

The Deadlift: A Functional Fitness Perspective

By [Chet Morjaria](#)

When coaching the deadlift in a group setting, I invariably begin the session by asking who has deadlifted before. Usually a fair number of hands go up. About half of the hands are held proudly in the air, chests held high and accompanied by a knowing smile. The other half are held up in that semi-raised-looking-round-the-room way, hoping they do not get asked to do anything more!

Well the good news is, you all have deadlifted before. Every single person reading this article. Picking shopping up off the floor? Deadlifting. Picking your baby son/nephew/grandson off the floor? Deadlifting. A deadlift is simply picking something up, essentially a *dead weight*, from the floor, and standing up with it. Deadlifting is very much a part of our fundamental being. Deadlifting is who we are, and who we were born to be. Oh, and did I mention it is fun?

The building up of lower back strength under load, for everyday safety through to athletic performance, is a key part of any functional fitness program. A conventional barbell deadlift is one of the best tools of the trade for this purpose. So here is where we will start our journey of investigating the deadlift.

There is a tendency to overcomplicate the deadlift, however the principles of the lift are very simple. That is not to say the lift itself is easy; it involves a multitude of muscles working in unison to pick the bar up, which is why it is so beneficial. Let us first look at what the deadlift looks like.

[Click here](#) to view a clip of a full conventional deadlift

We can simplify this into start position, end position... and what happens in between.

End position is the most obvious. At the top of the lift you want to be stood full upright - that is to say, with knees and hips and shoulders fully locked out.



This is the end of the actual lift - you have got the bar from the floor to where it needs to be. However what goes up, must come down. We will examine this shortly.

Start position is the next key element. We can go through a simple progression in order to assume a safe and consistent position each time. In order to achieve this consistency, we must assume that the bar and weight plates we are using are also consistent. This will be achieved by using a standard Olympic bar - the weight plates will either be rubber bumper plates (which are always this same diameter) or metal plates of the same diameter (21.5cm between the bottom of the bar and the floor - usually the 20kg or 25kg plates). Whilst objects we deadlift in real life come in all shapes and sizes, for the purpose of the barbell deadlift it is important we have this set-up.

Find your ideal 'get-set' position as follows:

Do a vertical jump! Exactly as it sounds - jump as high as you can into the air from a standing-still position. Do this three times. Observe the stance you naturally jump with. This is the stance you need to be in to deadlift. Your feet will be roughly underneath your hips -

this is the stance through which we can impart the most force through the ground, as you have seen with your jump. It is also a good warm up!



On Your Marks

Walk up to the bar and place your feet underneath the bar in this stance. Make sure the bar is even in terms of the plates being equidistant from each foot. The bar should also bisect your foot. Be aware the position you are standing in may give you a skewed perspective. Get a friend or fellow gym goer to check it is actually bisecting your foot for the first couple of times you do this. Remember how this looks in relation to your shoelaces or something similar so you can find this position every time.



Grab the bar with both palms facing towards you (commonly known as the double

overhand grip), hands slightly wider than shoulder width apart and symmetrical on the bar. Your bum should be sticking up in the air at this point. Your arms should be straight at the elbows, and remain straight throughout the entire lift. However they should also be relaxed - they are simply hooks that enable you to connect your body to the bar.

Get Set

Bring your bum down and lift your chest up. A couple of things will happen. Firstly your shins will be touching the bar. This is exactly what we want - the bar to be very close to the body. Also lifting your chest up will help to create an arch in your lower back. Now lift your chest up even higher and tighten up your back.

Ensure your shoulders are ahead of the bar. For the purposes of a sound basic deadlift for overall functional fitness, this is the most biomechanically advantageous position.



Go!

You are now ready to lift! Take a deep breath and get tight to that point where a tiny bit more effort will send the bar flying up. Now pull the bar fast right up your legs until you are standing tall in the end position we looked at.

While this sounds complicated you will soon find that it becomes second nature - and this is

the whole point. A consistent set up that you can self monitor in terms of the key checks on position we have looked at above.

