The

Pull-Up Manifesto



Todd Bumgardner, CSCS

The Pull-up Manifesto
By: Todd Bumgardner, MS, CSCS
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For my mother, Kathy, my brother, Terry and my girlfriend Annie; if any of you were missing from my life I wouldn't be where I am today.

A Call to Arms

By definition a manifesto is a public declaration of principles and intentions. Entire societies, continents and even the world as a whole have changed in response to the decrees made by a few enlightened individuals. While I am definitely no Karl Marx, nor am I trying to influence political doctrine or create social upheaval; I want to change the way you think about the most versatile body weight exercise known to man, the pull-up.

Too long has the pull-up been shuttled to the back of the programming rolodex; it's hightime that it moves back to the first tier of exercises with squats and deadlifts where it belongs.

This is a call to arms so that you can build *your* arms, back and better core stability. It's a call to make your deadlift bigger, your squat stronger and your bench a tightly wrapped package of power. I wrote this manifesto to challenge you, inspire you to take a new outlook on training and give you the tools to build a back that even Atlas himself would envy.

Here is my official public declaration of principles and intentions. By enhancing your understanding of the pull-up and providing you with new and interesting ways to use the exercise; I intend to bring the pull-up back into the forefront of your consciousness as an exercise worthy of being called the king of all bodyweight exercises.

Long Live the King!

I'll give you fifteen seconds to think of a body weight exercise that requires more upper-body strength, core stability and recruits more over-all muscle mass than the pull-up. You didn't think of one did you? Honestly, I'm not surprised. Mainly because I know that there is no better body-weight exercise than the pull-up. The pull-up is the king of all body-weight exercises.

The pull-up, in all its glorious versatility, can build mass, power, strength and conditioning. Pull-ups can be used to build stability in the upper-back while shaping lats that fan like a Cobra, not to mention biceps that rip shirt sleeves like Hulk Hogan tearing through a tanktop. What's not to love about healthy shoulders, beastly lats and gun-boat biceps?

We know that the pull-up is great for upper-back strength and health, but what about carry-over to performance on other strength movements, namely the big three: squat, bench and deadlift? What can the pull-up do for them?

Doing pull-ups builds upper-back and lat thickness, increasing muscle cross-sectional area. Having larger and thicker lats creates a more stable platform to bench off of, adds more muscle to recruit for the pull of the deadlift and helps secure a more stable core for all three lifts. Let's look at an example by using the absolute king of all lifts (not just body weight movements) the deadlift.

Picture in your mind the phases of the deadlift: the set-up, the initial pull, the pull from mid-shins to the knees and the pull from the knees to lock out. A powerful and sustained lat contraction is necessary for success throughout all portions of the pull. During the set-up, the lats contract to set the scapulae back and down while securing the neutral position of the spine. While you progress into the initial pull through the mid-shins to the knees the lats pull hard to keep the spine in extension and to keep the weight close to the body so that the glutes,

hamstrings and erector spinae can extend the hips. When you hit the final stage of the pull and are close to locking out the weight, the lats continue fighting to hold the spine in extension, while also aiding in achieving those final few inches at the end of the movement.

Now, picture in your mind the full range of motion of the pull-up and the powerful lat contraction that coincides. While the lat contraction associated with the pull-up doesn't exactly mimic that of the bench, squat or deadlift; the mass, strength and power gained from doing pull-ups will give you a better specific lat contribution with the big three lifts.

There is no other body-weight exercise known to man that has as much carry-over to the dominant strength lifts. One could argue plyometric variations could, but they are variations that would have to be specific to the target movement. Besides, who says that pull-ups can't be done explosively and with reactivity. Concentric pull-ups and clap pull-ups can both be used to train for a powerful pull and in a reactive format.

What else about the pull-up makes it the king of all body weight exercises? Here's a list: grip strength, core stability, really weak people can't do them, a lot of variations, a ton of applications and they can be done almost anywhere. Hugh Hefner makes playmates do them naked, they reinforce healthy scapular movement, they build massive lats (I may have mentioned this already) and because I said so.

Anatomy of the Pull-Up

Part of my decree was to enhance your understanding of the pull-up. What better place to start than by doing a brief and entertaining anatomy lesson? I'm not going to bore you with 'this muscle originates here and inserts here and is then innervated by this nerve', but I'll give you a brief description of all the muscles involved during the pull-up and their given function while performing the exercise.

From most accounts, there are seven major muscles normally included in pull-up research: pectoralis major, lower-trapezius, SITS muscles, erector spinae, external obliques, biceps brachii and latissimus dorsi. These are definitely not the only players in the game, though. From the neck down let's look at the major players and the supporting cast in the pull-up show.

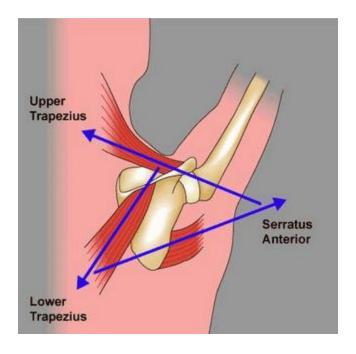
Cervical Musculature

Even though the pull-up is primarily an upper-back, lat and arm movement the muscles of the neck are involved in stabilization during the exercise. Holding your head and neck stable and in the neutral position allows for more efficient movement while ensuring that muscles are being activated and recruited properly. If your noggin is flailing about like a metal head at a Slayer concert, your spatial awareness is limited. This will reduce the effectiveness of the movement while teaching your brain poor movement patterns. While an extremely in depth discussion of cervical musculature is beyond the scope of this book, it is important to keep in mind that activating the neck musculature to keep the chin tucked and the cervical spine in the neutral position while doing pull-ups is crucial for optimal upper-back recruitment and learning of the proper pull-up motor pattern.

Upper-Back and Shoulder Girdle Musculature

The meat and potatoes of performing pull-ups are proper functioning of the upper-back muscles. All the muscles of the upper-back must fire in concert to bring about a successful pull-up. In the upper-back the pull-up movement is focused around downward rotation and depression of the scapulae, as well as the upward rotation and elevation of the scapulae. Directly related with movement at the scapulae is movement at the glenohumeral joints, which involves flexion, extension, adduction and abduction (2).

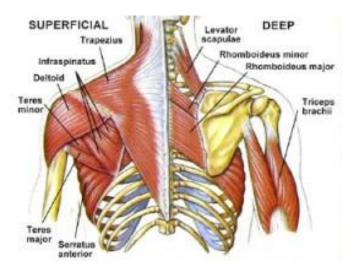
The muscles responsible for upward rotation of the scapulae during abduction and shoulder flexion are the upper-, middle- and lower trapezius; the serratus anterior and the deltoid muscles. A great visual for this movement is picturing three people pushing on a revolving door. Picture all the people walking through the door in the same direction but contacting it at three separate points, applying force to the door so it rotates in one direction. This is how the rotation force couple functions during abduction of the humerus and upward rotation of the scapula. The majority of the torque for this rotation is generated by the lower-trapezuis, upper-trapezius and serratus anterior (2).



