THE DEAD LIFT: PART I

The Conventional Dead Lift

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The Dead Lift in its many variations is an excellent training movement. Since this exercise can be manipulated to target most of the muscle groups in the body it is an excellent exercise to base a training program around. Conventional style is the most common variation on the Dead Lift as seen at the gym so my first article in this series will address conventional Dead Lifting .

To perform the Conventional Dead Lift the lifter should stand close to the bar so that the shins almost touch the bar with feet about shoulder width apart. Bend over and grasp the bar with either an overhand or reverse grip (one hand over and the other under). Keeping the low back in a "neutral spine" position. (A neutral spine is the low back position that maintains the "normal" lordosis, or curve. This is sometimes incorrectly referred to as a "flat back" position). Squeeze the scapulae together (shoulder blades), let the arms hang straight down, keep the head in a neutral or slightly up position, squeeze your "butt cheeks together" and L I F T. When lifting the bar it is important to keep it close to the body avoiding any tendency to let it drift out. If the bar moves away from the body during the lift it will significantly increase the stress on the lower back and make it much more difficult to complete the lift while increasing the chance for injury. The reason that the start should not place the bar tight against the shins is to avoid having to let the bar move out to clear the knees. Once the bar passes the knee the second pull begins. At this time the hips should be thrust forward as the bar continues its upward path. Once the knees and hips are straight square the shoulders to complete the lift. It is not necessary, or advisable, to lean back at the top of the lift.

Breath control is important in weight lifting and the Dead Lift is no exception. Be sure to get plenty of air prior to starting the pull, hold your breath briefly at the initiation of the pull and then exhale slowly as you stand up with the weight. If you are doing repetitions be sure to regain control of your breathing before starting the next repetition. It is also important to be sure that you are in the correct starting position prior to each rep. Bouncing the bar at the bottom may get you an additional rep or two but it is also likely to pull you out of position thereby limiting the effectiveness of the training effect and increasing the chance of injury.

The Conventional style Dead Lift will primarily target the entire back of the body from the upper traps to the gastrocs since the ankles, knees, hips and shoulders must all move into extension during the lift. The hamstrings, glutes and back extensors are worked particularly hard with the Conventional dead Lift. The abdominals are also worked during this movement, as they must contract to provide core stability in order to

accomplish the movement. Other areas worked are the quadriceps, posterior delts and the muscles of the forearm, wrist and hand. I recommend that you do not use lifting straps for dead lifting so that you will build grip strength. If you find that your lifts are limited by your grip then use lifting straps for your dead lifts *if you must* but train your grip hard so that you will not be limited by it in the long run. Most trainees benefit from using low rep combinations when training the Dead Lift hard that way you will maximize the effectiveness of each pull. Cheating on the DL is not beneficial. Conventional Dead Lifts are safe when properly performed (assuming you have no underlying pathology) and will strengthen your back better than almost any other exercise. Many trainees find that high intensity DL training requires significantly more recovery than other exercises before the next session. If this is the case try training the Dead Lift every 10 days or every two weeks. This will allow for complete recovery so that you can maintain a healthy back and continue to train with high intensity.

If you add some pushing type exercises to your workout (such as bench and overhead press) along with 20 to 30 minutes of cardio you will have a complete full body workout in a minimal amount of time. You can gain strength and mass on such a program done twice per week as well as improve your overall conditioning. This type of abbreviated approach is ideal for those times when "life" gets in the way of your ideal workouts. It is important, to make gains, whether you are doing a high volume or low volume program, that you maintain high intensity. If the lifts do not leave you feeling more than a little drained then you will probably need to increase your intensity. You can accomplish this by adding weight to the bar, increasing the number of sets or decreasing the rest period between sets. Increasing the number of reps per sets will also increase the intensity but if you choose this route be sure that you can maintain perfect form throughout each set. This is not an exercise that should be trained to failure!

There are a few precautions to keep in mind before you launch into a high intensity Dead Lift based program. If you are new to the Dead Lift or are new to high intensity training programs you should start slowly acclimating yourself to the movement and perfect your technique before you start piling on the weight. You should also start off with a general conditioning program to build up your baseline fitness level. Those with a history of back problems or other health issues should see the appropriate medical practitioner, MD, Chiropractor or Physical Therapist, prior to initiating any new training program.