To summarise, these points are:

- Stance - feet under hips
- Grip - slightly wider than shoulder width apart, palms facing towards you
- Position
 - Arch in lower back (lumbar extension)
 - Chest high
 - Shoulders ahead of bar
 - Bar on shins
 - Weight on heels

Now if you are anything like me you may well have ventured onto YouTube or similar and checked out some videos of people deadlifting. Perhaps you have seen others deadlifting too. No doubt you have seen a whole bunch of different styles, particularly of different back angles at set-up. What does the correct start position look like? Surely they can't all be correct?

In terms of being correct - as long as the position satisfies the criteria in the summary above, it is a correct start position for that person. To an observer this may look entirely different in each case. A large part of the reason they all look so different is simply different body proportions. Someone with long legs and a shorter torso will have a more horizontal back angle at the start than someone who has shorter legs and a longer torso.

So the key point from all of this is about satisfying a set of criteria, not copying a certain person or style. Your start or 'get-set' position will be unique to you.

Now we have a firm idea of where we start and where we end up, let's examine how we get there in a little more detail. But not too much detail. It is very easy to overcomplicate the deadlift. We have taken some time to examine the get-set position as it literally sets the

way the rest of the lift is going to go. So with regards actually picking the thing up, just follow a few key rules, and you will be both safe and efficient as possible- which means you can go heavy!

1) Take a deep breath

This is important. The pressure created when you fill your belly with air will help maintain the arch in your lower back and general position of your spine. Look at a point on the ground about 10ft away from you - your neck should feel relaxed, not strained.

2) Tight in body and bar

By now your whole body should feel coiled like a spring, ready to release at speed. We want all that tension to be channelled right up the legs, through the hips, up the back, across the scapula down the arms, and into the bar. A common mistake is to be tight in body but lose energy at the point of contact with the bar. To avoid this, pull at the bar until it is just about to leave the ground. You will actually hear a noise of the bar hitting the plates. That is when you have completed the energy chain - a tiny amount more effort will result in the bar leaving the ground. NOW you are truly ready to lift that bar.

3) Up the legs

The bar must come *straight up the legs*. *Up the legs* - ensure that the bar stays in contact with your legs the whole time - both up the shins and then up the thighs. If you are wearing shorts and they ride up, this is a good sign. Keeping the bar close to you to you will help you retain the most control over the bar and over your body position. *Straight* - we want the bar to travel up in a straight vertical line, the most efficient path between the floor and finish position. And efficient means heavy!

4) Hips and shoulders

To ensure the bar comes up in a straight line, we need to make sure we clear the knees. To achieve this, the first part of the deadlift must involve pushing our heels right into the floor, and bringing the hips and shoulders up in unison, at exactly the same time. This will have the effect of keeping the back angle the same and gives us space to clear the knees. As we can see from the first and second pictures, the lifter retains the same back angle whilst the bar is still coming up her shins.



Also note the fact that all the key elements from the start are still in place - the weight is through the heels, the chest is up and there is an arch in the back.

5) Stand up straight

As we can see from the third picture, when the bar is coming up the thighs the lifter is changing the back angle - lifting the chest and pulling the shoulders back. Once you are past your knees, stand up straight until knees, hips and shoulders are all locked out.

A word about putting the bar down. It is the exact opposite of the way it came up. So the hips must go back first and the bar goes down the thighs. The hips continue to go back until the bar passes the knees at which point the knee bends too. The bar should go back down along the straight line it came up. The body must remain in the same position with the chest up, shoulders retracted and arched in the lower back during this process.

So there you have it. A simple, fundamental lift with immediate application outside the gym. So if deadlifting is so straightforward, why are we looking at all these details? Because nailing the basics will promote safety, and the ability to lift heavy.

Why do we not see more people doing it at the gym? As we have seen is straightforward to pick up the fundamentals. That is not to say it is easy to pick up the bar! In fact it is a hard and taxing lift - which lends itself to benefits proportional to its difficulty. In fact the deadlift is one of the three lifts which form the sport of powerlifting - the other two being the squat and the bench press.

As in any sport there are a number of ways we can break the deadlift down and train individual elements. However that is beyond the scope of this article - the purpose of which is to get you lifting as a safe, effective and coherent whole. Also, as you may have noted, - the article is called 'The Deadlift: A Functional Fitness Perspective'. There are certainly other perspectives and variations we can consider. We will look a few of the key variations in brief below.