Pulling from the bottom position of the pull-up to the top position of the pull-up requires downward rotation of the scapulae and extension at the glenohumeral joint. As you probably guessed, most of the force and torque generated to extend the glenohumeral joints comes from the lats. There are, however, some other muscles that are key for a successful trip from the hang position to the top. Pectoralis major and lower-trapezius are both extremely active during the pull-up, especially early in the movement. Pec major is active early in the movement to stabilize during glenohumeral extension, whereas the lower-trap activates to help pull the scapula into downward rotation and depression. The muscles involved in upward rotation of the scapulae also play a role in downward rotation of the scapulae, but the shift is from a predominantly concentric role to one that is predominantly eccentric (2).

The SITS (supraspinatus, infraspinatus, teres minor, subscapularis), or rotator cuff muscles, are also active during the pull-up, however the infraspinatus is the most widely studied in reference to the pull-up (3). Function of the rotator cuff muscles during the pull-up is that of regulation. While the other muscles are generating the torque for movement the rotator cuff

provides dynamic stabilization at the glenohumeral joint. This ensures that the humeral head is moving properly in the glenohumeral joint.



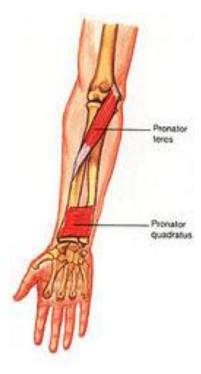
Arm Musculature

It's no secret that the biceps brachii are intensively active during pull-ups. But other muscles in the arm are also important during a pull-up, especially the muscles that comprise the grip. Setting a strong grip on the bar creates the tension that tells your body it's ok to pull hard. This comes from a phenomenon known as irradiation. For this reason, the muscles of the grip are just as important as those which flex the elbows. We also have to consider the muscles that pronate and supinate the forearm. Without them we wouldn't be doing pronated or supinated pull-ups. No one muscle can be separated as the most important, they are all required for success. Let's start with the grip, stop off at the pronators and supinators of the forearm and finish with the elbow flexors.

In the forearm there are three main muscles responsible for grip: flexor digitorum superficialis, flexor pollicis longus and flexor digitorum profundus (2). The rest of the muscles responsible for producing grip strength are found in the hand.



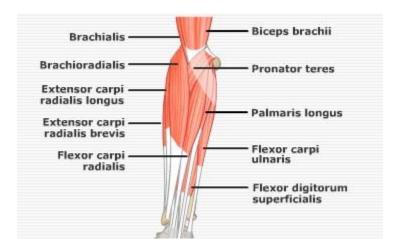
Pronation of the forearm is produced mainly by the pronator teres and secondarily by the pronator quadratus. The pronator teres originates in the elbow and inserts about halfway down the forearm on the radius. In contrast, the pronator quadratus originates on radius and inserts on the ulna at the distal end of the forearm, almost to the hand (2). I thought it was necessary to go a little more in depth and describe the location of those muscles in order for you to see that pronation is controlled at both ends of the forearm.



The primary supinators of the forearm are the biceps brachii and the supinator. The supinator originates on the proximal end of the radius and attaches to the lateral epicondyle of the elbow (2).

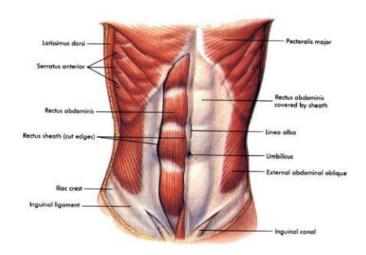


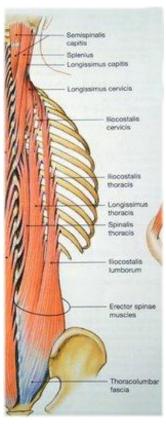
As you probably already know, the largest elbow flexor is the biceps brachii. It has two heads, long and short. Working in concert with the biceps brachii to flex the elbow are the brachialis, brachioradialis and the pronator teres (2). It's also worth noting that the triceps decelerate the concentric movement created by the elbow flexors.



Core Musculature

The core muscles that are most commonly studied in respect to pull-ups are the erector spinae and the external obliques. Other core muscles, however, are active during pull-ups (3). As is the case with most human movement, the function of the core during the pull-up is to stabilize the body so that the prime movers can safely and efficiently generate force. The internal and external obliques, rectus abdominis, erector spinae, transverso-spinal muscles, glute complex and iliopsoas work in concert to create the stability that allows you to pull efficiently up to the bar (2,3).





Technique

Performing a pull-up the right way can mean the difference between looking like a purse wielding Nancy and developing a man-tastic upper-back! With all joking aside, there will always be arguments over the right and wrong ways to do a pull-up. There are, however, some key elements that must be considered before performing a pull-up. Let's outline some key points that will keep your pull-up technique solid no matter what variation you are using.

• Tight Core: Bracing the core is one key element of doing a pull-up that is all too often forgotten. Tightening the anterior core by bracing the abs and "locking" the rib cage while simultaneously tightening the glutes stabilizes the center of the body, allowing you to generate more force as you pull because the spine (and the body) feels safe. Practicing bracing while doing pull-ups also reinforces a better motor pattern because it allows muscle to be activated and recruited in a better sequence. For more information on how to brace properly, check out the work of James "Smitty" Smith at dieselsc.com.

Tip: In the bottom hang position before beginning a pull-up; tighten the abs and the glutes to brace the core.

• Chest to the Bar: You've seen it, I've seen it, hell I bet even your uncle Vern as seen it. You know, the guy doing pull-ups that rounds his back, extends and protracts his neck and internally rotates at the GH joint to squeeze out those last few inches at the top. Not only does the guy look like a super-geek, he is also reinforcing some ridiculously bad habits.

Think about it. Rather than building strength and creating stability in the shoulders and upper-back, doing a pull-up with the aforementioned form reinforces all the common postural issues that people display. Don't get me wrong, the pull-up is about kicking ass and performance; but if it is done incorrectly it won't elicit the desired training effect.

Tip: At the top position of the pull-up, squeeze the shoulder blades back and down and push your chest up to the bar.

• Chin Tucked: Reaching to get your chin above the bar usually means that you didn't complete the pull-up through the full range of motion. Not only does tucking your chin reinforce moving through the complete range of motion but it also reinforces good posture. The point of tucking the chin is to keep the cervical spine in the neutral position. When your spine is neutral it feels more stable and you'll be able to recruit muscles more efficiently. Tucking your chin will give you a reference point for range of motion, reinforce better posture and help you generate more force as you pull.

