



The Deadlift

From the Floor to Lockout (Part 2)

WEEKLY

By Matt Gary

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Like the squat and bench press, deadlifting is a skill. Only a heretic would advise not deadlifting as the optimal means for building a bigger deadlift. That's like telling a world-class violinist to spend their time practicing on the tuba. If you want to deadlift more, you should deadlift more.

The two primary ways of training the deadlift are with multiple repetitions or singles. And while there are examples of world-class deadlifters using the multiple reps approach, at SSPT, we much prefer singles and for good reason.

There's an old deadlift axiom that says, "If you can hit it for one rep, you can probably do two." This is the direct result of using stored elastic energy on the eccentric portion of the start of the second rep. Lowering the weight first enables us to build tension, generate momentum, and employ the stretch reflex. Even if you perform multiple repetitions in a "dead-stop" fashion, the successive reps are still easier because of the tension you've built on the eccentric phase of the preceding reps.

Multiple-rep sets of deadlift are more appropriate for bodybuilders, fitness enthusiasts, strongman competitors, and other strength athletes who want to put on some muscle and/or increase their muscular endurance. More time under tension may help your muscles grow but, for powerlifters, our singular objective is lifting maximum weight. In terms of deadlift training for a one-rep max, singles are more optimal.

On numerous occasions I have seen lifters perform heavy doubles or triples in training and then barely be able to complete their attempt at the meet with the same weight. This is especially true of those who bounce or use a "touch n go" style. This enables trainees to use energy from the floor to assist in lifting the weight. At competitions, all deadlifts begin motionless from the floor so the multiple reps approach is irrelevant in terms of building momentum at the start. Furthermore, multiple-rep sets arguably lead to greater degrees of fatigue and higher susceptibility to injury. With multiple reps, lower back fatigue eventually becomes a limiting factor resulting in technical breakdowns.

On game day it all boils down to attempt selection and execution.

Performing singles in the deadlift doesn't mean coming into the gym, loading the bar to your maximum weight, pulling it once, and going home. Deadlift training requires a planned and systematic approach of using percentages for multiple singles then attacking the muscles that are germane to the movement. An additional benefit to training the deadlift with multiple singles is more practice.

Powerlifting may be the best example of a "practice like you play" sport. Lifters should strive to simulate meet conditions in training as often as possible and singles afford you that opportunity. Singles allow you to treat each rep as its own attempt or set. You can practice visualization, set-up, breathing, and technique with each one. With multiple-rep approaches, you only get one shot on the first rep of each set.

For example, let's assume Lifter A deadlifts 440-pounds (200kg) for one set of 10 reps. This equates to a total training volume of roughly 4,400-pounds (2000kg). Odds are high that the lifter exerted tremendous effort during the set and the last few reps probably looked pretty ugly due to accumulated fatigue and subsequent technical breakdowns. Such a Herculean effort would likely require a long rest period before an additional set was attempted. On the other hand, Lifter B performs 10 sets of 1 rep with the same weight. The total training volume is identical but Lifter B was afforded 10 times as many opportunities to practice their sport-form skills of setting-up, breathing, and executing the lift to standard. Short rest periods between reps enabled Lifter B to regroup, perhaps chalk their hands, and reset before the next rep. Furthermore, each rep was a first rep that wasn't influenced by momentum or the stretch reflex. Performing ten "first" reps increases skill acquisition and the likelihood of enhanced technique. Stop looking at volume like endless toil and start seeing it through a different lens. Be thankful for the additional opportunities to improve and sharpen your skills.

It's difficult to generate momentum in the deadlift because we must overcome inertia on the bar. You're not apt to get a heavy weight moving from the floor by pulling it slowly. Deadlifts need to be done explosively with a focus on technique and speed. Singles allow you to be explosive and deliver maximum force into the barbell each time. Multiple repetitions do not allow the same velocity because as the set continues, bar speed significantly decreases with each repetition. As form breaks down over the set, the risk of injury may increase and you're not likely to be in the correct start position again after the first rep. This is not the preferred combination and doesn't set the table for an optimal training environment. Moreover, singles allow you to train the deadlift more frequently and at higher intensities. Muscle damage is reduced and greater loads can be used. Increasing frequency and intensity helps bridge the volume gap created by doing one rep per set as opposed to multiple reps.

Train like an animal. Think like a human.