Firstly, the sumo deadlift. This lift entails a much wider leg position and narrower hand position. There are certainly numerous benefits to the sumo style; for example more of an emphasis on the legs and a shorter range of motion. It is equally as valid as the conventional deadlift we are examining in competitive terms: both are allowed in powerlifting competitions. However we have chosen to focus on the conventional deadlift as, from a perspective of lower back strength, the conventional deadlift is king. We will be revisiting the sumo deadlift in a subsequent article.



Another variation is the complete opposite, a 'snatch grip' deadlift, with a very wide hand position. This lift, along with a variation on the conventional deadlift called the 'clean deadlift', function as assistance exercises to the Olympics lifts, the Snatch and the Clean and Jerk.

There is also a debate in the world of deadlifting as to shoulder position in relation to the

bar. Again it is a little beyond the scope of this article to enter into this discussion here and now, but suffice to say that we have chosen to focus on the shoulders over the bar position (as opposed to in line with or even behind the bar) as it makes for the optimum deadlift with regards to overall functional strength and capacity - and transferable strength to other movements and sports

It would behoove us to mention the work of Mark Rippetoe at this point, as he is arguably the key proponent of the benefits this position bestows on the lifter. For those that are interested, a detailed technical analysis can be found in Starting Strength (Rippetoe, M. and Kilgore, L, 2nd Edition).

You can even deadlift on a single leg or using a single arm. The single arm barbell deadlift is still a competitive lift in the world of All Round Lifting (or the 'Odd Lifts')

So we have looked at the specifics of how to deadlift. We have revelled in its effectiveness. We have even glanced at some of the variations. What now? Go out and lift!

Here are 5 tips for putting all this into practice.

1) Practice! Read the article, watch the videos...and go out and lift. If you have never deadlifted before, it will probably feel like a lot to think about. But that is what the practice is for. However for practice to make perfect it has to be correct practice so...

2) Learn to self-correct. If you can deadlift in front of a coach, then that is great. The coach can help us with correct positioning, but we have to simulate that when we lift by ourselves. So learn to use markers of your own body in relation to itself, space and the bar. For example in the starting stance, we talked about how you will remember what the bar looks like above your shoelaces. You might notice that when you are in the optimum starting position your elbows are in a certain position relative to your knees. As you lift the bar up, passing your knees is an indicated to "open the hips up" and stand up tall. Another tip - check stance, grip and position *every* time.

3) Don't go too heavy too often. It's very easy to get carried away with deadlifting. It's fun. It's good for you. More and heavier has got to be better, right? Heavier is definitely better - the heavier we lift, the stronger we get. However, if it is at the stage where you are lifting to your max effort three times a week, it is time to cut it back a little. A scheme of something like 3 sets of 5 reps is great for both building up strength and fine-tuning the technique. Try not to lift to your single rep max too often, even if you are a seasoned lifter. This places a lot of stress on your body and should really be done once every two weeks at most.

4) Use the double overhand grip for as many lifts as possible, both to build up grip strength and to limit imbalances leading to potential injury. The alternative is the alternate grip - one hand facing towards you, the other away. However this should only come into play in the heavier sets.



5) Lift fast. The deadlift and the other powerlifts are sometimes referred to as the "slow lifts". But this is something of a misnomer. The lift still needs to be explosive - a *powerlift*. Get that bar up there fast.

So...next time you are asked if you have deadlifted before, you can be one of those people that takes a deep breath, raise your chest, and stands up tall (I am hoping that by now this is a familiar sequence) and raises your hand high - proud of the fact that you are making a profound impact on your physical strength and wellbeing, in your commitment to mastery of the fundamentals of the deadlift.



Chet Morjaria is the Founder and Director of FK.UK, strength & conditioning coach and sponsored strength athlete. He spends most of his time spreading the word of functional fitness, and is one of the original coaches on the infamous CrossFit London iCourse. He also loves to extol the virtues of picking heavy things up off the ground (and putting them overhead), specialising in the deadlift. [Click here](#) for his full bio.