Tip: During the hang before starting a pull-up, tuck your chin by pulling your jaw back and down.

of the Bar Hard: A strong grip sends the message to your body that it is stable and it is ok to generate maximal force. This happens through a process known as irradiation, which tells your body to recruit large amounts of muscle because of the intense recruitment of muscles farther up and down the kinetic chain. If you want to be able to recruit a lot of muscle mass during your pull-ups it is crucial for you to put a forceful grip on the bar. Without a strong grip your body will be

unsure about the situation and won't be as apt to recruit as much muscle. Your form will suffer and so will your performance.

Tip: Wrap your thumbs, forcefully contract the muscles of your forearms and squeeze the bar hard.

Pull Hard on Every Rep: This doesn't require a tremendous amount of
explanation. On every rep, no matter if you are doing a set to failure or pulling
with heavy weight, pull as forcefully and quickly as you possibly can. More
motor units will fire and you will be stronger throughout the set.

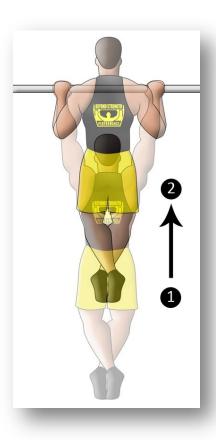
Tip: Pull like someone just lit a fire under your ass and you don't want to singe your underoos!

Variations

Everything in life requires a little variation from time to time. Sometimes it is for spice, other times it is because one thing may be better suited for a situation than another. You aren't going to use your driver to putt and you aren't going to bring a knife to a gun fight (unless you like things spicy!). As with most things, general rules of life can be applied to training.

The list of pull-up variations is as large as your Aunt Edna's underwear. Image out of your head yet? No? Ok, I'll wait. Are you all good now? Great! Like I was saying there are a lot of different pull-up variations, finding which ones that are useful to you is the objective. Here is my short list of pull-up variations that I use frequently. I've even thrown in some general application guidelines that I use. God, you're lucky!

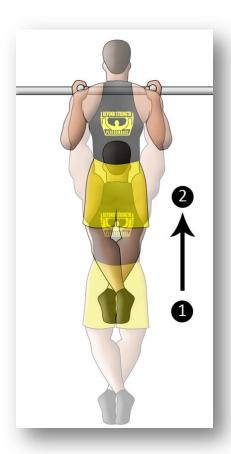
Pronated: When most people picture a pull-up in their mind's eye they see the pronated version. Sometimes I picture my sixth grade best friend squirming, scissor kicking and ultimately failing to get his chin above the bar when we did the pull-up test in gym class. Fond memories of my sissy-girl friend shouldn't distract me (or you for that matter) away from the fact that the basic, pronated (double overhand) pull-up is a fantastic movement that is applicable across various situations and populations. In fact, since the basic pronated pull-up is so great for so many people, we'll just talk about what people this variation isn't great for. Since the humerus is internally rotated and the shoulders are flexed to a high degree in the hang position of the pronated pull-up, this is a bad option for anyone at a high risk of shoulder impingement.



1-Pronated Pull-up

Neutral: A lot of coaches will only have their athletes or clients push and pull vertically with a neutral grip. Generally, this is because they consider it to be the safest and most natural way to complete over-head movements. While it's probably not my place to comment on what a "more" natural movement is compared to another movement, I think that neutral grip pull-ups are a great exercise. Pronated pull-ups are heavy on the lats and supinated pull-ups offer a great way to hit the biceps, but neutral grip pull-ups make training the upper-back a focal point. Yes, both pronated and supinated pull-ups train the upper-back, but neutral grip is better for recruiting upper-back muscles. For those that need added scapular stability, are looking to put more focus on the rhomboids and traps or would have their shoulder health compromised by excessive

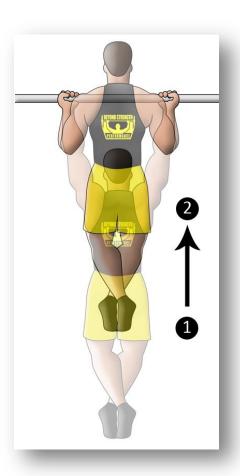
internal or external rotation, neutral grip pull-ups work well. I like them a lot for baseball players, quarterbacks and other over-head athletes.



2-Neutral Pull-up

Supinated: Hitting pull-ups using a supinated grip recruits more bicep than any other pull-up variation, although using a neutral grip does come in a close second. So for those of you looking to build massive biceps along with a manly back, this variation needs to be worked into your program. Although supinated pull-ups go a long way to build great biceps, they also put a lot of stress on the bicep tendon. The last thing that any of us needs is a fraying bicep tendon. To lessen the chance of a bicep tendon injury, avoid doing slow eccentrics, extremely explosive

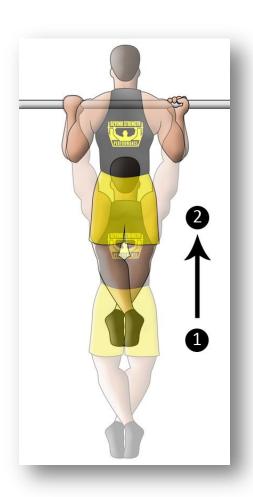
pulls or dead hangs with a supinated pull-up grip as these will surely piss off your bicep tendon, immensely.



3-Supinated Pull-up

Mixed Grip: The mixed grip pull-up is my silent favorite. It's a variation that most people don't talk about or use, but they should. Take the alternated grip that you use for your deadlift and transfer it over to the pull-up bar and you'll have yourself a mixed grip pull-up. A fair question would be, "Why are mixed grip pull-ups awesome?" Well, good friend, I will give you a fair answer.

They are awesome because you can load the absolute bejesus out of them. The mixed grip allows for a stronger over-all grip, thus allowing you to strap more poundage to yourself. So, they are a great pull-up variation for building maximal upper-back strength. Using the mixed grip pull-up to train the alternated grip for your deadlift is another awesome idea. This is especially true if you are not switching your grip while deadlifting, because it could lead to asymmetrical internal and external rotation at your glenohumeral joints bilaterally. Working in some mixed grip pull-ups and alternating which hand is pronated and which is supinated can help to balance the internal and external rotational stress on your shoulders.



4-Mixed-grip Pull-up

Gironda: Made popular by body builder Vince Gironda, these are also commonly called sternum pull-ups. Starting from a dead hang, pull your sternum to the bar instead of the top of your chest. If you're not great at pull-ups this probably isn't a variation that you should look to work into your program, as it requires a greater range of motion and greater over-all strength in comparison to other variations. These can be done with a pronated, neutral or supinated grip, but it's best to do them with a neutral or supinated grip. This is purely due to the amount of range of motion that can be achieved. Pronating your hands limits how much your shoulders will extend while still being able to keep extension in your thoracic spine, thus decreasing the overall range of motion.