It's all about skill acquisition. Here's a look at three sample 10-week plans featuring varied frequency, intensities, and volume:

SAMPLE DEADLIFT CYCLES						
Percent of 1RM x sets x reps						
	OPTION 1	OPTION 2		OPTION 3		
Week	Day 1	Day 1	Day 2	Day 1	Day 2	Day 3
1	65% x 15 x 1	70% x 12 x 1	70% x 12 x 1	80% x 6 x 1	75% x 8 x 1	70% x 10 x 1
2	70% x 15 x 1	75% x 10 x 1	75% x 10 x 1	80% x 8 x 1	75% x 8 x 1	70% x 8 x 1
3	75% x 12 x 1	80% x 8 x 1	70% x 8 x 1	80% x 10 x 1	75% x 8 x 1	70% x 6 x 1
4	80% x 10 x 1	80% x 10 x 1	72.5% x 8 x 1	80% x 12 x 1	75% x 6 x 1	70% x 6 x 1
5	82.5% x 8 x 1	85% x 6 x 1	75% x 8 x 1	85% x 6 x 1	80% x 7 x 1	75% x 8 x 1
6	85% x 6 x 1	85% x 8 x 1	75% x 6 x 1	85% x 8 x 1	80% x 7 x 1	75% x 6 x 1
7	87.5% x 6 x 1	90% x 5 x 1	80% x 6 x 1	90% x 5 x 1	82.5% x 5 x 1	77.5% x 8 x 1
8	90% x 5 x 1	90% x 6 x 1	80% x 5 x 1	92.5% x 3 x 1	82.5% x 6 x 1	77.5% x 9 x 1
9	92.5% x 4 x 1	92.5% x 4 x 1	rest	92.5% x 5 x 1	82.5% x 7 x 1	rest
10	90% x 1, 95% x 1, 90% x 1	95% x 2 x 1	rest	95% x 2 x 1, 91% x 1	rest	rest
11	Competition	Competition		Competition		

The above plans are linear from week to week. With the first option, you may add some back down (fatigue drop) singles in the latter weeks to accommodate for the reduction in volume but it's not always necessary. The second two examples place the heaviest deadlifts earlier in the week. That can be switched to meet your schedule and/or create a different undulation. Our long-term planning is more undulating in nature with the majority of our training occurring in the 80-89% range. There are enormous benefits to hovering around that intensity. It's light enough where one can perform lots of volume to acquire skill without overtraining or needing a de-load. On the other hand, it's heavy enough to elicit a significant strength response and keep lifters close to top form. When 80-89% is your home base, you're never very far from bringing your strength to a peak. You can create your own training plan using [SSPT's Deadlift Table](#). The options are infinite.

We train like we compete so most training sessions begin with squats and we always squat before deadlifting. The squat serves as a warm-up for the deadlift and prepares us for the rigors of game day. When using the once/week option above, the deadlifts are performed after a high-volume, medium-intensity squat. Later in the week, we'll squat heavy immediately followed by a special deadlift assistance exercise based on our individual weaknesses. You'll rarely see anyone at SSPT deadlifting with the opposite grip or stance. Our specific deadlift assistance exercises closely resemble the competition style deadlift and are most often trained in the one to three rep range but sometimes as high as four or five. We may select from deficit, halting (pause), rack/block (partials), Romanian deadlifts, or even add chains. These assistance deadlift moves are typically implemented via [Rates of Perceived Exertion](#) (RPE) or percentages (of our DL max) for three to four consecutive weeks over the course of a single training block. After using a special exercise for one block, we'll switch it for another. Training sessions are occasionally finished with a non-specific (supplemental) posterior chain movement but always with some direct (weighted) abdominal work.

Most of our cycles end with our final heavy deadlift about 10-14 days out from a meet. For those worried about losing skill over the final week, rest easy. You're not going to magically forget how to deadlift overnight. Your body will super-compensate and thank you for the additional rest. You want to head into the meet with a ravenous attitude. There's nothing worse than feeling over-trained and leaving your heaviest deadlift in the gym. You do not need to test (max) the deadlift in training to hit a personal record (PR) at the meet. Most of our competition (peaking blocks) preparation ends at roughly 95% of our max. The deadlift is the powerlift most affected by game day adrenaline. Rest assured if your 95% singles go smoothly in training, you'll be good for significantly more at the meet. Even our second attempts in competition are often heavier than our final heavy single in training and they are always faster.

In preparation for the 2014 USAPL Raw Nationals, my final heavy single in training was 567-pounds (257.5kg) on Monday, July 7. On Sunday, July 20, I nailed 573-pounds (260kg) on my second attempt en route to an all-time beltless PR of 600-pounds (272.5kg) on my third. The PR was never in doubt. Starting months in advance, I visualized and performed it hundreds of times in my mind before ever stepping on the platform. I always use a winning mental approach because attitude is everything. On game day it all boils down to [attempt selection](#) and execution. Everything else is trivial and you'll never find me on Facebook or Twitter between attempts.



The great Greek philosopher Aristotle said, "We are what we repeatedly do. Excellence, then, is not an act, but a habit." Focus on the process, commit to consistency, and strive for technical mastery. The results will take care of themselves. You may not break a world record but with a single rep at a time; you can become an excellent deadlifter.



About the Author

Matt Gary has 20 years of powerlifting experience. He has served as both head and assistant coach on numerous international teams and currently coaches over 50 lifters from novice to elite. In 2012 he was named USAPL Coach of the Year and currently serves on the USAPL Raw Committee, as Chairman of the USAPL Coaching Committee, and is a qualified National Referee. He and his wife Sioux-z own Supreme Sports Performance & Training, Inc. (SSPT) in Rockville, MD, which is one of the nation's premier training facilities for powerlifters and weightlifters.

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