Different Types of Squat

- **Back Squat** there are two types of this squat: bodybuilding/weightlifting version, also called **high bar**, because the bar is placed high on trapezius muscles near the neck, and powerlifting version, also called **low bar**, where the bar is rested further down where the upper back meets the rear part of the deltoids. First one is used for achieving greater depth at the bottom of the squat while keeping the torso in the upright position, while second is used to create a lever advantage).
- **Front Squat** (The barbell is rested on the clavicles and front deltoids. Two grips can be used on the bar: clean type grip as used in Olympic weightlifting or arms crossed and palms placed over the bar).
- **Overhead Squat** (Bar is held above the head with arms fully extended in a wide snatch type grip. Depending on the flexibility of the shoulders and arms, narrower grip can be used to reduce the stress off the wrist joints. It is typically used in Olympic weightlifting training, but it can serve as a very useful supplemental powerlifting exercise).
- **Hack Squat** (It can be performed using free weights, where the barbell/dumbbells are placed on the floor behind the lifter to pick them up or using a sled type Hack squat machine).
- **Box Squat** (As the name implies, squatting is done by sitting on a usually wooden box at the bottom of the exercise. Height of the box can vary but typically it matches the lifter's "parallel").
- **Zercher Squat** (Arms are joined together and a bar is held on the inside of the elbows. A wooden board can be used between the bar and the arms to prevent knurls from tearing the skin).
- **Single Leg Squat** (Performed with one leg while non-lifting leg is held up and off the ground. It's usually done without the weights, because the bodyweight is generally enough on itself).
- **Bodyweight Squat** (As the name says, this one is performed only by using the bodyweight; without a barbell. The form is exactly the same as with back squat but just without the weights).
- **Split Squat** (Performed with one leg while non-lifting leg is rested behind the lifter on the floor. Similar to lunge exercise but without moving).
- **Bulgarian Squat** (Similar to split variant, except the foot of the non-lifting leg is not rested on the floor but on a knee-high platform).
- **Jump Squat** (At the top of the back squat the lift is continued into a jump off the floor. This is actually a plyometrics exercise).
- **Hindu Squat** (Performed without the weights by raising the heels and shifting the weight on toes. This form is completely different and useless in regards to powerlifting; because it drives the knees far pass the toes).

Types of DEADLIFTS

- **Conventional Deadlift** (When the term “deadlift” is used, it is usually referred to a conventional variant. This technique heavily employs the leg muscles, amongst many other secondary muscles, like back and arms).

- **Sumo Deadlift** (The legs are spread far apart to the sides, almost reaching the weight plates on the barbell, with arms reaching down inside of legs, mimicking a stance of sumo fighters. In oppose to conventional sumo deadlift involves heavier use of legs (especially hamstrings) and glutes instead of the back. If you have a massive waist or if you are really tall but have short arms I recommend you to do sumo. This technique may place greater stress on the connective tissues of the pelvic bone, so be careful how you do it).

- **Romanian Deadlift** (This variant is used by Olympic weightlifters. Emphasis is on the hamstrings, glutes and lower back. At lowest position waist should be straight with back parallel to floor. The bar is grabbed by extending the hips and bending the knees while the back is fully arched. It is raised by contracting glutes and hamstrings. Usually, a very wide snatch grip is used).

- **Stiff-Leg Deadlift** (This is another variant very similar to Romanian style that is primarily used in bodybuilding for developing hamstrings and glutes. The only difference between these two is that with stiff-leg you bend from the waist and with Romanian deadlift from the hips).

- **Single Leg Deadlift** (This is actually a stiff-leg deadlift only performed standing on one leg. Dumbbells or barbell is used, either with one or two hands).

- **Trap Bar Deadlift** (Trap bar has a hollow part in the middle where a lifter can step in and grab the two side handles. This creates more room for the knees to pass through thus recruiting the legs and glutes more than back).

- **Side Deadlift** (Also known as the suitcase deadlift, it is very similar to trapbar version where instead of the bar two dumbbells or suitcases, like in Strongman competition, are deadlifted).

