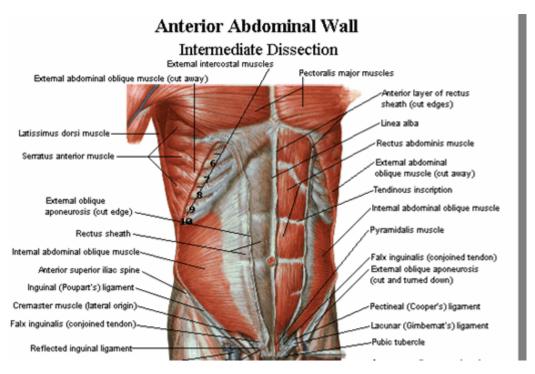


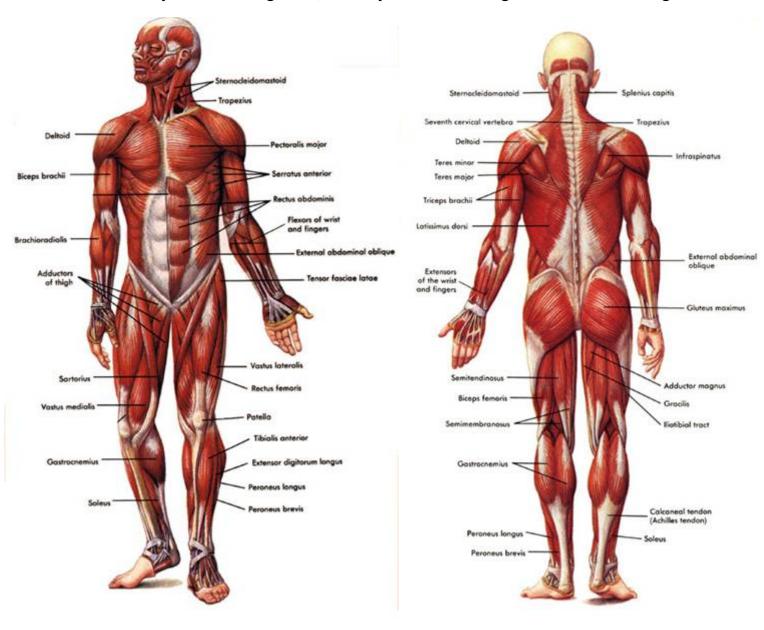
The term "core strength" is thrown around a lot in training literature these days. Much of the talk about core strength is centered on 1. It is good, 2. You should have it because it is good, 3. It will protect your lower back, 4. Start taking your core training more seriously because it will protect your lower back – but the subject of core strength pretty much ends there. Most people, after listening to this radical insight into strength training, say to themselves: "I need to start doing sit-ups!" That is why I wrote this article. The following is a comprehensive look at what core strength is, what it is not, some specific applications of it, and how to train for it.

Core Strength vs. Abdominal Strength

In my training scheme I differentiate between core strength and abdominal strength. Core strength encompasses many more muscles and muscle groups than just the rectus abdominis and the inner and outer obliques, Another reason I make a distinction is that you can do sit-ups until doomsday and still not have the core strength to one hand snatch 100 lbs. without toppling over. Core strength involves not only your rectus abdominis, and the inner and outer obliques, but it also involves the transverses abdominus (the muscle that sucks your gut in and out), the intercostals muscles between the ribs, serratus anterior (those ridges that come out from under the lats), along with the quadratus lumborum and the serratus posterior inferior which are both deep muscles of the back.



Yet another distinction is that the abdominals tend to work synergistic with the hip flexors, core muscle movements are often synergistic with the hip extensors and leg abductors. With all these minor muscles involved that do not move independently by your will alone, you should start to get the picture why isolation exercises are useless here. Heavy, systematic movements are required to train for core strength. Leg raises and sit-ups are good exercises and I do not intend to dissuade you from using them, but they are not building blocks of core strength.



