

the **CrossFit** JOURNAL ARTICLES

Dumbbell Conditioning for Rotational Strength and Health

Michael Rutherford

As you look everywhere in the sporting world you see athletes performing sports with a rotational component. In sports such as baseball, tennis, and golf, the athlete must transfer ground forces through the middle of the body to the upper extremities. Without getting into physics involved, suffice it to say that those with weaker rotational strength and experience will not be as successful and will most likely end up with aches, pains, and possibly even injuries. A little preparation and prevention goes a long way.

In this month's Dumbbell Coach article, I present the three-step process I use for improving rotational strength and health.

Step 1: Get good at overhead squats

The first step in developing rotational strength is to get weight above the head. This triggers the musculature about the lumbar region to work in stabilizing the area. Basic strength in this area lays a good foundation for more complex moves and additional strength-endurance conditioning later.

Overhead squatting is the launching pad for this activity and, in my opinion, provides the biggest bang for your rotational training buck. Building your capacity at overhead squatting is one of the keys to foundational core strength. Single-arm overhead dumbbell squats offer the added advantage of requiring unilateral stabilization and exposing imbalances so that the

athlete can correct potential problems or avoid injury. Overhead squatting your bodyweight on a barbell for fifteen reps or performing a single rep with bodyweight plus 25 kg is a sign of elite ability.

Step 2: Get into shape

A sound conditioning base is critical to proper execution of any sport skill. Those activities that include a rotational component require keen coordination of movement and demand that all the muscles work together. As an athlete fatigues due to lack of conditioning, the potential for injury from execution of rotational movements increases. Your return on investment in GPP ("general physical preparedness" or broad-based fitness) will be high.

Pull out your favorite CrossFit workout of the day. Or fire up your Internet connection and see what is up at headquarters. You can also use dice like I do with my clients. Each roll represents one of "the girls." For beginners, we do these workouts modified and scaled back (what I like to refer to as "Men's Journal style"). You can follow the three-days-on, one-day-off workout schedule that CrossFit.com uses, but there's nothing magical about that particular scheme. You can get equally good results from a five-on, two-off schedule, or from one day on and one day off. It's important not to get injured by an irrational exuberance for loading or to chase a good time. Establish consistency and build strong technique in the fundamental movements first.

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Dumbbell Conditioning for Rotational Strength and Health (continued...)

Step 3: Perform rotation-specific movements

Before your workout, practice these drills with light dumbbells.

Lunge and twist

This basic drill can be implemented with almost any population. Keep the hips stationary and turn the torso toward the side. “Take a picture” and hold it for a moment. Go forward and backward for five to ten paces. Only light loading is required.

Lunge Twist



Reverse lunge tilt and twist

The reverse lunge tilt and twist is a multi-planar movement using two 10-pound dumbbells. The frontal, sagittal, and transverse planes are all active during this movement. Step back with the right leg. With a light dumbbell in the left hand, reach up and tilt to the right, looking over the right shoulder slightly. Make sure the hips are square to the front, and do not overreach. (People who have hypermobility in their lower back do not need loading for this particular movement.) Switch hands and reverse the direction of the movement. Try three to five reps per side for this exercise.

Reverse Lunge Reach Tilt



Overhead extension anterior reach

Stand on the left leg with a light dumbbell in the right hand. Reach back overhead with the dumbbell and then reach forward with it toward the ground while balancing on the left leg. You can place a cone or other object in front of you as a target to touch on the forward part of the movement.

Overhead Extension Anterior Reach



Low to high diagonal reach

Squat with a light- to moderate-weight dumbbell at the floor just outside your right ankle, with both hands

holding the dumbbell handle. Then, in a smooth motion, stand and rotate to the left, pulling the bell diagonally up across your body and up over the left shoulder until the arms are fully extended upward and to the left. As you execute the move, your torso and head will rotate along with the bell, and you will pivot on your toes to face to the left. Repeat on the other side. The total number of reps need not exceed five to ten per side in a set.

Low High Diagonal Reach



Saxon side bends

Named for old-school strength athlete Arthur Saxon, this is also a good warm-up drill when performed without load. For the weighted version, use two one- to three-pound dumbbells. Seriously, this is all the weight you or your athletes will need. Press the bells over your head and position the feet at shoulder width. Lean to the left and then return to center and move immediately to the right. This is a dynamic movement in both directions. Keep the chin untucked and the eyes forward. Perform five to ten reps.

Saxon Sidebend



Michael Rutherford (a.k.a. Coach Rut) is the owner of [CrossFit Kansas City/Boot Camp Fitness](#). He has over a quarter-century of fitness coaching experience with athletes of all ages. He has also worked in hospital wellness environments and rehabilitation clinics. Coach Rut holds academic degrees in biology, physical education, and exercise physiology and sports biomechanics. He is a USAW-certified Club Coach and is a CrossFit level 3 trainer. He is also the current national Masters Champion in weightlifting at 94 kg. You can learn more dumbbell exercises from his DVDs [Dumbbell Moves Volume 1](#) and [Volume 2](#).