A final note: if you experience pain beyond the expected muscle soreness or if you experience any radiating symptoms ... stop the exercise immediately! Get it checked out by a medical professional. Symptoms could be the result of using incorrect technique for the exercise. So be sure your technique is perfect. If you continue to experience symptoms seek medical help and stop doing any exercises that "hurt".

There are many other variations on the Dead Lift. These will be covered in future articles. Stay tuned! Train hard and stay healthy.

The Dead Lift: Part II

The Sumo Dead Lift

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In part one of this series I discussed some of the general advantages of adding Dead Lifting to your training routines. In that article the technique and benefits specific to the Conventional Style of Dead Lifting were addressed. This time we will enter the wonderful world of the "Sumo" Dead Lift. This style is a useful alternative to the Conventional style especially for competitive Power Lifters and fitness trainees who find that low back pain or stiffness and long recovery times from bouts of Conventional Dead Lifts limit their ability to train aggressively on the Dead Lift. If your training progress or max lifts are stalled it may be that switching to the Sumo technique will allow you to get back on track and make progress again. Many find that they can train more frequently or with higher poundage by using this style for part of their training. Some competitive Power Lifters have found that they can substantially boost their Dead Lift max by switching to the Sumo style.

The Sumo Dead Lift technique differs significantly from the Conventional. First of all, you will need good hip flexibility, as the stance is much wider. You will set up with your feet turned out (as much as 60 or 70 degrees in some cases) and out as far as the weight plates will allow, in extreme cases. The actual width of your stance will depend on comfort and your personal biomechanical advantage. At any rate your stance will be wider than shoulder width. The shins should be tight against the bar and your grip will be narrow and inside your legs. As with any Dead Lifting, you can use a full overhand grip or an alternate grip with either a thumb over (standard grip) or a hook grip (thumb under). When you reach down for the bar maintain a "neutral spine". Think of sitting back, not down, while maintaining the normal curve in your low back. It is also important to keep your shoulder back (scapular retraction) and your arms straight. Consider that your arms are only there to attach your torso (from the shoulders) to the bar. You will most likely find that your torso is much more vertical than with the Conventional technique. Finally, lift by squeezing the bar off the floor by extending your hips and knees simultaneously. You may find it useful to cue yourself to "spread the floor" or "push your feet apart". At lock out you will find that you are unable to square your shoulders as much as you can with Conventional technique. This is because of the narrow grip on the bar. The bar path should be straight up: that is, the shortest distance from floor to lock out.

Once you have mastered this technique you will find that it puts much less stress on the low back since it transfers a great deal of the effort to the hips and

legs. Your hamstrings and glutes will get a real workout. If you grow to know and love this style of Dead Lifts you will find that the amount of weight you can lift goes up significantly. My recommendation is that if you train Sumo you should cycle into your training year some Conventional Style Dead Lifting so that you maintain optimum low back strength. Also, be sure to do plenty of core training.

An interesting aspect of this type of Dead Lifting is that you will need to work on and think about "speed" off the floor for the initial pull. Once you break the bar from the floor the lock out should follow without too much trouble. With Sumo Dead Lifting that initial drive off the floor is the real key to success. Be sure your set up is consistent and your technique is as perfect as possible and you will be well on your way to picking lots of weight off the floor. If you don't drive hard off the floor you will find yourself wondering who snuck in and glued the weights to the floor!

In the next installment I will address some of the other popular variations on the Dead Lift such as Romanian, Stiff Leg and some thoughts on partials and rack pulls. Until then train hard, train smart and stay healthy.

DEADLIFT PART 3

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Our previous excursions into the wonderful world of Dead Lifting dealt with the two most popular methods for lifting a heavy barbell from the floor. If your goal is related to lifting the most weight possible from the floor then you will need to practice using the Conventional or Sumo techniques for the Dead Lift. However, if your interests run more toward building back, hip and leg strength or if you are looking for ways to enhance your Dead Lifting or Squat strength then you may wish to consider adding some variety to your Dead Lift training. Training with these is lifts is safe as long as you maintain perfect technique and do not have some pathology that would contra-indicate putting heavy stress on your back and/or hips. The basic rule here is that you *must* maintain a neutral lumbar spine during the performance of these lifts. That is, you must hold your normal lumbar lordosis during all phases of the exercises.