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First Things First

The best way to start core conditioning is to not use support equipment, most specifically a weight lifting belt, but support briefs and any type of suit are a big no-no. Now obviously support equipment has its place, especially in contest preparation where the equipment will be used. I have heard others say that a weightlifting belt, and extra support in general, is needed for heavy partial lifts because it is more than you can lift. I do not train with a belt, even on my heavy partial lifts. I suggest that if you currently use a belt the majority of your exercises to slowly wean yourself off the use of a weight lifting belt in all exercises, including partial movements. This can mean significant drops in weight on some exercises, but I guarantee it will produce gains once the equipment is put back on for a test drive. I am not a doctor so I cannot demand that you throw away that knee brace despite your injured knee, but within the bounds of common sense the rule of least support equipment possible and the promise to reduce the amount of use still stands.

One Side At A Time

The majority of core strengthening exercises are done one handed. This imbalance cases the core muscles of one side to contract in order to keep you upright. Pretty much any standard dumbbell lift that requires you to stand can be converted into a core strengthening exercise. (Using kettlebells in ring weights would be even better than a dumbbell.) Despite hearing these

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words of wisdom, many trainees will by pass this advice due to the extra time it takes in order to complete basically the same exercise. This is a big mistake. A great deal of untapped strength can be developed by regularly practicing one handed lifts. A great one handed lifter will be able to lift significantly more weight than one half the amount one would lift in the two handed version of the exercise, regardless of the weight implement. This is most true for Olympic style lifts such as the snatch, and clean and jerk because of the driving force of both legs goes into one arm, but there is a notable strength gain in strict movements like the one handed dumbbell curl or a one handed strict press due to the greater amount of tension you'll be able to generate from your core muscles. Poor one handed lifters will only be able to lift slightly less than half of their best two handed lifts. Your improved technique with the regular practice of one handed lifts, along with increased core strength will determine just how much extra force you will be able to apply with that single arm. Doing one handed lifts, each side back to back is a great way to increase the aerobic workload in your weight training. However when going for max attempts, I would advise a normal rest period between right and left hand sets.

The Core of Core Strength

I could not possibly detail every exercise that can be converted into a one handed lift that will provide you with great gains in core strength. (I have gotten a heck of a core-strengthening workout just doing whatever came to mind using a 20Kg kettlebell; get creative.) I will

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however cover some of the big guns in the core strength arsenal and I hope to encourage you to foster your creativity.

Suitcase Deadlifts: Simply put, this is a one handed deadlift that is picked up off the ground at the right or left of your body. I prefer to use the tricep bars found in gyms due to the shorter, more manageable length, and the displacement of the weight in relation to your grip. If you are fortunate enough to possess a set of beefy dumbbells, go ahead and use those. Some suggestions on form I have found to increase the core strengthening aspects of this lift are to position your implement so that your grip is taken at a point where your palm is directly opposite of your ankle; this places the weight directly in line with your body. It is tempting to use a heavy weight, but I have found to include the core muscles the most, you must choose a weight that enables you to stand perfectly erect. Locking your legs and hips while your torso is still slumped to one side is not perfectly erect. With these weight levels, pushing against your leg with your free hand should not be necessary because if you do, you will be unable to stand perfectly erect free from assistance with this heavy weight. Keep a firm grip, and do not allow the weight to begin to turn, which will shift your weight and destroy your form. Hitching is fine as long as you can stand perfectly erect under your own power. One handed farmers walks are a variation of this lift. Do not worry too much about the strictness of form for the duration of one-handed farmers walks. The weight is dropped either after your grip goes or your upright carriage has grossly deteriorated from your fatigue.

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The picture on the left is not a good lift, despite the fact that the legs are locked out. The picture on the right is the proper finished position for suitcase deadlifts and side bends.

Side Bends: I'm not talking about those hip twitches with pink dumbbells you see going on in commercial gyms. I'm talking about break out the barbell because the gym dumbbells only go up to 110lbs. Side bends can be trained heavy, and the weights can get really heavy. If you have not done you side bends heavy before, you may very well double the weight you are currently using for this exercise. I like to use triples, starting at a weight I can get five rep easily and working my way up the chain ten pounds at a time until I'm not sure if I will be able to do a triple and might only get a single repetition. I like a shoulder width stance. Try to keep your head facing forward. Make sure that you bend at your side in only one plane of motion.