These bad boys are great for crushing your upper-back and lats through a huge range of motion.

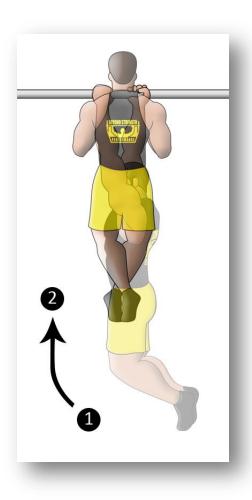
The fact that you are starting in a dead hang and inverting yourself as you pull-up to the bar also adds an element of core stability.



5-Gironda Pull-up

Transverse: These are a recent addition to my arsenal. But they are a lot of fun and they train your shoulders, and the rest of your body for that matter, for stability and range of motion in the transverse plane. Instead of facing the pull-up bar, place yourself perpendicular to the bar and directly underneath it. Grab the bar with both hands pronated but on opposite sides of the bar with your hands stacked, or with a little bit of space between them. From here you will pull and rotate ninety degrees (toward the outside hand) to bring your chest up to the bar. It is even more critical to keep your abs braced and glutes contracted throughout the entire movement for transverse pull-ups because the rotation will require more core stability.

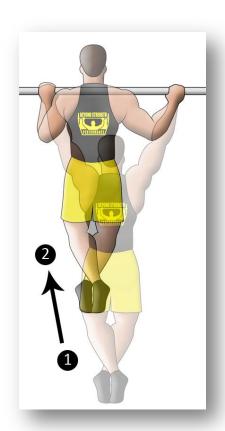
Not only are they great as a supplemental exercise, but transverse pull-ups fit nicely into a warm-up due to the internal and external rotation necessary at the glenohumeral joints to complete the movement. The added core stability involved is another great reason for them to be included in a warm-up. For the exact same reasons that transverse pull-ups are great for a warm-up they are great at the end of work-out. Reinforcing range of motion about the shoulders and core stability while fatigued can be beneficial for just about anyone that plans on using their body at some point during their life (yep, I think they are for just about anyone). Transverse movement is a necessary element of everyday life. Including transverse plane upper-body training by using transverse pull-ups makes your body stronger in rotational movement patterns that you move through daily. Program them either by doing all of the reps rotating in one direction or you can alternate directions on every rep.

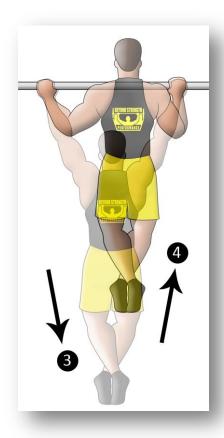


6-Transverse Pull-up

Half-Moon: These are a relatively new addition to my pull-up tool box, but they have quickly become one of my favorites. And for those of us that can't do a one arm pull-up, it is the closest we can get to doing pull-ups unilaterally. Half-moon pull-ups can be done with a pronated grip, neutral grip or supinated grip (although I favor the former two instead of the latter). Set your chosen grip on the pull-up bar, tighten up your core and pull predominately toward either your right or left hand. Without dropping directly down, return smoothly to the starting position and immediately begin to pull-up to the opposite hand. Continue this way until you hit your prescribed number of reps for each arm. Remember that all the transitions must be smooth and

almost sweeping as you go from pulling up to one hand to pulling up to the other; otherwise you will have a "triangle" pull-up rather than a half-moon pull-up.





7- Half-moon Pull-up

If pull-ups aren't your forte yet, cut your gums on some of the other variations before progressing to the half-moon variety.

When I said shortlist, I meant it! I don't use a lot of different pull-up variations regularly. Obviously, there are always going to be new grips and applications that make their way into my programming (the same should go for you), but it is the application that becomes the most important. Using one grip as many ways as possible is where creativity, training effect and adaptation meet. Let's talk about programming considerations.



Programming Considerations

There are a million and one ways to fit pull-ups into your programming, so there is definitely no excuse to not include them. Whether you are trying to build bigger and thicker lats, balancing your pushing to pulling ratios, training to become as explosive as humanly possible or training to be as bad ass as you can be, there is always a way to get your pull-ups in. Sometimes it just takes a kick in the ass and a few good ideas to get you moving in the right direction. Take these programming considerations for the mighty pull-up and make them work for you.

• Max Effort: For those of you that are unfamiliar with what max effort training entails, let's do a brief overview. Max effort training is the ultimate way to push limit strength because you will be working to either an absolute one rep max or a rep max for a given movement. However, this isn't the high rep max that pops most commonly into people's minds. Rep maxes in max effort training normally consist of either a five or three rep max.

Max effort training is most commonly used to train movements such as the squat, bench press and deadlift, but it can easily be applied to pull-ups. There's a great chance that you are thinking, "Pull-ups are a secondary exercise, what is the point of pushing my limit strength with them?" Well, I'll see your question and raise you two. And by two, I mean two solid reasons for using pull-ups as a max effort exercise.

The first reason is matching training magnitude. Balancing training volume is a concept that we are all familiar with, but I believe that it is irrelevant if the overall impact of loading parameters is out of balance. Let's say you max effort bench once per week and bench submaximally one other day per week. Let's also say

that your assistance work consists of at least one other pressing movement, maybe dips or an overhead press. Like we talked about above, the first thing to do is attempt to balance the volume of pushing to pulling, maybe even adding more pulling volume to your program than pushing. But, if you are trying to match fifteen heavy bench reps by doing 60 reps of light face-pulls the scale is going to tip in the direction of the bench. Although, your total volume is far in favor of pulling, your body cares more about being able to handle pressing 300 pounds off of your chest than it does about a low intensity pulling exercise such as the face pull.

Max effort pull-ups offer a solution to this conundrum because they can match the magnitude of stress that benching, or any other high intensity pressing, puts on your body. Working to a rep max of three or five is the best suited approach to max effort pull-up training because it helps to reinforce balancing volume and magnitude, also helping maintain good form while still using heavy loads. Use them in place of a max effort push on an upper-body training day.

Submaximal Effort Weighted: These are the follow up to the max effort pull-up because they are the under study, as in doing submaximal weighted pull-ups starts the progression into max effort pull-ups. Like max effort pull-ups, doing submaximal effort weighted pull-ups is also a great way to balance pushing to pulling training magnitude; they just aren't going to push the limit strength of your back as much as max effort training will. Where submaximal effort pull-ups lack in pushing limit strength they make up for it because of their versatility for application across several programming situations. They can be used as a main

exercise or an assistance movement. It is easy to plug them in on a deadlift day to incur more lat fatigue or they are great for use strictly on upper-body days. The application and insertion into your program is as broad as you would like it to be, so don't get tunnel vision! One of my favorite applications for submaximal effort pull-ups is to use them in conjunction with a lower-body push movement on a full-body training day.

