

the  
**CrossFit**  
JOURNAL ARTICLES

## Medicine Ball Cleans

Greg Glassman



The clean and jerk and the snatch, the Olympic lifts, present the toughest learning challenge in all of weight training. Absent these lifts, there are no complex movements found in the weight room. By contrast, the average collegiate gymnast has learned hundreds of movements at least as complex, difficult, and nuanced as the clean or snatch. In large part because most weight training is exceedingly simple, learning the Olympic lifts is for too many athletes a shock of frustration and incompetence.

1 of 5

## Medicine Ball Cleans (continued...)

Sadly, many coaches, trainers, and athletes have avoided these movements precisely because of their technical complexity. Ironically, but not surprisingly, the technical complexity of the quick lifts exactly contain the seeds of their worth. They train for, that is, they simultaneously demand and develop strength, power, speed, flexibility, coordination, agility, balance, and accuracy.

When examining the reasons offered for not teaching the Olympic lifts we cannot help but suspect that the lifts' detractors have no first hand (real) experience with them. We want to see someone, anyone, do a technically sound clean or snatch at any weight and then offer a rationale for the movement's restricted applicability. Were they dangerous or inappropriate for any particular population, we'd find coaches intimate with the lifts articulating the nature of their inappropriateness. We do not.

At CrossFit everyone learns the Olympic lifts – that's right, everyone.

We review here the bad rap hung on the Olympic lifts because we've made exciting progress working past the common misconceptions and fears surrounding their introduction, execution, and applicability to general populations. The medicine ball clean has been integral to our successes.

In the June 2003 issue of the CrossFit Journal we covered the foundation of one of the lifts, the clean. In that issue we made brief mention of our use of the medicine ball to teach the clean. This month we revisit and update that work.

The **Dynamax** medicine ball is a soft, large, pillowy ball that ranges in weight from four to twenty-eight pounds available in twopound increments to twenty pounds. It is unthreatening, even friendly.

Working with Dynamax balls we introduce the starting position and posture of the deadlift then the lift itself. In a matter of minutes we then

shift our efforts to front squatting with the ball. After a little practice with the squat we move to the clean. (A similar approach is used to teach the shoulder press, push press, and push jerk.)

The clean is then reduced to “pop the hip and drop – catch it in a squat” and it's done. The devil's in the details, but the group is cleaning in five minutes. It's a legitimate, functional clean. This clean may in fact have clearer application, than cleaning with a bar, to heaving a bag of cement into a pick-up or hucking up a toddler to put in a car seat.

### Common Faults ...and Their Corrections



*Heels up*



*Back rounded*



*Head down*



*Corrected starting position:  
heels down, head up, back arched*

**Common Faults ...and Their Corrections** (cont'd)



Arms bent



Pulling too high



No hip extension



No shrug



Curling the ball



Corrections:  
Arms locked, full extension, shrug, not pulling too high, ball kept close to body

## Medicine Ball Cleans (continued...)

The faults universal to lifting initiates are all there in as plain sight with the ball as with the bar. Any subtleties of matured and modern bar technique not possible with the ball are not immediate concerns, and their absence is plainly justified by the imparted understanding that this is functional stuff and applicable to all objects we may desire to heave from ground to chest.

In a group of mixed capacities the newbies get the light balls and the veterans get the heavy ones. In thirty rep doses whoever ends up with the twenty-eight pound ball is going to get a workout regardless of their abilities. The heavier balls impart a nasty wallop far beyond the same work done with a bar or dumbbell of equal weight; considerable additional effort is expended adducting the arms, which is required to “pinch” the ball and keep it from slipping.

### Common Faults ...and Their Corrections (cont'd)



*Low slow elbows in catch*



*Correction:  
Catch with elbows high*

We use the medicine ball clean in warm-ups and cool downs to reinforce the movement and the results are clearly manifest in the number and rate of personal records we're seeing in bar cleans with all our athletes. Yes, the benefit transfers to the bar - even for our better lifters!

In the duration of a warm-up there are uncountable opportunities to weed out bad mechanics. Pulling with the arms, not finishing hip extension, failing to shrug, pulling too high, lifting the heels in the first pull, curling the ball, losing back extension, looking down, catching high then squatting, slow dropping under, slow elbows... all the faults are there.



*Arms bent overhead*



*Arms not straight overhead*



*Corrected overhead position*

## Medicine Ball Cleans (continued...)

With several weeks practice, a group will go from “spastic” to a precision medicine ball drill team in perfect synch. In fact, that is how we conduct the training effort.

We put the athletes in a small circle, put the best clean available in the center as leader, and ask the athletes to mirror the center. Screw-ups are clearly evident by being in postures or positions out of synch. Attention is riveted on a good model while duplicating the movement in real time. The time required for “paralysis through analysis” is wonderfully not there. Thinking becomes doing.

Individuals generally impervious to verbal cues become self-correcting of faults made apparent by watching and comparing to others. It is not uncommon for shouts of correction to be lobbed across the circle from participant to participant. The number of coaching cues and discussion becomes reduced to the minimum and essential as the process is turned into a child’s game of “follow the leader”.

Where this becomes “dangerous”, “bad for the joints”, “too technical to learn” or any other nonsense routinely uttered about weightlifting we don’t know.



---

*We review here the bad rap hung on the Olympic lifts because we’ve made exciting progress working past the common misconceptions and fears surrounding their introduction, execution, and applicability to general populations. The medicine ball clean has been integral to our successes.*

---

Greg Glassman is the founder (with Lauren Glassman) of CrossFit, Inc. and CrossFit Santa Cruz and is the publisher of the CrossFit Journal. He is a former competitive gymnast and has been a fitness trainer and conditioning coach since the early 1980s.