Your hand and arm should be perfectly aligned with your torso and your legs; letting the weight

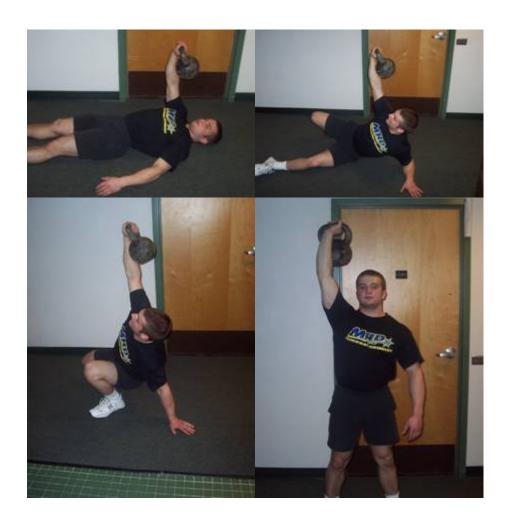
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drift a little in front of you is the easiest way to cheat. This range of motion will feel a little restricted. It might even seem like your ribs are ramming into your hips. If so, you are doing something right. Now after you have gone down as far as you can go without cheating pull real hard with the obliques of the opposite side. Imagine your ribs being constricted towards your hip. As you are doing this contract your glutes and lower back like you are locking out a deadlift. Your legs will not move because they are fully extended but this helps you get the big numbers and it protects your lower back. Also tilt your head in the direction you are trying to go, whether you are rising or going back down; the body likes to follow the head.

Turkish Get-Up: As complex as this lift is, the explanation is simple. Lie flat on the ground. With one arm, take a kettlebell, dumbbell, ring weight, or barbell if you are a badass, and fully extend it (you may use your other hand to help) just like a one handed floor press. (I find it necessary to use my free hand to press the weight into lockout position because I can do a Turkish get up with more than one half of my best dumbbell bench.) From here you just get up, by any means possible without touching anything but the floor. Yes you can use your free hand to help you stand up. You will start off by posting free hand help lift up your torso so you can bring your legs underneath you. Once you get both legs underneath you, stand up. You're done. It sounds rather simple and the use of your free hand may seem like cheating, but if it is, you're not using enough weight. You must also be looking at the weight the entire duration of the lift to help make sure it does not wander. The idea is to keep your arm perpendicular with the floor and you accomplish this by making sure you are well underneath the weight, no juxtaposed to

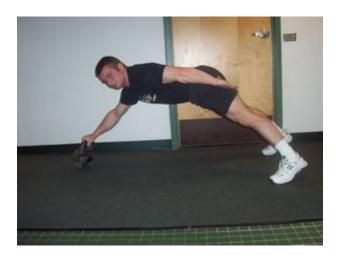
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it. A maximum Turkish get up is a slow, deliberate process that requires precision balancing from start to finish. I like to do singles and low reps with these. Doing these for more than five reps will get you into great shape, but will quickly degrade from training into inhumane torture. An excellent Turkish Get-Up would be your body weight, but that may actually be closer to world class than excellent.



Your first task is to get one leg underneath you. Do this by doing a sit-up assisted by your free hand.

One Handed Jack Knives: Jack knives are an exercise that is similar to using an ab wheel, but we're taking it to the next level by using only one hand with objects that don't move so easily. Dumbbells, kettlebells, even block weights will work as suitable implements. Gripping your implement with one arm, bend over. Now walk your feet backwards as far out as you can go while forcing pressure down into the floor with your implement to make sure it does not slide. Improve by holding yourself for longer periods of time and/or extending yourself more, always reaching for the super man position. I like to use kettlebells because they make the exercise so much more difficult because you must keep the handle of the kettlebell in line with the angle of your arm. (I learned this doosy from Brad "The Rafter Man" Johnson.) I don't like block weights because it's easy to rest your hand on top of them instead of gripping them hard on the side like you should. Never cheat by bracing you weight of choice against a wall or any backstop. If you're a total badass do these with an underhanded grip on a dumbbell.