You may find advice related to the advantages of "rounded back" lifting. The theory is that in order to strengthen the back extensors you should allow these muscles to work segmentally in extending the back rather than using an isometric hold by maintaining the neutral spine. This sort of lifting is termed a P.I.L.E. lift (Progressive Isoinertial Lifting Evaluation) and is often used in a rehabilitation setting with chronic back pain patients. In this setting the lifts are monitored so as not to exceed parameters set for lumbar extension strength. As a theory, that makes a certain amount of sense but when you are training asymptomatic athletes or fitness enthusiasts to Dead Lift you will be using substantial amounts of weight since the hips and legs will contribute to the lift and these muscles will need heavy loads to achieve a training effect.

The **Romanian Dead Lift** is an excellent exercise for strengthening the back, hips and legs. In particular it will focus on the gluteal and trapezius muscles. To start the lift you will be standing and holding the bar with either an overhand or reverse grip. (You can get into this position by Dead Lifting the bar from the floor or by starting with the bar up on blocks or in a safety rack). The head should be slightly retracted and looking straight ahead or very slightly up (you will maintain this head position throughout the lift). Next, retract the shoulders so that you are "sticking out" your chest, again you will maintain this position as much as possible during the lift. At this point, simply bend over while maintaining a neutral lumbar spine and keeping your knees slightly bent. Hold the knees in this slightly bent position. Do not straighten them fully. It is also important that you keep the bar close to your legs throughout the movement. Do not allow your back to round, even if you feel that you are not bending over very much. This exercise can be very taxing but will produce tremendous results. I recommend that you keep the rep range at no less than 5 and no more than 10 or 12. If the rep range is too high you will fatigue during the set and risk injury due to technique failure. If the rep range is too low you will not be able to keep the intensity high without risk of injury.

High and Low Pulls are assistance exercises used to build vertical jump and speed "off the floor". These lifts are used extensively by Olympic style lifters but can be beneficial for fitness trainees, strength athletes and Power Lifters as well. These exercise require the use of relatively light weight as the focus is on pulling for speed. The set up is basically the same as for the Conventional Dead Lift (see Part 1). Again practice flawless technique. High Pulls require that you drive off the floor coming up on your toes and pulling the bar above the waist and as high as the lower chest. Low pulls are essentially a "speed Dead Lift" in that you drive hard and fast off the floor but only pull to about waist height or a little lower. The two lifts are very taxing neurologically so should never be trained in a fatigued state. Keep the reps low (in the 1 –5 range) reset for each rep and rest enough to fully recover between sets. Again, beware of fatigue; keep the number of sets low so that you can focus on speed and technique. The advantage to including these in your strength training is that they will enhance your initial pull off the floor.

Partial Dead Lifts are just what the name implies, that is limited range lifts. You can perform these as lockouts from just below to just above knee height or as short range lifts from the floor in which you contact an immoveable pin after a few inches and hold for a brief isometric contraction. These are specialization exercises and are effective for training sticking points in the range of your lift as a result they are seldom used for general fitness training.

As you have probably gathered from this series of articles Dead Lifts are an excellent training tool. These exercises work many of the body's muscle groups thus providing the lifter with a lot of "bang for the buck". Aside from the barbell squat the Dead Lift may be the most complete body exercise working everything from the ankles to the shoulder in one movement. The variety of the lifts will provide you with many hours of interesting and effective training and the nature of these exercises is such that you do not need a spotter or any special equipment or machines.

This wraps up my Dead Lift series. I've tried to keep it brief and easy to follow while still covering all the basics. If you have questions or comments please forward them to me at david.mansfield@healthsouth.com or you can e-mail me at my home address at Dave46M@earthlink.net. I hope I've encouraged you to take advantage of a truly efficient exercise in your strength training programs.

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