

Starting Strength

Strong Traps

The Key To Shoulder Girdle Stability

by
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There was a time, in the not-so-distant past, when every athlete who trained with weights sported an impressive set of traps. Bodybuilders had them, shot putters had them, and, of course, so did Olympic lifters. That's because they all did lots of heavy pulling movements in their programs. Currently, the only group of strength athletes who show any trap development are Olympic lifters, and those taking part in a scholastic or collegiate strength program which includes the power clean and shrug.

Yet, quite often, once an athlete finishes his high school or college sports career, he stops doing many of the exercises he did when playing his sport, which usually means dropping good mornings and shrugs, in many cases even power cleans. The emphasis is generally shifted to a routine built around exercises for the front of the upper body because what the athlete really wants is a set of Herculean arms and an imposing chest. These programs neglect the upper back and are one of the main reasons why there are so many shoulder injuries occurring to those who use this unbalanced sort of approach to weight training.

To many, traps aren't that important unless they plan on lifting heavy weights from the floor to their shoulders or overhead. Since they aren't interested in doing any such movements, why bother with the traps? The answer: they secure the shoulder girdle, and this has many implications that should be obvious to anyone who is aware of how his body functions. Without a stable shoulder girdle, a long list of problems can rear their ugly heads and when they do, the consequences can be severe.

The trapezius, which is made up of four overlapping layers in the shape of a trapezoid is located on the upper part of the back and lying immediately under the skin. The origin is at the base of the skull in the neck and a row of spinous processes of the vertebrae from the seventh cervical to the last thoracic, which is right about in the middle of the back. From the neck, the muscle fans out to the shoulders and inserts in the rear portion of the clavicle (collarbone), the top of the acromion of the scapula and the upper borders of the spine of the scapula (shoulder blade). Then it swings downward in the shape of a "V" to the middle back.

Traps are the keystones of strength for the shoulder girdle just as the lumbar are for the lower body. When serious traps work is neglected the athlete displays rounded shoulders, and in some cases this rounding can be very severe. It's basically a matter of disproportionate strength – a disparity between the strength in the higher portion of the front of the body as opposed to the strength in the upper back. This is usually a result of an athlete's love affair with the bench press, or for an almost

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obsessive desire to possess a massive chest and arms like Arnold (not the current Arnold, the younger version, as in Conan).

These slightly demented individuals pound away on flat benches, inclines, declines, flies, dips, and a wild assortment of arm movements, sometimes at every workout and all the while they completely ignore their upper backs. If they do anything at all for their traps, it's typically dumbbell shrugs or some high reps with a light barbell.

When those groups in the front of the upper body – primarily the frontal deltoids and pecs – become considerably stronger than those in the rear of the shoulders – traps and rear deltoids – the shoulders can no longer stay in correct alignment and begin to move forward. Since this is very unnatural, the shoulder joints and surrounding muscles, tendons, and ligaments start to complain. At first, it's no more than a nagging pain, but if something is not done to correct the imbalance it escalates to a severe, stabbing sensation and can become so intense that the athlete cannot do any exercises that involve his shoulder girdle. And that is, as we all know, a shitload of exercises.

The epidemic of rotator cuff injuries can be directly linked to this infatuation with the bench press and the neglect of attention to the upper back. If the relative weakness between the groups that comprise the shoulder girdle has only recently revealed itself, it can be easily corrected. Easy, if you're willing to put in the necessary work. The alternative is to stop doing many of the exercises you enjoy, or even worse, surgery. You really don't want to resort to the knife. After any type of shoulder surgery, the majority of subjects never regain the same range of motion or are able to regain the strength they formerly had in their shoulder girdle. So that should be the last resort.

The news that most do not like to hear is that the exercises that are the very best for strengthening the upper back require hard work. The good news, however, is that the traps respond very quickly to specific exercising. I could never figure out why someone didn't like to do trap work. I've always found the exercises for that bodypart to be more fun than work. And for the majority of strength athletes, more weight can be handled when doing trap work than for any other exercise in the routine.

While heavy shrugs are the very best exercise to build strength and size in the upper back, I do not start my athletes off with this movement. I want them to have a substantial base before really overloading the upper back, and they also need to learn the proper line of pull in order for shrugs to be beneficial.

I start them on power cleans, add in power snatches, move on to high pulls, and then they're ready for shrugs. Even if you're already doing power cleans, a refresher course can't hurt. When correct form is utilized on this exercise, learning how to high pull and shrug comes much easier.