The small area of surface contact due to the rounded bottom of the kettlebell makes it very challenging to exert enough pressure to keep it from sliding. Though I am not very extended in this picture, it is very challenging on top of the short carpet. Smaller kettlebells are more difficult than bigger ones to use.

Reverse Neck Bridge Mountain Climbers: This is an exercise I invented that is an offshoot of jack knives. Move into a reverse neck bridge. Try to extend yourself so that your weight is on your forehead and not on the top of your head. Once you are here, raise one leg to your chest while bending at the knee. Try not to let the moving foot touch the ground. Now bring it back and repeat. I find it helpful to point the toes of the foot that does not move inside. This provides a more stable stance and does not decrease the difficulty of the exercise. This exercise will help you in developing the chain from your head all the way down to your toes. Your front neck muscles should have equal difficulty with this lift. If not, one will catch up to the other in time if you train this exercise.



The picture on the left demonstrates the beginning and end of the exercise. The photograph on the right is in mid stride; try to touch your knee to your chest.

This is what core strength is all about: Preventing your thoracic and abdominal cavities from exploding under high pressure. These lifts will try to rip your guts out. My advice is to not

allow them to do so. 4/12/2005

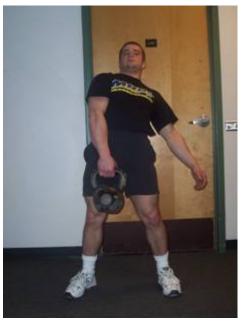
Overhead Supports: Take a power rack. Set the pins to the height that you would normally do overhead lockouts with. Throw your weight lifting belt away, and induce vomiting into a trashcan before you really embarrass yourself. Select a weight near your best overhead lockout, or your best jerk. Space your arms apart in the most comfortable manner that would allow you to press the most weight. Do likewise for your feet position. Grip the barbell and dip your legs, without lifting the bar, straighten your arms into the lockout position. Keep your head forward; looking up will place the pressure of this lift across your chest, where you will fail to lift the most weight possible. Keep your gut tight, kind of like taking a dump but pushing in instead of down and out. Make sure your chest is full of air. Drive with your legs in a deliberate, forceful manner and maintain your upright position and lockout elbows. Hold this position however long you feel necessary. I personally consider 4 seconds is the minimum time the position must be held for a legitimate lift, and anything over 10 seconds means I could be doing more weight. You may find that when you drive your legs up that your body just slides forward or behind the bar, not moving it and inch. There is a delicate, magic spot that your core muscles must keep you perfectly erect in order to keep you under the barbell. You may have to find that spot every time you adjust the weight, and with good reason, the zone of success is smaller and smaller as the weight gets larger. Progress on this lift like you would do your partial movements: you may like to do one weight for multiple sets or do singles, doubles, or triples until you can't do anymore weight. To give you an idea of a good lift, my bodyweight is 158lbs. My best clean

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and strict press is 200lbs. My best overhead support is 405lbs. You can spice up this lifting by using a thicker barbell, which will be more difficult to balance and a heck of a wrist workout.

Deep Straddled One Handed Deadlifts: This probably has more to do with lower back strength than core strength but I can't think of a more functional implementation of core strength. You really can't do these one handed deadlifts with a barbell. You'll either need some heavy-duty loadable dumbbells or a loading pin with ring weight. I use the ladder setup. Stand on something (I like to use the gym's benches when no one is watching.) so that the grip is taken at the level of the bottom of your feet, maybe lower if you can handle it. Get your back and legs all set up in good deadlifting form and pull on the thing like a cartoon character on a broken doorknob. Now with your free hand you can brace yourself by pushing on the leg that is on the same side of the free hand. To save the strain on your hips and lower back, do not go to a full lockout like a two handed dead lift. I advise completing the lift with an upright torso while keeping the knees bent. It is tempting to look down at the weight, possibly because it is pulling so much on just that one side it drags your torso with it, but do not. Now since this is a one sided lift, you have to do both sides, but realize it is easy to overtrain this lift. The muscles of the opposite side are working very hard, just not quite the same way. When you have them do the other side, they are pulling double duty; this is all beside the fact that it will be hitting muscles you never knew you had and not normally targeted in your training. I have always found 2 sets per side, for 4 sets total wipes me out worse than a set of high rep heavy squats.