Repetition Effort: Applying any exercise in a repetition effort format means
working to failure (or close to it) with that exercise. In most instances I wouldn't
advise working to failure with a multi-joint exercise but there are some definite
benefits to doing high rep sets of pull-ups.

Those of you looking to build a lock-tight grip should definitely be doing repetition effort pull-ups. Putting your grip under tension for extended period of time to support your body weight provides the stress for some serious strength and hypertrophy gains in the flexors, pronators, supinators and extenders of your forearms.

Another definite adaptation of high-rep pull-ups is serious upper-back conditioning. While building strength in the upper-back is of paramount importance, conditioning the upper-back to withstand high volumes of work is a close second. No matter what you are training for your upper-back will be taking a lot of stress, especially if you are squatting, benching, deadlifting or Olympic lifting. High-rep pull-ups provide a great non-specific preparation for your upper-back to be put through hell.

Let's not forget that all those reps can result in some awesome hypertrophy gains. High-rep pull-ups build massive lats and upper-back musculature, so they are a great addition to your hypertrophy program. Finding where to fit pull-ups to failure into your program can be the tricky thing.

Of course, if failure for you is five reps then this probably doesn't apply to you because volume isn't an issue. But for those that can crush a set of twenty pullups before failure it takes a little more planning on where to fit them in during a training day and week. Failure sets are great to use at the end of a training week and programmed as a first level assistance exercise. Programming them this way allows for you to reap the benefits of the cumulative training stress throughout the week without wrecking your back for every other training day. Using them as a first assistance exercise is great because you can do them while you are still relatively fresh, simply because you'll be able to get more reps.

As a rule of thumb when programming repetition effort pull-ups, keep it between one to three total sets. If you use more than three sets quality of movement and the total number of reps that you can get per set will diminish to the point that the set becomes worthless.

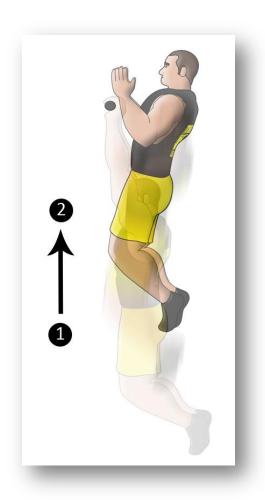
• **Dynamic Effort:** Being able to generate power through any movement is crucial for becoming efficient with that movement. Whether you are a powerlifter, athlete or just a fitness enthusiast, powerful movement is important for strength, speed and over-all musculoskeletal health.

If you aren't familiar with dynamic effort training, it consists of quick and powerful reps with submaximal weights. The technique was made popular by

West Side Barbell as they applied the method to improve the speed of their squat, bench and deadlift efforts. A sample dynamic effort bench program for a given day could look like this: 8 x 3 @ 50% of 1RM with 45 seconds rest. The programming and application of dynamic effort pull-ups can replicate dynamic effort training as it is applied to squatting, benching and deadlifting. My friend Ben Bruno performs dynamic effort pull-ups by attaching a jump stretch band to his waist for resistance. Programming dynamic effort pull-ups, however, doesn't have to be pigeon holed by other paradigms. If you stick to a few principles you can program pull-ups for power in a ton of different ways. Like my friend Ben, you can use a band for resistance with the typical dynamic effort loading parameters, but I am also a big fan of concentric pull-ups, plyometric pull-ups (clap pull-ups) and pull-up jumps to train pull-ups for power. Concentric pull-ups are great because you can train a powerful concentric contraction without causing any eccentric muscle damage. Simply enough, you will just do the concentric portion of a pull-up and then drop to the ground or a box without controlling the downward phase of the movement and you'll have yourself a concentric pull-up. Typically, I program concentric pull-ups in cluster reps. A sample cluster set would consist of doing two reps then resting for ten seconds and then repeating that process four times. Not only are they great as a dynamic effort movement but they fit well into a warm-up because of the absence of an eccentric load.

Clap pull-ups are great for those that can do them. They involve creating a ton of power, body awareness and extreme coordination. Do them by setting up with a

pronated grip, explosively pulling your chin above the bar, letting go and clapping and then grabbing the bar and decelerating yourself into the eccentric portion of the movement. It sounds like a lot doesn't it? Well, it is. This isn't a movement for beginners. It's a complex movement that requires the gonads of a horny wildebeest and the precision of a Tai Chi monk. Progress into them by doing hand switches on the bar, such as flipping grips from pronated to supinated or vice versa. Hand switches will help you get used to letting go of the bar and then grabbing it again. Also, concentric pull-ups are great for teaching the explosion necessary during the up-phase of the clap pull-up.



The ballsiest of the of dynamic effort pull-ups is the pull-up jump. No, you won't be jumping from the ground, grabbing the bar and doing a pull-up. That's a cool idea as well, but better reserved for a metabolic training circuit or something of that nature. For a pull-up jump, you'll need a squat rack with a pull-up bar attached to the top cross bar and a barbell secured in the rack at one of the highest pin settings. Grab the barbell, get a little bit of a swing going, explosively pull-up and let go of the barbell and then grab the pull-up bar on the top of the rack. It sounds like something out of a road side circus act, doesn't it? Although it sounds crazy, even developing the ability to do one pull-up jump will develop pulling power tremendously. Not to mention that it is seriously bad ass. What lady wouldn't want to see the man-italia of a brute that can jump three feet in the air just by doing a pull-up? Well, if there is a lady that wouldn't be impressed by that she probably wouldn't be a lot of fun anyway. I'm sure she probably enjoys reading doormat instructional manuals and watching paint dry. Pull-up jumps aren't just a great way to build a powerful back; they are also a great way to add variation to your program. Rising to the challenge and building up the nerve, to do a pull-up jump can give you an awesome goal to strive for. Clap pull-ups are a great place to start when progressing into a pull-up jump. From there, start attempting pull-up jumps at very short distances and progressively add more distance between the bars.

• **Total Volume:** A great way to practice pull-ups is to simply *do a lot of pull-ups*.

Getting past the obviousness of that statement, programming pull-ups for total

volume is a great way to get better at doing pull-ups as well as build strength and mass. Pick a grip, set a total number of pull-ups you want to get done for that training session (or day) and then get to work. The key is to keep fatigue to a minimum. That means don't worry about how many pull-ups you get in per set; just get the total number in for the day. If you start to struggle during a set or have a breakdown in form, put the nix on the set and come back when you are fresh. This will ensure that you are training to engrain a good motor pattern and not feeding the ego with false achievement. Let's say you want to hit fifty total reps on the day. You start out by doing sets of eight with clean, crisp reps. Three sets in, however, you hit a wall, and at six reps you struggle to keep form and finish the last rep cleanly. At this point you drop down a rep per set and make sure the reps are perfect and fast. As you incur more fatigue drop the reps per set as necessary. Since the total volume strategy is about getting a lot of quality work in, start conservatively when you set rep goals for a given day. As you improve with technique and are able to tolerate more volume you can manipulate rest periods, total number of reps, reps per set and even load. I wouldn't plan on adding any load during a total volume pull-up extravaganza until you can handle well over one hundred reps in a session.

