be comfortable. Remember that the shoulder is a very shallow joint and over stretching can tend to dislodge the ball from the socket.

Cardinal Rule: After you strengthen a muscle, lengthen it.

Supraspinatus.

The supraspinatus is a small muscle that sits just in front of the ridge you feel at the top of your shoulder blade (the spine) and attaches to the outside of the ball at the shoulder joint. Supraspinatus has little independent action. In addition to stabilizing the shoulder joint, it's primary function is to assist the deltoid muscle in moving your arm out to the side of your body. The deltoid muscle has three components that cover the front and sides of your shoulder; they are called the anterior, middle, and posterior deltoid.

Do the following for one side of the body, and then repeat for the other side.

Strengthen.

Stand with your hands at your side so that your shoulder is near a wall. Slightly rotate your arm inward.

Now press the outside edge of your hand against the wall with moderate pressure for a count of four.

Release the pressure for a count of four.

Repeat the pressure and release 10 times increasing the pressure each time. Rest briefly, and repeat twice more for a total of 30 repetitions.

Lengthen.

Place your arm across your chest, and put the other hand on your elbow.

Push your elbow toward your chest and hold this position for 30 seconds. Rest briefly, and repeat the stretch two to four times.

Infraspinatus, Teres Minor, and Subscapularis.

The infraspinatus covers the back or outside of your shoulder blade (Scapula), and subscapularis covers the front or inside. They perform opposite functions: the infraspinatus rotates your arm outward, and the subscapularis rotates it inward. Teres Minor lies at the outer edge of infraspinatus. It rotates your arm outward like infraspinatus, but also tightens your elbow into your side.

Strengthen All.

Sit, stand, or lie down as you wish. Bend both elbows at 90°, and interlace your fingers keeping your elbows close to your body at all times.

For a count of four, press your fingers and hands together. This is strengthening the subscapularis.

For a count of four pull your hands apart keeping your fingers interlaced so the hands don't actually separate, and simultaneously tighten your elbows into your sides. This strengthens the infraspinatus and teres minor.

Repeat those two moves 10 times, and rest briefly. Repeat 10 times twice more for a total of 30 repetitions.

Lengthen Infraspinatus and Teres Minor.

Again sitting, standing, or lying, raise your arm in front of your body so it's about 90°, and bend your elbow also 90° across your body. Now reach across your body with the opposite hand, and pull the elbow across your body, and hold this position for 30 seconds. Rest briefly, and repeat the stretch two to four times.

Lengthen Subscapularis.

Stand at the side of a door frame as though you are about to go through it. Raise your arm so that your elbow is a little higher than your shoulder, and place your fore arm vertically flat against the door frame.

With the opposite leg, take a step through the door frame until you feel a stretch in your shoulder. Enhance the stretch by rotating your body slightly away from the door frame.

Hold this position for 30 seconds. Rest briefly, and repeat the stretch two to four times.