All lifting movements start with the feet. To find your strongest starting position for your feet, step up to the bar, shut your eyes, and imagine that you're about to do a standing broad jump. You'll be able to feel when you've got it right. To find the grip on an Olympic bar, extend your thumbs so that they're barely touching the smooth center. That's the ideal grip for most, but there are exceptions to the rule. Those with very wide shoulders will need to take a slightly wider grip and those with narrow shoulders might need to grip the bar a bit closer. A bit of trial and error will solve the problem rather quickly.

Should you not have an Olympic bar available, grip the bar just outside your legs at shoulder width. Flatten your back. This can best be done by pulling your shoulder blades together and keeping them there throughout the exercise. Make sure your frontal deltoids are out in front of the bar. Not much, but some. With your arms straight, ease the bar off the floor keeping it snug to your shins. Many jerk the bar upward in hopes of getting a fast start, but this doesn't work well. It causes the bar

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to run forward, out of the correct line, and it usually results in bent arms. Both are form faults.

Once the bar passes your knees, drive your hips forward aggressively, and contract your traps forcefully, only after these two things are done will you bend your arms. And when you do bend them, your elbows must turn out and up, not back, once your elbows rotate backward, you no longer have the ability to apply upward thrust to the bar. You're totally dependent on momentum. You can get by with this with the light weights, but when they get heavy, that technique mistake will cost you. All the while the bar is tucked close to your body, so much so that it brushes your chest at the top.

At the same instant that you're bringing your arms into play, climb high on your toes. That combined action of traps, arms, and calves will cause the bar to leap upward and that's when you move under it and rack it across your shoulders.

Racking a power clean requires a certain amount of flexibility in your shoulders, and if you find that you have tight shoulders you must take the time to stretch them out. The best way to achieve this is to fix a bar inside a power rack or load it up with enough weight that you cannot budge it from a squat rack. First step, grip the bar with one hand and elevate your elbow just as high as you can while keeping your torso very erect. When your elbow is as high as you can get it, hold it in that position for an 8-10 second count. Now do the other arm. After a few sets of these, grip the bar with both hands using the same grip you use in the power clean and elevate both elbows. It helps to have some assistance with these, so ask a training mate to help you. While you hold a solid body posture, he will lift your elbows upward until you signal that you can't go any higher. Hold that top-most position for an 8-10 count once more. Do as many of these as necessary to allow you to rack the bar correctly across your frontal deltoids. You don't want the bar across your collarbones, because this is not only painful, if done repeatedly it can cause damage to the bones.

Should racking a power clean be stressful to your wrists – often the case in youngsters, females, and those who have not yet gained the necessary flexibility in their shoulders – tape them. Trainer's



tape works well and with a bit of practice you will learn how to lay it on so that it's snug enough, yet not so tight that it cuts off circulation. I've had a number of athletes who couldn't figure out how to elevate their frontal deltoids enough to cushion the bar. Simply contract your traps and your entire shoulder girdle will lift up several inches. End of problem.

Bend your knees a bit when racking the bar to help cushion the impact. Once the bar is resting across your shoulders, your elbows need to be up so that your triceps are parallel to the floor. One of the most common mistakes beginners make during the rack is they lean back. This is a definite no-no, because it can be harmful to your lower back. Make sure your upper body is perfectly erect when the bar is racked. Leaning a tad forward is okay, leaning back is not.

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After the bar is secure on your shoulders, lower it to the floor. There's technique required in that move as well. Don't allow the bar to crash to the floor, even if you're using bumper plates. Rather, lower it first to your waist, then down to the floor in a deliberate manner. This will prevent you from rounding your back. Keep in mind that you can injure your back when lowering the weight just as you can when lifting it, and rounding the back is a form mistake.

Reset and make sure your feet are in the proper position, the bar is tucked in against your shins, and your frontal deltoids are out ahead of the bar, then do the next rep. Power cleans are high skill so keep the reps rather low, 3s and 5s, While learning how to do the movement correctly, stick with 5 sets of 5.

The power snatch is another excellent exercise to strengthen the traps and a good alternative for someone who cannot rack a power clean. This is sometimes the case with an older athlete, or someone who has sustained a serious injury to a shoulder or has had some sort of surgery to the shoulder joint.

