

# Eccentric Strength Training

## The Right Way to Rebuild Your Tendons



# Centre for Chiropractic & Sports Rehabilitation

An integrative, biomechanical approach to the everyday sports and spinal injuries.

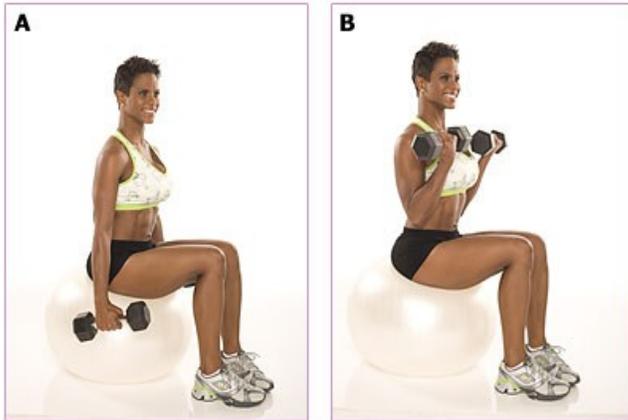


Figure 1: The Bicep Curl

Strengthening your tendons is an incredibly important part of your treatment at CCSR. Once you and your doctor have cleared your problem area(s) of damaged tissue, lengthening and strengthening the affected tendons will ensure continued strength and overall health. This sort of strengthening will teach your body to operate efficiently and effectively, can rebuild muscle mass and strengthen muscle, and is particularly effective in repairing tendinoses (tendons with long-term damage) all over the body. And, eccentric training is low impact and easy to do!

### What is Eccentric Training?

Eccentric training is simple: it's the lowering or lengthening phase of any exercise. Let's use the bicep curl in Figure 1 as an example: gripping a dumbbell, the patient raises her hand to her shoulder. When she does so, the bicep contracts, creating a group of shortened muscles and tendons (B). This is called *concentric* strengthening. When the patient slowly lowers her arm back to her side, the bicep and surrounding tendons lengthen (A). This is *eccentric* strengthening: lengthening the tendon while it is under a load. Eccentric strengthening can be performed with any tendon or muscle in the body.

### How do I do it?

Clinical studies have proven that a dedicated regime of eccentric strengthening is an effective way to heal painful, damaged tendons. In fact, after friction massage and active release techniques (Dr. LaBelle's preferred treatment methods), this is the *most* effective way!

You must perform two exercises to improve or heal tendinosis in your wrist: wrist flexion (Figure 2) and wrist extension (Figure 3).

With your elbow at a 90-degree angle, grip the theraband with your right hand, palm facing up. Slowly curl your hand upwards, and gently lower back down (Figure 2). Perform this 12 times with each hand. Then, perform the opposite movement, gripping the theraband with your palms facing downward and curl your hand downwards (Figure 3). This motion should also be performed 12 times with each hand. Repeat this entire sequence three times.

**Remember: eccentric training will only result in permanent results when you follow a dedicated regime. Perform each movement every day for three sets of 10-12 repetitions. Continue for twelve weeks.**

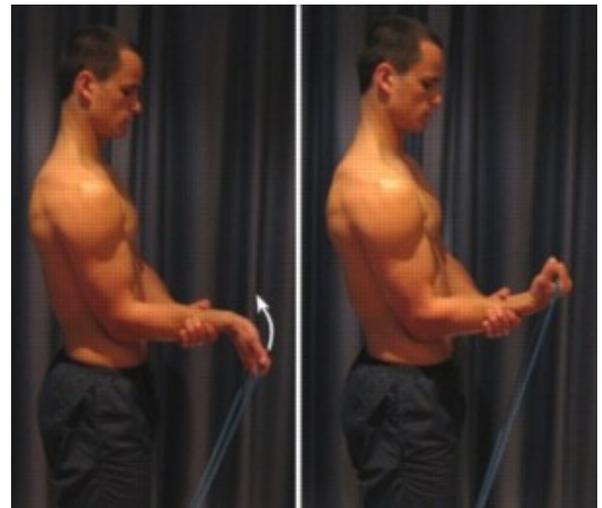


Figure 2: Wrist Flexion



Figure 3: Wrist Extension