• Ladders: Doing pull-ups in a ladder format is a form of escalating density training. Basically, you are trying to increase the amount of work you are doing in a set amount of time. Smitty (James Smith) of Diesel Strength and Conditioning put me through my first pull-up ladder and I was hooked ever since. Pull-ups done in ladder format are great for controlling fatigue and recovery. Here's how

Smitty baptized me in the fire of the pull-up ladder: working from one rep per set to five reps per set while alternating grips within each set while continuously cycling sets for ten minutes. Sound confusing? Here's a visual:

Ladder- 1,2,3,4,5 repeating

Grip- Alternating various grips

Time- 10 minutes

One thing to keep in mind is that there were four of us working on this ladder. So instead of one person having to do all the reps in succession, there was a built in rest period because three other lifters would do their pull-ups in between one person's sets; controlling fatigue and recovery. This is only one take on the pull-up ladder, so use your imagination to come up with some different variations!

The great thing about programming pull-ups in a ladder format is the versatility of progression. Add more reps during a given period of time, decrease the time to get a certain amount of reps or cut down the rest between ladders and you're golden any way you slice it. Depending on how you use them, pull-up ladders are great for total volume technique practice, building mass and building relative strength with your body weight.

During a Warm-Up: Working pull-ups into your warm-up is a great way to activate your lats and upper-back before training. It's also a great way to make sure that you are achieving balance within your pushing to pulling ratio in your upper-body. It's important not to work to fatigue with pull-ups during a warm-up. I'm sure this seems obvious, but it is worth commenting on.

The main reasons for using pull-ups during a warm-up are to work on exciting the nervous system, to increase shoulder mobility, balance pulling to pushing volume and to activate the muscles of the back. Keeping those ideas in mind, my two favorite pull-up variations to use during a warm-up are concentric pull-ups and transverse pull-ups. Like we talked about earlier in the book, concentric pull-ups are great for training an explosive concentric contraction while limiting eccentric stress. What could be better for a warm-up? You get to fire up your nervous system, activate some key muscles and limit muscle damage all at the same time. Developing rotational mobility and stability in the shoulders is important for long term shoulder health. Yes, there are a million and a half drills to increase internal and external range of motion and activate the peri-scapular muscles, this much is true. However, integrating all the components of glenohumeral mobility and stability as well as peri-scapular activation into a larger movement pattern, by using a pull-up, is beneficial. Transverse pull-ups are great for integrating all of those components. Hitting a couple sets of three to five reps per side of transverse pull-ups after doing all your shoulder range of motion and upper-back activation work serves as a great link between warming-up and the training session.

Pull-Up Challenges

In June of 2011 an article that I wrote was published in Testosterone Magazine (T-nation.com) entitled "5 Pull-up Challenges." The article is great for busting beyond the typical pull-up mind set and applying some new ideas to progress forward in pull-up conquest. It's also the article that gave me the idea to write this e-book. So thank your lucky stars for that. If you haven't had a chance to check out that article yet, head over to t-nation.com, read that article and get started on those challenges before moving on to the new set of challenges I'm about to issue.

Challenges are the basis of training. Whether you are trying to overcome the challenge of setting a new PR at a powerlifting meet or busting your ass to be a starter on your high school football team—issuing yourself challenges to focus on and accomplish has to be included in your program. While a pull-up challenge may not be specific to your goal of deadlifting 500 pounds, it can help create the mindset necessary to rise up and achieve what you set out to do. The strength, mass and core stability gained from rising to a pull-up challenge are also beneficial to other aspects of fitness. Do pull-up challenges have to occur in your program every week?

Nope, they sure don't. They don't even need to be included during every training cycle. But they should be completed a few times per year so you have something to test your salt against.

Here are some other awesome reasons to rise to pull-up challenges:

- They prevent male pattern baldness.
- Mental toughness is something to be trained and rising to a challenge reinforces it.
- Your testosterone levels will be comparable to those of a sex deprived Yeti.
- If done regularly, they can help to build upper-body mass.
- Competition breeds progress, even if you're only competing against yourself.

• Guys that do pull-up challenges are 127% more likely to get laid, TODAY!

All joking aside, pull-up challenges are awesome. I've used them to make stale programs fun again and to motivate myself and my clients. Besides progress and achievement training is also about having fun. That's one important fact that we can't forget no matter why we go to the iron sanctuary habitually. But remember, challenges are called challenges for a reason. This shit won't be easy. Without further ado, here are five new pull-up challenges for you to test your manhood against:

- Pull-up Ladder Challenge (2,4,8 Challenge): The affinity that I've developed for the pull-up ladder motivated me to develop a challenge based on it. Pull-up ladders that I normally include in my programs have a definitive amount of rest and only increase by one rep each set. But the 2,4,8 challenge isn't so friendly. Because I'm a nice guy, I'll give you two extra minutes (usually you only get ten). The first set in the ladder is two reps, and then we double to four reps for the second set and lastly double the number of reps to eight. After you complete one ladder you'll start back with the two rep set and progress up to eight reps again. You have twelve minutes to get as many 2,4,8 ladders completed as possible. The amount of rest you take between sets is completely up to you. The grip you take is also up to you—just don't try to compare your results at one grip to your results at another grip. That's like comparing apples and oranges. You've got twelve minutes to be awesome and your goal is five ladders. Good luck!
- Clap Pull-Up Challenge: In my Testosterone Magazine pull-up challenge article the first challenge I laid out was the one minute pull-up challenge. It's a pretty straightforward challenge. Pick a grip and get as many pull-ups in as you can in

one minute. Well, I've decided to take it to another level. For this bad Larry you'll have one minute to get as many clap pull-ups in as possible. This challenge is going to test your grip, power endurance and your ability to shut out the rest of the world and push yourself to the limit. Just like during the original one minute pull-up challenge, this challenge is all about strategy. Lactic acid is our enemy. Do your reps in bursts and avoid fatigue, because once the lactic burn hits your toast. Your goal is to smoke twenty reps in a minute.

• The Triangle Challenge: They say that great things come in groups of three.

Well, so do things that make you wonder, what the hell was I thinking? I'll inform you, my friend, that the triangle challenge is the latter of the two.

Triangles inspired this challenge because they have three points. I'm not talking about doing a three pointed pull-up (I can't begin to imagine how that might be done). I'm talking about three grips and thirty reps.

For the triangle challenge you'll need a pull-up station with a neutral grip and regular pull-up bar. Your goal for the triangle challenge is ten reps in at each grip in the shortest amount of time possible, but you have to finish all ten reps at one grip before moving on to the next grip. The order of grips is up to you. Figuring out what grip progression works fastest for you is part of the strategy. Finish the entire challenge in less than two minutes and you have something to be proud of. If you're not quite there yet, you have something to strive for!