The two primary differences between power cleans and power snatches is that the latter exercise requires that you assume a wider grip and the bar is pulled from the floor all the way above your head. Otherwise, the starting foot positioning and line of pull are the same. For most, this method of finding the best grip works best: On Olympic bars, there is a score 6" in from the collars. Wrap your ring fingers around those, Again, because of your size, you may have to do some experimenting to find the grip that suits you best.

Assume your grip, pull the bar against your legs with your deltoids leading slightly, look straight ahead and set your hips. The higher you can set your hips the better. That is, if you can hold that higher position as the bar climbs upward. If you can't and the hips move up at a faster pace than the bar, you will need to lower them somewhat at the start. That higher starting position will give you an advantage in leverage, but it may take some time before your back and hips are strong enough to keep it from elevating too fast.

The main point to remember for all these exercises that are pulled off the floor is that the bar must travel upward at the exact same rate as the hips. No exceptions.

Using the same sequence as the power clean; hips driven forward as the bar moves past your thighs, traps, then arms, lift the bar off the floor and pull it over your head and lock it out with straight arms. It's even more important to drive your elbows up and out in the power snatch than it is in the power clean because the bar is pulled a great deal higher. It is also more critical in the longer pull to keep the bar extremely close to your body throughout the movement. If it moves even an inch out of the proper groove, you're going to have trouble locking it out. When the bar passes your head, dip under it by bending your knees and keeping your upper body very upright. And don't just think about catching the bar overhead. As you lock out your arms, exert pressure up into the bar. This affords you much more control than merely catching it. Stand up and continue to push up against the bar. This offensive act builds a different kind of strength in not only your shoulders and back, but also in your hips, glutes, and legs. Those who like to talk about building a stronger core would do well to try power snatches and hold the lockout for an 8-10 count on the final rep because that would strengthen the entire structure from top to bottom. The bar should be fixed at a spot that if you were draw a line up from head, that's where you want the bar to be.

Same idea for lowering the bar back to the floor: first down to your waist, then under control to the floor. The motion of the power snatch should resemble that of a whip. Slow off the floor, picking up speed through the middle, and be no more than a blur at the finish. There is a great deal of coordination, timing, quickness, and balance involved in this exercise so it will take some practice to perfect it. And once you've done that you've also enhanced those attributes for other athletic endeavors.

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The set and rep formula that I use for power snatches is two warm-up sets of five followed by three to five sets of three. The triples serve two purposes. They allow you to concentrate more on the technique and since more weight can be handled than with five reps, the muscles and attachments utilized in the exercise get stronger.

The two power exercises are perfect lead-ins to clean and snatch-grip high-pulls. The high-pulls overload the various pulling muscles since much more weight can be handled than in the power moves. How much more? As a rule of thumb, I have my athletes use 75 lbs. more in the clean high-pull than what they can power clean and 50 more lbs. in the snatch, or wide-grip, high-pull than they can power snatch. More is even better.

The technique for the high-pulls is the same as for the power ones, except you're not going to be racking or locking out the bar at the top. What you will be doing is trying to pull the bar just as high as you possibly can on every rep. Your objective is height, and you can never put the bar too high. That means, on the first set, the bar may travel up over your head on both the clean and snatch high-pull. That's good. What you're wanting to do is establish a pattern from the very beginning. Then as the weights get heavier you will still be trying to pull the bar just as high as you can.

Use straps. You may not need them for the lighter poundages, but you will once the weights get really heavy. And with the straps, you can focus completely on the line and height of pull. The higher you pull the bar on both the snatch and clean grip high-pull, the harder the muscles and attachments have to work. Whenever a bar is pulled high, you're not only hitting the traps and rear deltoids, but all those other groups in the back that help make you stronger: lats, rhomboids, teres major, infraspinatus, serratus posterior and anterior, splenius capitis, plus other smaller groups including those that comprise the rotator cuff.

High-pulls are deadlifts followed by a shrug. Nothing complicated about that, yet learning how to flow through the transition from one to the other is very difficult. There can be no hesitation in the middle, but a strong continuous move through that phase with the bar picking up speed at the same time. That comes with practice and it's best to stay with weights that you can handle correctly instead of overloading the bar and having it hitch through the middle.

