

the **CrossFit** JOURNAL ARTICLES

CrossFit Shoulder Therapy

Tyler Hass

One of the paradigms in physical therapy is the notion that once range of motion (ROM) is restored, the patient is considered healthy. The American Medical Association quantifies the severity of back problems mostly on the loss of spinal ROM (McGill, 2002). While this is a laughable definition of “healthy,” we need not dwell on it because our goal is to pass by “healthy” faster than prunes through a goose.

Part of the definition of CrossFit is that sickness, health, and fitness fall into a continuum (see the “What is Fitness?” issue of the CrossFit Journal [October 2002]). A person with bad shoulders generally has weak, tight shoulders. A person with healthy shoulders (according to health codes) will have adequate range of motion, but not necessarily strength. Truly “fit” shoulders must be strong throughout the full range of motion. This article describes a progression of exercises that has been proven effective at restoring ROM and strength in the shoulders. A lot of doctors tell patients with shoulder problems to never lift anything over their heads. I disagree.

This article is not intended as medical advice. As always, we suggest that you consult a doctor, and then another doctor, until you find one who will sign off on this type of work.



Bar Hangs

The first exercise in our progression is hanging from a bar with straight arms. What does it mean to have straight arms? They should have no bend in them. We also want an extended body. You should try to reach your toes to the ground. This is an extremely strong position. According to some people, you should always keep your shoulders depressed in their sockets when hanging or doing pullups: <http://forum.dragondoor.com/training/message/354725%5C>

Notice the shoulder position of the gymnast in the photo to the left. He is performing a giant swing on the rings. This skill starts in a handstand. He then swings down and then back up to a handstand. The force of the swing is 10-12x bodyweight at the very bottom of

the swing. Again, take notice of his shoulder position. It is the same “ears in the shoulder” position that was discussed in last month’s CrossFit Journal. In spite of what others might say, this position is strong and should not be ignored in our training program. It provides a functionally useful range of motion that can become extremely strong.

If you are not ready to support your full body weight in a bar hang, you can use your legs for assistance.

1 of 3

CrossFit Shoulder Therapy (continued...)

Kip Swings

The second exercise in this progression is the kip swing. To perform this exercise, you begin in a hang. You should start from a perfectly static hang. Some people see the kipping pullup and think they need to initiate a pendulum swing. The kipping motion is actually more like a standing wave and when you stop, you should not accumulate any extra swing. You will simply stop where you are.

To start, you push your chest forward, while driving your heels backward. From the side your body will look like the letter C. Next, you drive your chest back and your feet forward; however, don't lift your feet by folding at the hips. This position should look like a backwards C, or the opposite of the first position.

Kip swings are done by rhythmically alternating between these two positions. Start out slow and easy. As you get better at the timing, you can add as much power as you can safely handle. This swing can be developed to the point that you are capable of launching yourself over the bar (like a muscle-up) with straight arms.

Kipping Pull-up

This is the staple pullup of the CrossFit program. Once you have the hang of the kip swing, you will then pull yourself up to the bar at the culmination of the backswing. This exercise was discussed in great detail in CrossFit Journal 32 (April 2005).

These three exercises develop passive range of motion, starting with static range of motion and moving into dynamic range of motion. Once you have mastered these exercises, you will have restored the ROM of your shoulders. Next we will move into developing the active ROM of the shoulders.

Overhead Supports

The first exercise is simply to support an object overhead. Wooden dowels work quite nicely. If you have to start with a slightly wide grip, that is okay. Over time, you should strive for the ability to hold the dowel overhead with your hands together. This is probably a good place to remind everyone of the location of the overhead position. It is directly over your head! And to stifle all of you clever people out there, I will add that you must maintain proper upright posture while supporting the dowel overhead. Arching back wards can definitely get

Our house really has two shoulder/ CF stories. I'll start with mine. Over the years I had my right shoulder dislocated twice, and my left had been separated by falls or blows several times. Add to that a tear across the muscle of the anterior deltoid and you have a pretty good picture of what my shoulders were like before CrossFit. When I started CrossFit I could not reach above my head with my right arm and it was painful to do so with my left even though I had done the physical therapy thing several times. When I began, I could not do a single full range pull-up. I simply had no strength out of the bottom position and it hurt like hell. Overhead presses had not been a part of my program for at least 15 years. I started working the movements with the full-range of motion that was possible for me. I am almost two years in now. Recently, two days after my 46th birthday, I did a set of 50 kipping pull-ups, the next day I pushpressed my bodyweight for a set of 5, and for the first time I did nose to the floor handstand push-ups. I am stronger than I have ever been and the shoulder joints feel better than at any time in the past 20 years.

My wife Mikki also had shoulder problems and was unable to get her right arm above her head for at least a couple years. She had surgery on the shoulder about a year and a half ago. She went through the typical PT and finally gave up on it because she wasn't getting better. She started CrossFitting and of course found her strength and range of motion improving weekly. Last week she did 19 full-range pull-ups. Just so we have it straight, this is a 40-something mother of three who had shoulder surgery last year.

CrossFit works.

- Jeff Martin, BrandX Martial Arts



the dowel over your head, but it is a weak position. We want the weight overhead and as high overhead as you can get it without your heels coming up off the ground. You should be wearing your shoulders like ear muffs.

Handstands and Overhead Presses

Next you will progress to active, loaded ROM. To do this you can work on both handstands and exercises that have you putting weights overhead, such as military presses, push presses, and jerks. People with tight shoulders often perform these exercises without ever locking the barbell out overhead. Remember, 3 inches in front of your forehead is not overhead. If you cannot lift a wooden dowel over your head, adding weight is not the best idea. Assuming you have mastered the previous

exercise, you can start adding loads. As before, you want your shoulders in your ears.

Overhead Squat

The overhead squat has an athlete actively engaging his shoulders through the full range of motion in a position of compromise. The overhead squat is covered in great detail in CrossFit Journal 36 (August 2005). For extra challenge, try this exercise with a wooden dowel and keep your hands together and your feet together. Once an athlete has mastered this feat, it is safe to say that he has “fit” shoulders.

