

the **CrossFit**[®]

JOURNAL ARTICLES

Dumbbells

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Twenty years ago I was awarded my first full-time job as the university's first fulltime strength and conditioning coach. Fresh out of graduate school and having served as an assistant conditioning coach in a Big 8 (now Big 12) athletic program I was ready to whip the world. There was only one problem. The school had a designated area for their new weight room but not enough equipment.

The school was inadequately equipped with the classic barbell and the accompanying weights. I had conditioned using barbells and I had learned to write programs involving barbells. With only enough equipment to service half the team, it was determined that the underclassmen would use the dumbbells for their training. Since they were the lowest members of the food chain, they would have to wait to graduate to the next class. What happened next was a tremendous learning experience for this young coach.

What we discovered during the post-assessment phase of the program that included agility testing, speed and power was that the kids using dumbbells improved as much, if not more than the older kids using the barbells. Now I understand that it was not a controlled study and that the majority of the underclassmen had never experienced any structured conditioning before college. The impression it left on me was so powerful I began a quest to try new exercises and ways in which to incorporate dumbbells.

As a CrossFit coach and athlete, I find dumbbells advantageous in the following ways.

- Require little space. You can toss one in your trunk and drive to a field or park for a workout. There is no need for bars and clamps and weight trees.

- Inexpensive. Since all you need is the bell itself then all the other stuff is not required. I might note that even though I own kettlebells I don't find them to be superior to dumbbells and in most cases the cost to benefit ratio points clearly to the advantages of the dumbbell.
- Great for joint stability.
- Versatility. This is my favorite. You can duplicate any classical movement and then some.
- Positive Transfer. Don't confuse this with rolling around on a Swiss Ball. Great things happen when using dumbbells in your conditioning. Just using dumbbells can add about 10% more effort to a workout as opposed to barbells. I can personally attest that I have seen athletes improve in the following by using dumbbells training exclusively.

- Vertical Jump
- Balance
- Acceleration
- Hip Flexibility
- Torso and abdominal strength

Sport coaches I have worked for have reported that athletes using dumbbell routines have improved their movement patterns after working with dumbbells.

In looking at dumbbell training I break it down at a couple of levels. First, it's going to be either single arm or double arm. It's pretty basic after that. We are going to pull, push, lunge, squat, twist or work some gait mechanics. Now you can roll out your bench, balls or your wobble boards, but I generally prefer the stuff where you are standing on your feet. The prime movers get much more work when you train on terra firma.

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Dumbbells (continued...)

We will start with some basics and move to some more complex movements.

LUNGING

SPRINT TECHNIQUE LUNGE WALK

I really like double-arm weighted lunge walking and single-arm weight lunge walks. This is a fundamental movement pattern that is not used enough. At CrossFit Kansas City we lunge walk every day as part of our warm-up. When the mood is right we use dumbbells for the walk. Pull up the toe, tighten the glute and stride under control. The torso is erect with hands moving from the hip to the lip. We stride forward and backward.



I also like the HAMMER technique with the bell in front and at the side. The balance and stabilization here is outstanding

Finally, we use OVERHEAD lunges as part of our programming. I have noticed the dumbbell overhead lunge has been showing up at lot at universities and colleges across the country. This is an outstanding movement.

CrossFit coaches should, at the least use some of these lunge movements in their warm-ups.



Dumbbells (continued...)

OVERHEAD SQUATS

Anyone who wants to maximize his or her abilities needs to overhead squat. With a single dumbbell in your hand this is a completely different experience.

CLEANS & PUSH PRESS/PUSH JERKS

I have observed that learning the shrug part of the pull with a dumbbell can be easier than learning with a bar. The athlete is more able to feel what that shrug does to the dumbbell than when holding both hands on the bar. I generally recommend that you alternate arms initially. Once you have the feel for the movement then proceed to the double-arm movement. Unlike the barbell version you will not have to unlock your grip to have the barbell in the proper rack position. You will be holding the bells hammer style. The biggest issue I see with cleaning a dumbbell is the inexperienced athlete turning it into a hammer curl. Strike yourself 12 times with PVC whenever you do this.



The push press/push jerks from here are straight up from the shoulders past the ears and really feel powerful! Concentrate on slapping the floor with your foot with the split jerk.

Obviously you put them together pulling from the hang, the floor or a combination of hang, push press; floor push jerk could be one of your complexes. Are you having fun yet?



Dumbbells (continued...)

SNATCH VARIATIONS

These are clearly my favorites. The snatch is one of the fastest movements in athletics. With a dumbbell in your hand it really gets smoking.

The muscle snatch is a good warm-up and teaching tool. Stand in front of a wall to feel how you need to bring the load up close to the body.

Once you have this down then move to single-arm snatch. You can start from the hang or from the floor. Remember that the longer your pull the more work you are doing. Pulling from the floor is my preference and recommendation.

The single-arm, single-leg dumbbell snatch with split catch is a movement I learned from Tom Cross at Mid-American Nazarene University. This is a highly athletic movement. From the hang with one bell in your right hand you balance on your left leg. In one explosive movement you snatch the bell and drop into a split stance with the right foot forward.

OTHER APPLICATIONS

You can challenge your athleticism with drop snatch, duck walk and press at the bottom. I like to call it the PIG ON ICE SKATES. I named it this after watching some 300lb offensive lineman warm-up with a version of this movement. After performing a drop snatch with one or two dumbbells take 4 steps forward, 4 backward, 4 left then 4 right and finish with a press to stand.



Dumbbells (continued...)

CrossFit athletes can become very frustrated with the handstand push-up (HSPU). My athletes like the challenge of the squat dumbbell press as a substitute for the HSPU. This takes out the knee kick and core but adds additional challenge and uniqueness to the workout.

A COMPLEX TO CONSIDER

I have located a number of tremendous complex movements to use over the years. My rules are simple. Never use more movements than are allowed by short term memory and secondly more than you can devote 100% of your energy towards.

With these rules in mind, I typically compose complex drills with two to four exercises. Some related and some unrelated.

One of our more infamous complex movements at our facility involves a single dumbbell and three movements. Four snatches right, four snatches left followed by 4 overhead squats right, 4 overhead squats left. We then finish with alternating lunges 4 left, 4 right while holding the dumbbell in the right hand and then in the left.

This was not to be presented as the definitive article on how to use dumbbells. My hope is that you will view these as another quality tool in your toolbox of movements. If you are planning the trek to Colorado in November we will be spending some time exploring these movements and others in detail. Until then, try some CrossFit workouts of the day with dumbbells. You won't be disappointed.



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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](#).