• Cliff Hanger Challenge 2.0: Redundancy is never warranted. Hell, there's no sense in repeating yourself if you said it right the first time. If you can, however, take an idea that's already cool and add something innovative to it you are making

moves in the right direction. The original cliff hanger challenge is brutal all by its lonesome, but I wanted to make you wonder how I come up with all these torturous ideas.

My first go at a cliff hanger challenge gave me the idea of doing pull-ups continuously until failure but making it a rule to switch grips every ten reps. Cliff hanger challenge 2.0 adds more hang time into the equation. Instead of doing the reps in immediate succession, you'll have to hang for five seconds in the bottom position at the end of each rep. No grip change is necessary for version 2.0, but you'll definitely be getting some serious grip work in the process! The only goal is to keep your hands on that bar for as long as possible while completing as many trips up to the bar as you can. Shoot for ten reps on your first go round. It may not sound like much, but all things considered that is fifty seconds under tension!

• The Gauntlet: Sometimes I hate myself for thinking this nasty bastard up, so I can only imagine how you are going to feel about me when you give it a try for the first time. Get ready to enter pull-up hell.

The gauntlet combines all the brutal aspects of the other pull-up challenges into one back blasting lat massacre. You'll start with five clap pull-ups. Once your hands grip the bar after the fifth rep you have a fifteen second hang in the bottom position. Then you have five pronated pull-ups followed by another fifteen second hang. Keep going by hitting five neutral pull-ups followed by a fifteen second hang. If you guessed that the next step was to hit five supinated pull-ups followed by a fifteen second hang you might want to consider becoming a detective because you are absolutely right. Switch back to a neutral or pronated

grip to do your hang because hanging with your hands supinated puts unnecessary stress on your biceps tendons. If you've made it this far without letting go of the bar you have the manliness of a flannel sporting lumberjack and you've risen to the challenge. But if you conquered this challenge easily don't fret; there is a way to keep progressing!

After the hang following your supinated pull-ups jump right back in with four more pronated pull-ups and then hang for ten seconds. Continue through neutral grip pull-ups and supinated pull-ups in the same way. If you make it the whole way through the hang after your second round of supinated pull-ups then call me and I will buy you a case of whatever beer you so desire.

Challenges are about being able to look yourself in the mirror and be comfortable with the person staring back with you. You might be thinking, "Todd they are pull-ups, tap the breaks, Andretti!" I won't deny that you may have a point. But if you can give up easily in the face of a simple pull-up challenge it makes it that much easier to fold the cards when you are faced with something that is much more serious. Take the challenge, have fun but don't punk out because you are only cheating yourself.

Pull-up Research

When I set out to do this book for you I wanted to make sure that it didn't turn into an extended version of a research paper. Anyone can use big words and pontificate about things that they learned last week. That's not my deal and I think that you deserve more. But it is always great to learn from research. In the spirit of academia, I decided to include this short section on pull-up research. Without further ado, here are some facts that guys in white coats learned for us.

The Perfect Pull-Up Ain't So Perfect!

About every fifteen minutes for about three years straight there was a spot that ran for "The Perfect Pull-Up" or "Perfect Push-Up" handles. Claims ranged from them being backed by scientific research to be more efficient than regular pull-ups to them being developed by a former navy seal. The two devices that claim to be "perfect" certainly could be backed by some sort of pseudo-science and it is completely possible that they were developed by a Navy Seal, but they aren't any better than the classic versions of the exercise—at least in the case of the pull-up.

Researchers in the physical therapy unit of the Mayo Clinic compared EMG outputs from three different pull-up variations: pronated (what they called pull-ups), supinated (what they called chin-ups) and those done on the Perfect Pull-Up apparatus. The muscles they collected data for were the pectoralis major, lower trapezius, infraspinatus, erector spinae, biceps brachii, external obliques and latissiumus dorsi (looks pretty similar to the muscle from the Anatomy of a Pull-up section, eh?). Every muscle studied had higher levels of activation during chin-ups and pull-ups than during the use of the Perfect-Pull-Up, except for the lats. And while activation of the lats was better during the Perfect-Pull-Up, it wasn't so overwhelming that pull-ups and chin-

ups were deemed inferior. In fact, quite the opposite; the researchers concluded that the Perfect-Pull-Up is an inferior exercise when compared to pull-ups or chin-ups (3). Better recruitment of one muscle group doesn't tip the scales when weighed against six others. Besides, the lat activation during the Perfect-Pull-Up didn't blow the other two groups out of the water. So you really aren't missing out on huge lat size and strength gains by not spending your money on a hyped up piece of equipment.

While we're at it, I'll drop some more knowledge bombs on you that also came from this research project. Namely by spelling out some different recruitment patterns that compare and contrast the pronated pull-up and supinated pull-up (or chin-up). Having a grasp on which movements recruit different muscles more effectively helps you to program based on your needs at the time. Here's a quick and dirty run down:

- Pronated pull-ups are better for recruiting the lower-trapezius. Good to know!
- Supinated pull-ups better recruit the biceps (I know, obvious) compared to
 pronated pull-ups. What might not be so obvious is that there is also a stronger
 contraction of the erector spinae and the external obliques during supinated pullups. Adding supinated pull-ups into your program could help train core stability
 to a greater extent!
- During both variations of the pull-up the first two muscles to activate were the pectoralis major and the lower-trapezius.
- The infraspinatus displayed high amounts of activity during all pull-up variations tested but was strongest during the pronated pull-up. It aids in dynamic stability and extension of the glenuhumeral joint during a pull-up.

It's important to note what the researchers involved with this study counted as a full range of motion pull-up. Participants in the study needed only to get their nose above the bar for the rep to count (3). By most standards the reps wouldn't count. Like most other coaches, I say for a pull-up to count the chin must rise above the bar without excessive cervical (neck) extension in the process. If the participants in the study had to rise to the chin standard of a pull-up, rather than the nose standard, the EMG outputs could have varied drastically—especially in the later phases of the pull-up.

Lat Pull-downs vs. Pull-ups

Comparing the lat pull-down and the pull-up has been a cause for controversy for years. Some coaches say they are interchangeable and that pull-downs can be used in place of pull-ups for those that aren't able to master the king of all body weight exercises. Other coaches denounce the lat pull-down as an inferior exercise that cannot be used in place of the pull-up. The truth of the matter has to be somewhere in the middle-ground, right? No, not really.

Researchers out of the Human Performance Laboratory at Truman State University in Missouri studied the pull-up and the pull-down and how performance on one of the movements might predict performance on the other. The athletes used in the study were tested on max reps of pronated pull-ups, lat pull-down one rep max and how many pull-down reps could be achieved at eighty percent of the lat pull-down one rep max. In short, the researchers found that pull-up performance was not indicative of lat pull-down performance, and vice versa (1).