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The picture on the left shows an improper lockout; extending yourself like this with a heavy, imbalanced load can really wrench your back. The picture on the right shows the proper end point of the lift. Overtime it will become very natural if not locking your legs feels strange to you.

Bent Press/Two Hands Anyhow/One Arm Push: These two lifts deserve entire articles devoted solely to them and I don't feel qualified to write that article. However I have studied and trained these lifts extensively enough to know I cannot fail to discuss them in my article about core strength. When people talk about the bentpress, Arthur Saxson, the man who holds the world record in two hands anyhow and the bentpress, comes up. Saxson did a bentpress of 380lbs. and a two hands anyhow of 448lbs. These lifts are amazing, but also intimidating. It gives the impression that if you cannot do 200lbs. in either lift you're no good and wasting your time. This is a false mindset. These high numbers can only come from the precision balance

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you can get from a non-revolving cambered barbell. Using other implements like kettlebells that have the weight placed in an unfavorable position, and dumbbells that radically shift balance if you so much as think to move, will make the bentpress just as tough and heavy as any monster barbell lift. In addition to needing core strength and arm strength, you will need brutally strong wrist to lift the big weights with these lifts.

Here's a walk through of the technique of the bentpress: Take your implement to the shoulder by any means you wish, many like to clean it, I prefer to use my free hand to assist. Take a stance slightly wider than shoulder width. The leg on the same side of the weight will be perfectly straight and will be kept perfectly in line with it. The opposite leg with be bent and pointing slightly outwards. The forearm of the arm holding the weight will be kept perfectly straight in line with the leg to form a straight line from your foot to the handle of the weight. Your grip on the implement must be perfectly in line with your torso, forming a 90 degree angle with straight line made by your forearm and leg. It is easy to tell how inline your grip is with a dumbbell or barbell. The free arm will brace against the free leg. Before we begin moving the weight it is of vital importance that your eyes are constantly focused on the weight at all stages of the lift! This is essential in order to control the implement. Begin to fade away from the weight by bending at the torso. The bend will be slightly forward and in front of your free leg. Bend with your free leg as much as you like. You may find that you will have to stick your hip out in order to maintain that straight line with your working leg and the weight. After you have bent all that you can, you press the weight, and you will press hard. When the weight is ready

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for lockout, bend the leg you have kept straight this hold time, but not so suddenly and so fast that it upsets your balance. This slight dip and the continued pushing from your arm should be enough to lockout the weight. Now using your free hand to brace against the free leg, bring yourself to standing position. Whew, that was a mouthful, and yes it is that complicated and you will have to practice a lot.



Notice how the load bearing leg and arm in a perfectly straight line perpendicular with the floor. Note the position of the free hand and the direction of the toes.



Notice how both knees are now bent and the arm is now fully extended. Once you are here, push your free hand against your leg and bring it home. Also note how I am completely focused on the weight once I begin to lift and until I finish.

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To do a two hands anyhow you must grab the second weight implement with the free hand after you have locked out the first implement over head. The weight is curled, or cheat curled if you can manage, as you begin to stand up, and pressed over head once you are fully standing. Holding a heavy two hands anyhow lift overhead is one of the most unique sensations in all of the iron game.

A two-hand push is a bent press performed with a stance no wider than 18". Both legs are locked throughout all of the lift so not nearly as much weight can be lifted in this manner. This lift is much less technical but requires more flexibility. A slight difference is that you should start to press as you fade away, if not you will have bent to the side so much that your upper arm will be straight and only your triceps will be pressing the weight up. I often will do these without the pressing part and just bend at the sides. I call this the overhead side bend.





Keep those feet with the proper 18" limit. I find reaching for my toes helps me know when I have reached the

full depth. You may choose to brace with your free hand or not. You may not be using enough weight to

necessitate the assistance of your free hand.

Stay tuned for Real Core Strength: Part II...

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