- **Rack Pull** (Also called a partial deadlift, it is performed in squat rack or power rack for strengthening the lockout part of the motion. Due to its shortened range of motion considerably higher amount of weight can be lifted. The only limitation lies in the grip. To overcome this weakness, wrist straps can be used in

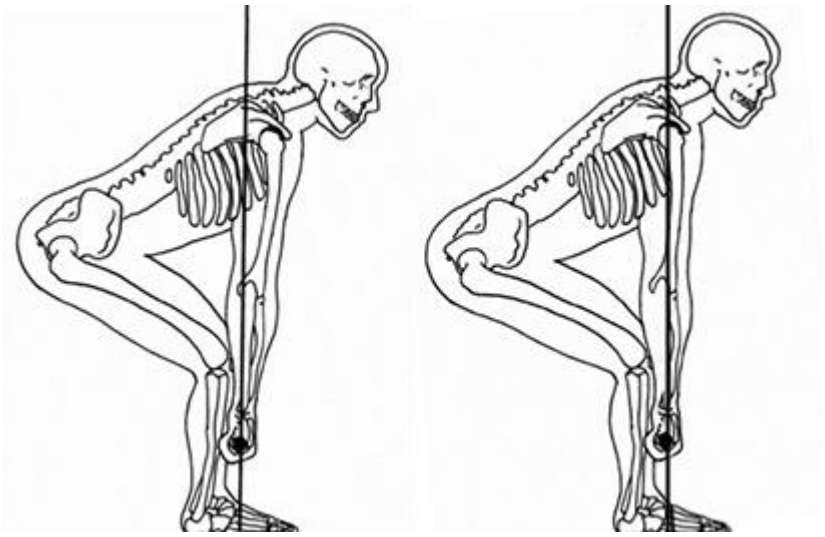
Cues/Phases/Explanation for Conventional and Sumo Deadlifts (Main Deadlift Styles)

Phases of the Deadlift (Conventional Style)

- **Feet Position** (Put the middle of your foot under the bar. Be sure to measure your whole foot and not just the part that you can see. Middle is somewhere above your shoelaces, where the bar stands approximately 2" (5cm) away from your shins).
- **Stance Width** (Position your feet about shoulder width apart. Feet can stand parallel to each other or with toes pointing slightly to the sides. This is something you should play around with and see what works the best for you. ADVICE: Try to jump vertically a couple of times. The landing position of the feet will be your deadlift stance).
- **Bar Grip Type** (Usually, two grips can be used. First one is mixed grip, also called alternating or offset, where stronger hand uses overhand (pronated) and weaker underhand (supinated) grip. Important thing with this grip I want to stress out is that you ALWAYS use a fully wrapped grip. Never use a thumbless (monkey) grip which is often practiced by bodybuilders where the thumb comes behind the bar with the rest of the fingers. Second one is hook grip where both hands use overhand grip with thumbs inside, allowing the lifter to "hook" onto them with the rest of the fingers. Olympic lifters are known for using this technique. In oppose to a classic overhand grip, where the bar can roll out of the hands, these two grips are used for bypassing the forearm weakness and holding heavier weights, thus preventing the bar from rolling out by using less grip strength. **NOTE:** Although some lifters practice the overhand grip for their lower weight sets and move to the mixed or hook grip when they surpass the strength capabilities of their grip. **DISADVANTAGES:** The mixed grip keeps shoulders and elbows in an asymmetrical position which can cause a lot of stress on the joints, while the hook grip is extremely uncomfortable for the thumbs. **ADVICE**: If you use the hook grip wrap the thumbs in a protective tape to reduce stress exerted on them).
- **Bar Grip Position** (Either grip you choose there are two schools of thought on this matter. Both are right to some extent. First says that the bar should be put close to the fingers, not in the palms, thus minimizing callus formation and skin tearing. But in this way you get a weaker grip. On the other hand, different schools advocate putting the bar deep in your palms, resulting in more reliable grip, but damaging the skin much more. **ADVICE:** For lower sets, while your grip strength is still enough use the first variant to prevent any palm hurting and the other one for max sets to ensure the maximum grip performance. **NOTE:** This won't hurt your technique at all, it is meant to save your palms from long term problems).
- **Bar Grip Width** (Arms must be completely straight and vertical (perpendicular to the floor). This is achieved by holding your arms shoulder with apart. In this position arms are closest to the ground which means that distance the bar has to travel is shortest possible. If the grip is wider or narrower than that, the bar will travel a greater distance which in result will cost you more strength. In addition, narrower grip than shoulder

width will make your shoulder blades come forward and break your back arch and prevent smooth rising of the bar by rubbing your hands against your legs).

