

Grip Strength

Grip strength has been found to be a measure of health in several ways. It's not a coincidence we want to improve it at OsteoStrong.

Poor grip strength has been found to be linked to an increased risk of heart attacks, stroke, cognitive decline, several chronic diseases and now longevity!

There are a few ways grip strength can influence the shoulder-

1. Improves Grip Strength

What we speak of the most at OsteoStrong, A stronger grip can help to improve wrist function and may prevent injuries. This increased grip strength can make functional tasks such as carrying groceries, opening jars, and lifting objects much easier.

2. Neurological Connection of the Grip and the Rotator Cuff

Many studies have shown a positive correlation between hand gripping activity and rotator cuff muscle activity. This correlation has been shown to be a result of a neurological connection through the upper kinetic chain. One advantage of this mechanism is that it provides the shoulder with anticipatory stability in upper extremity tasks involving a gripping activity.

3. Redistributes Muscle Activity of the Shoulder

Not only does gripping help to activate the rotator cuff of the shoulder but it assists in ensuring the muscles of the shoulder 'fire' in the right order and sequence minimising challenges with shoulder issues in the future.

4. Neurons that fire together wire together.

By focusing on grip strength, we can encourage a better stability and increased strength response. Gripping can be used to increase the flow of neural drive to all the muscles in the upper kinetic chain.

5. Better blood flow

For injured/irritable shoulders or shoulders that could benefit from increased blood flow and improved venous return, grip work provides a muscle pump similar to that of ankle pumps for knee patients. Improved blood flow – better white blood cell saturation – potentially improvement in healing time.

6. Prevents Mechanical Compensation

A weak grip can cause compensatory mechanisms in the elbow, shoulder, and/or cervical spine. A lack of stability in one segment will always be made up for by another and usually it is higher up the chain.

This is why our focus with you on the Upper Growth Trigger is pushing through the palms of the hands and keeping the shoulders in a neutral position (not up to your ears) and relaxed etc.

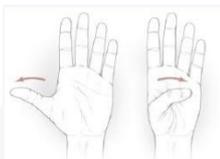
Ways to improve grip strength –

Note: starting any strengthening program needs to be completed slowly and with the appropriate guidance.

We are aiming to improve the dexterity of fingers, muscle strength of forearms and the ability for the forearm/wrist to rotate.

Lingo: ulnar = pinkie side; radius = thumb side; extensor = forearm side with hair; flexor = forearm side with no hair.

- **Wrist flexor stretches** Begin with a bent elbow. Grasp the fingers of that hand with the other. Pull the hand back gently until you feel the stretch. Repeat the same exercise with a straight arm.
- **Wrist extensor stretches** Begin with a bent elbow. With the other hand, grasp the thumb side of the hand and bend your wrist downward. Repeat the same exercise with a straight arm.
- **Squeezers.** Squeeze a soft stress ball between the fingers and thumb of one hand. Hold for 30 to 60 seconds. Repeat with the other hand.
- **Cloth wringing.** Wet a small towel or cloth. Then use both hands to wring out the water. Repeat several times.



- **Play with playdoh/clay.** Squish clay into a ball. Use your palms to roll long "snakes."

- **Thumb flexion/extension** Begin with your thumb positioned outward. Move the thumb across the palm and then back to the starting position. Repeat the movement several times



- **Wrist ulnar/radial deviation** Support your forearm on its side (on a table on a rolled-up towel), thumb upward. Move the hand straight up and down in small motions.

- **Shoulder bottoms up press** Laying on your back with your knees bent. Starting light, you may just use a clenched fist. This is usually performed with a kettlebell, but you may use anything at home. Hold your arm above your head with a straight arm.

Minimise your shoulder from raising up to your ears. Hold 40-60seconds, relax and repeat 3x.



Progression – holding the arm above your head and rotate the wrist, palms up and palms down.