One of the mistakes that most make while learning high pulls is to allow the upper body to come down to meet the rising bar. This defeats the purpose of the exercise. At the conclusion of the pull, you should be up on your toes with your body erect. The sequence of contracting your traps before bending your arms is even more critical on high-pulls than it is for power cleans and snatches simply because a great deal more weight is being used in the high-pull. So drill on the movement until it's smooth as silk, and then start adding plates.

Do both forms of the high-pull. They hit the muscles in the upper back in a slightly different manner. For example, the snatch grip version works the wide part of the traps and the lats as well as the rear deltoids more than the clean grip. I put these into the program right behind the power cleans or snatches. While learning the technique, just do three sets of three, but once you have the form down and are able to recover from the workload, add in yet more sets of three. For someone who is unable to do either power cleans or snatches, high-pulls will serve as the primary upper back movement in the beginning.

Once you get the feel of the high-pulls, you're ready for the Big Dog – shrugs. They're absolutely the best exercise of all to overload the upper back and make the traps incredibly strong.

It helps to have a power rack in which to do shrugs, although it's not mandatory. I've done them off blocks or taken the bar off the bottom rung of a staircase squat rack. However, the rack makes

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learning the movement much easier. Set the pins inside the rack at mid-thigh. Straps are definitely required for shrugs because you're going to be piling on the plates and don't want to have to be thinking about your grip. Most racks aren't wide enough to do snatch grip shrugs inside it, so start with clean grip shrugs. All the mechanics and sequence you learned from the previous recommended exercises comes to roost during shrugs. Make sure the bar is snug against your thighs, your torso is erect, frontal deltoids out in front of the bar, and every muscle in your body is tight. Really tight.

Don't jerk the bar off the pins. This will make you break form. Ease it upward, then pull just as high as you can. The majority of athletes were able to hit the top crossbar inside the power rack on the first set and some could even do that on their second set with 225. As in all of these upper back movements, your goal is height.

I've found that nearly every athlete could be coaxed into pulling his high-pulls and shrugs a bit higher when he had a target to shoot for. So I hold a stick at the height I want him to reach and when he taps it, he knows he succeeded. Then I raise the stick even higher. I've had a large number of athletes who truly believed that they were pulling with everything they had in them. Yet when I made them hit the stick, they ended up pulling the bar another six inches higher.

When I coached at The University of Hawaii, for the first two years we didn't have a power rack and in order to shrug, the athletes took the bar off of two pins on the back of a squat rack that was designed to hold plates. Then they stepped back, did their set, and staggered forward to replace the bar on the pins. So these became "Hawaiian-style" shrugs. I use them in all my strength programs because they require much more control than those done inside the rack. If an athlete pulls way out of line, the bar crashes to the floor. They're especially useful for Olympic lifters because they require a very precise line of pull and a lot of balance.

If your power rack isn't wide enough to allow you to do snatch grip shrugs inside it, then do them outside the rack Hawaiian-style. Of course, how much weight you use on the shrugs depends on your current level of strength, but regardless of where you are, you must overload the pulling muscles. The goal I set for my athletes at Hopkins was to be able to shrug with a clean grip, the bar plus six 45-lb, plates on each side, 585 lbs. Nearly everyone of them achieved that goal. And what they really liked about being able to handle that much weight was when they went home and trained at the local gym. Naturally, no one there was even coming close to shrugging that much so their stock went sky-high among their friends and fellow lifters.



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I put shrugs in the weekly program on Fridays so that the athlete has two full days to recover. If you're not sore on Saturday morning after a shrug session, you didn't handle enough weight. I mean every Saturday morning, so lean into these and your traps will soon look like Twin Peaks next to your neck.

Strong traps have a direct bearing on nearly every exercise in strength training. Obviously, they help all pulling movements, but they play a major role in squatting as well. Without a strong upper body, the athlete is not able to hold the proper position during a heavy squat. And while few think in terms of upper back strength in connection with pressing movements, a strong upper back benefits flat benches, inclines, and particularly overhead presses. The top pressers in the country always made sure they involved their traps in the lift.

One more rather important reason why everyone – and especially athletes who engage in contact sports – should do plenty of work on their upper backs is they could prevent a serious injury to the cervical spine by having extremely strong traps. Even those who have long since stopped participating in any form of athletics still need strong upper backs.

Make upper back work a priority in your strength routine until you're able to handle some significant numbers. They'll help you get stronger across the board, and once your traps start to grow they'll let everyone know that you are indeed a strong and powerful athlete.

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