- **Shoulders Behind** (Remember, you need to lift the bar up in a straight line as possible. To do so, the shoulders should be positioned slightly behind the bar. More accurate, the mid-line of the deltoid when watched from the side, not the front deltoid, should come slightly behind the bar. From this position you will be able to pull straight up and back).



Wrong technique (Left), Right technique (Left)

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- **Arched Back** (Arching your back is the most important thing you can do. Push your chest up and forward to prevent rounding of the back. Maintain strong arch throughout the entire movement. NOTE: Some lifters use more advanced technique, called round back deadlift that involves rounding of the upper back. Although it shortens the path I do NOT recommend it, because it's way too advanced and if you don't know what you're doing, you can destroy your spine permanently very easily).
- **Hips High** (Drive the hips/butt up as high as they can possibly go without sacrificing the arch in your back. Sinking the hips too low will turn deadlift into front squat or going too high will turn it into stiff-leg deadlift. You don't want either of that).
- **Chin Up** (This may seem as a detail of less importance, but it is way more important than you think. Look forward or slightly up to navigate the lift. Looking down during the lift can mess up you balance pretty fast or round your back which can lead to disaster. Your focus should be unbreakable).

- **Phase 2: Ascent** (Here I will use the example of performing a deadlift set with just one rep using maximum weight. Note: this example is actually a simulation of the maximum lift performed like the one on a meet. The only step that is different than in normal training is "Inhale Deep", where you will inhale before every repetition and not just before the first one).

- **Inhale Deep** (Take a deep breath, to take in a lot of oxygen supplies, because the next time you will breath in will be when you return the bar on the floor at the finishing point of the lift! NOTE: Don't exaggerate by taking too much air. Take just enough to make your stomach hard and push it out on your belt).
- **Hips Forward** (Explode to the top! Contract and drive your hips forward by pushing from the heels. Pull the weight up and back explosively and controlled in a completely straight line. Try not to pull from your lower back but instead bring your hips forward. Make sure not to bend the arms at any point. Keep the bar as close to you as possible to reduce the traveling path. NOTE: This may scrape your shins and knees, but in time you'll get use to it. To prevent the scraping you can wear deadlift socks and light protective shin guards).
- **Extend Knees** (Once the bar passes the knee level start straightening your knees. Assume an erect position by locking your knees and hips. There is no need to roll the shoulders too far back or hyper-extend the lower back).
- **Phase 3: Descent** (Once you're in the final upright position with knees and hips locked wait while the weight stabilizes. Referee will then give the down signal. Descent must be done in a very controlled and somewhat slow manner. Descending too rapidly or losing contact with the weight is not allowed. So be sure to control this part of the lift. Don't let the fact that you managed the weight so far to steal your focus, because it isn't over yet).
- **Hips Back** (Bend your hips back and start lowering the luggage. Continue shifting your hips back until you pass the knee level).
- **Flex Knees** (Once you're below the knee level, start bending the knees. This will save your lower back from excessive pressure).

Phases of the Deadlift (Sumo Style)

- **Phase 1: Setup** (Since sumo and conventional are very similar styles, there is only one step that differs between them. Be sure to read all the phases of the conventional style above before you read the following step that is specific to sumo deadlift).

- **Stance Width** (Position your feet as wide as you can with toes pointing 30-45 degrees to the sides. Make sure to assume wide enough stance to shorten the distance of the bar as much as possible and engage legs more than back, but narrow enough to have a lot of power for the lift. Exact position depends on flexibility and mobility of the hips and length of the legs. Not every lifter can use an extremely wide stance. This is something you should play around with and see what works the best for you).

Phases of the Bench Press

- **Phase 1**

- **Lay on bench** with 3 points of contact: Head, Shoulder blades, Hips

  - **Feet :** Option one: Feet flat on the floor where heels are underneath in line with the knees creating a 90 degree bend, next to bench, someone in line with hip width.. Option 2: Soles flat but feet positioned further out (things is more dependent on body time; longer limbs may feel more stable and generate more power with feet out a little wider to the sides), Option 3: Feet tucked back and on toes (this for some, helps generate a greater force of power using heal drive; pressing heals toward the floor as the weight is being press off the chest)
  - **Bridged Back** (Grab the bar with an underhand grip and pull yourself up towards the bar and down towards your feet, so that your forehead touches the bar. Do NOT move your feet of the ground; just arch your back into a bridge. After touching the bar with forehead, first rest your head on the bench, then traps and upper back while maintaining an extremely strong bridge. The back has a natural curve of the spine, it should not be pressed down into the bench losing its natural arch. Some people, especially power lifters exaggerate this arch allowing them to get tighter, shorten the range of motion, allowing them to press greater weight off their chest. Go with what is comfortable for you personally, also dependent on personal goals of bench press.
  - **Squeeze Shoulder Blades** Roll the shoulders back to meet the shoulder blades. Doing so helps tighten the back and raises the chest. Clamping blades tight together shortens the path that bar needs to travel, avoids recruiting of the anterior deltoid muscles and creates a thick upper back platform that will carry out most of the weight.
  - **Lats:** Should be flexed during entire movement. “Bend the bar”, doing so, will tighten up the lats (act like you are bending the bar in half, tight grip on this through the whole move). Lat activation is key to a strong, solid, big bench. Do not neglect firing the lats.
  - **Bar Grip Type** (First and most important thing I want to stress out is that you ALWAYS use a fully wrapped grip. Never use a thumbless (monkey) grip where the thumb comes behind the bar with the rest of the fingers. Wrapping the bar with thumbs will prevent it from dropping on your chest and ensure more pressing power. Digging your hands deep into the knurls of the bar, and squeezing it as hard as you can, will trigger a reflex which will make your entire body to tighten. This is a little trick used by the professionals).
  - **Bar Grip Width** (As for the width of the grip, this is something you will need to figure out for yourself. Wider grip will put more stress on the chest while narrower on the triceps. Either way is fine, just be sure not to use too narrow or too wide grip. As I said try different widths and see what works the best for you. NOTE: The spacing of the hands must not exceed 81 cm measured between the forefingers. In other words, both forefingers must be within the 81 cm marks and the whole of the forefingers must be in contact with the 81 cm marks).
  - **Wrists Straight** (First of all, put the bar on the root of the palms not the part that meets the fingers. As a result, the wrists should be completely straight, as almost

as if you are doing push-ups on your fists. Nevertheless, some lifters rely on heavy duty wrist wraps that allow you to bend the wrists an inch back while saving them from additional pressure. This way the path of the bar gets shorter, which means that less distance it has to travel.

- **Phase 2: Unracking**
    - Bar is unracked with control, by you and/or help from a spotter. Bar is placed above nipple line preparing for decend.
    - **Inhale Deep** (Take an enormously deep breath, to take in a lot of oxygen supplies, because the next time you will breath in will be when you return the bar on the rack at the finishing point of the lift! NOTE: Don't exaggerate by taking too much air. Take just enough to make your stomach hard and push it out on your belt).
    - **Elbows Locked** (Keep your elbows locked during the lockout because you are strongest in that position. Bending your arms will only waste your lifting strength by additionally pressuring the triceps).
    - **Unrack the Bar** (Don't unrack the bar by pressing out with your chest and triceps or raising the shoulders. Instead pull it off by using only the strength of your back (lats). This is not the time to be aggressive and jerk the bar up like a mad man. It will waste your strength, mess up your concentration and balance or perhaps result in an injury. After unracking, wait while the weight stabilizes. NOTE: Make sure to use a bench that has shallow enough "J" hooks to allow you to pull the bar out and not cause a resetting of your shoulder blades. But, these hooks should be deep enough just to catch the bar though).
- **Phase 3: Descent** (Descent must be done in a very controlled and somewhat slow manner. Descending too rapidly will make you lose control and bounce the bar off the chest which is not good to do. So be sure to control this part of the lift. The strongest focus is required for this stage).
    - **Tuck Elbows** (Lower the bar down and forward towards the lower end of your chest by rotating (tucking) your elbows in. The path of the bar will resemble a written backslash character "\". This part of the lift may be very uncomfortable and appear to go against logic if you are a beginner. However, this technique, once mastered will provide more power).
    - **Heels Down/Belly Up** (While tucking your elbows, simultaneously dig your heels as hard as possible into the floor and arch your back as hard as you can! Basically, drive your heels into the ground and push your belly up to shorten the bar path, but don't raise your butt of the bench). You should feel this throughout the whole body. Leg drive is essential to move weight off the chest. Bench is not just an upper body move. Glutes should be tight, contracted and firing, ass should the hamstring, calves,. Keep the whole body tight.
- **Phase 4: Ascent** (During this stage you must put forth all the resources that you have in order to drive the weight up. Since your descent was done slowly and bouncing off the chest is not advisable, you can't count on inertia to aid you in going up. NOTE: the bar should touch the chest at the sternum (breastbone), or the high point of the chest/ belly.

Different Types of Bench Press

- **Flat Bench Press** (When the term “bench press” is used, it is usually referred to a flat bench press which is thoroughly described in the text above. As I said, there are two types of this bench press: a bodybuilding/gym /standard version and a powerlifting version. First one focuses on stimulation and development of muscles, primarily chest (the pectoralis major), shoulders (anterior deltoids), and triceps, while second on weight lifted, which additionally employs middle (latissimus dorsi) and upper back muscles).
- **Incline Bench Press** (This variation works the same muscles as flat bench but with focus on slightly different muscle subgroups. In the position where the pelvis is lowered and shoulder are elevated, emphasis is shifted towards the deltoid and upper portion of the chest. In general, less weight can be pressed from this angle than from flat or incline benches).
- **Decline Bench Press** (Here the pelvis is elevated and the head is lowered. Although the same muscles are engaged as with flat bench, lower portion of the chest and deltoid are aimed. Such short trajectory of the bar usually allows greater weight to be pushed than on any other type of bench. This is an equivalent to raising the butt up on a flat bench).
- **Close Grip Bench Press** (Close grip is considered to be a shoulder width grip. At the bottom of the movement a barbell is rested on the sternum, i.e. lower than in normal or wide grip bench. Close grip forms such angle of the elbows where emphasis is thrown on triceps muscles, rather than on pecs).
- **Wide Grip Bench Press** (This one works the same muscles but with completely opposite focus than close grip bench. Triceps works very little at the top during lockout, while pectorals and deltoids carry out most of the strain. This variant is ideal for strengthening the press in the lockout phase of the movement).
- **Floor Press** (The weight is pressed while lying on the floor. Contact of elbows with the floor dictates how much the bar will be lowered. At the bottom of the movement focus is primarily left on pecs, but at the top triceps is targeted more. This exercise develops static strength more than dynamic strength).
- **Reverse Grip Bench Press** (Hands should grab the bar in such way that the palms are looking at you, which is the same as grabbing the bar for biceps curls. Reverse grip creates a position where only close grip can be used on the bar. As a result, triceps is heavily engaged. Although it may sound like an exotic exercise, this is actually the dumbest thing ever invented when it comes to benching. It can cause a number of injuries, starting from the wrists all the way up to the shoulders. As one smart man once said: “With reverse benching you are just pressing your luck”).
- **Dumbbell Bench Press** (Instead of using barbell, all bench variations listed above can also be done with dumbbells. Depending on the angle and grip width the same groups of muscles are activated. In addition to the major phasic (dynamic) muscles these presses also uses tonic (stabilizing) muscles even more than in regular barbell benching. As a result, greater stabilization skills are developed. Dumbbell bench press can be great a supplemental program to your core bench training, but I do NOT advise you to use it as a primary exercise).

Overhead Pressing Cues:

Start:

- Stand with feet hip-shoulder width apart
- Weight heavy on the heels
- Squeeze glutes to avoid arching your back further than its natural arch.
- Chest is up and expanded
- Grip bar with the base of the palms, directly over the forearm
- Elbows should be slightly in front of the barbell
- Wrist are in line with forearms
- Look forward with head natural
- Grip bar so that forearms are vertical
- Bar should be at about clavicle level

Execution on the overhead press:

- Bar is to be pressed straight up
- Tuck chin back and press bar straight up and overhead to full extension; return head to neutral and bring torso forward once bar clears face
- Lock elbows out
- Squeeze shoulder blades while extending arms overhead until full extension is reached
- Keep upper back, glutes, and abs tight
- Straight line going from the bar, down through shoulder blades, and middle of feet