For pull-ups and pull-downs to be used interchangeably in a program they would need to be so similar that performance on one could predict performance on the other. Although outward appearance makes them look as though they are similar enough, science tells us otherwise. Does

this mean that lat pull-downs suck and shouldn't be used in your programs? No, not at all; the important take away is that lat pull-downs and pull-ups are used to develop different qualities.

While they can co-exist in your program with harmony, if you want the results of a pull-up then you have to do pull-ups.

Awesome Ways to Make Pull-Ups Harder

We're all over-achievers. That's why we live and breathe training. Somewhere deep down we feel the need to constantly test the waters and see how much we can handle. For some people, it's about how much pain they can stand without throwing in the cards. Others want to challenge the limits of their body by picking up the heaviest damn thing they can find. Some are just nuts. If it sounds ridiculous, dangerous and could end with projectile vomiting their spleen, they are in. We call these people try-hards (street name: crossfitter). Either way, we all have one or more of these aspects built into our psyche. We can't just let pushing the prowler be pushing the prowler. It has to be pushing the prowler while towing a sled full of oxen and wearing a 300 pound X-vest. And on and on it goes.

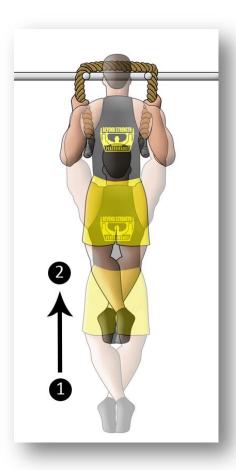
Leaving the ever-sanctified pull-up alone is also out of the question. We have to twist even this basic movement into something torturous that's verging on the brink of something malicious. To give you the increased bad-assery that you so desire, I've put together a list of ways you can make your pull-ups harder (as if they aren't hard enough for some people already). The list is comprised of strategies to challenge all the key training components of the pull-up: grip, core stability, maximal pulling strength and upper-body strength endurance.

Progression is what makes life worth living, so use the following list to *pull* yourself out of mediocrity (see what I did there?) and progress toward something greater. Unless, of course, you are comfortable with sub-optimal awesomeness, then disregard the next 1,000 words or so.

Grip: Challenging the grip during the pull-up can carry-over to many other lifts in the weight-room and improve performance on the field of battle (or sport). It takes a certain level of creativity to bring new challenges to the grip during a basic movement such as the pull-up. Let's

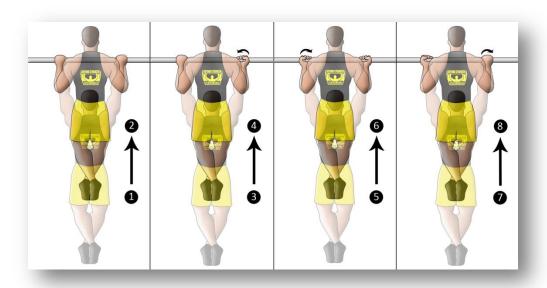
get creative together! Check out my short-list of the best ways to add intensity to grip training while doing pull-ups:

• **Gripping on ropes, bands or towels:** Wrap some ropes, two bands or two towels around your pull-up bar and use them for your hand placement. All three present a serious grip challenge, with bands leading the pack as the most difficult to grip.



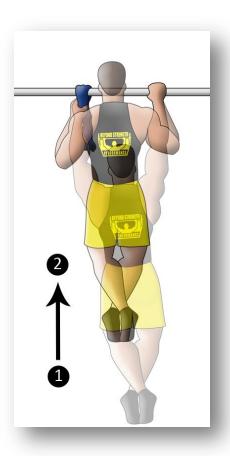
9-Rope Pull-up

• **Grip Rotations:** Flip your grip during your set. Not only will this train your grip musculature from different angles, but while you change one hand placement the other must support the entirety of your body weight. This will make your grip work over-time on each arm. Try switching your grip several times within a set.



10-Grip Switch Pull-up

• Odd Hand Placement: Ledges, squat rack cross bars and rock climbing wall holds are all great for odd hand placement pull-ups. Your grip is adapted to holding on to a smooth, round surface. Challenging it by using hand placements that typically don't allow for wrapping of the thumb will add serious strength to your grip. Here's an example that consists of an off-set grip with one hand on the pull-up bar and the other on a band.



11-Off-set Pull-up

• Supramaximal Dead Hangs: On a dip belt, or in an x-vest, add more weight than you can use to load your pull-ups. Walk yourself over to the pull-up bar, grip it up like it stole something from you, pack your shoulder blades back and down and hang there for as long as you can. I know this isn't a full-range pull-up, but it is part of one that's loaded super-heavy, so it counts.

Core Stability: This is one training effect of the pull-up that definitely doesn't get enough love. Even though increased core stability is a major outcome of continually programming and progressing through pull-up variations. Your lats are a key player in the corseting effect that takes place when you brace your core, and they are under tension throughout the pull-up

movement. Since your feet are not in contact with the ground, you can't draw stability from having them planted; meaning greater amounts of tension must be achieved by your abs, spinal erectors, glutes and other supporting core musculature. Adding movement and other stimuli to a pull-up will increase the necessity for core stability exponentially. But if you just hit your first ever full-range pull-up yesterday you aren't ready for these added challenges. Learn to keep your core braced efficiently during normal body weight pull-ups before you jump on board with added stability challenges.

- Adding Rotation: Movements like the transverse pull-up challenge your core's anti-rotation strength. Being able to resist rotation is important for the health of your spine and entire body. Rotating while doing pull-ups also adds a new dimension and training effect because your muscles aren't being trained linearly, as is usually the case. Transverse pull-ups allow for your pulling muscles to be trained from different angles. During the initial rotation your lower body will create counter-rotation that will transfer to the core and the rest of your upper-body. The goal is to brace the core well enough to oppose rotation of the legs, keeping it from influencing movement in the rest of your body. Start by doing transverse pull-ups with your legs straight and progress to doing them in the L-sit position.
- Agitation/Perturbation: Agitation and perturbation are techniques used
 frequently in training the rotator cuff and shoulder stability. As I learned from
 Smitty of Diesel Strength and Conditioning, they are also great techniques for
 training the core. Most of the time this is done during a plank or bridging variation,
 during which a partner tries to disrupt your brace to further challenge your core

stability and forcing you to brace your core more rigidly. I thought, 'why can't this also be used to challenge stability during pull-ups.' Having a partner apply direct pressure to your body by pushing or pulling on your core gently while doing pull-ups or using a band attached around the waist to gently pull your core in different directions are two great agitation/perturbation techniques. The pull or push on the core does not have to be very forceful; only enough to challenge the brace and require harder contractions from the core musculature. Perturbation during pull-ups is also going to present a serious challenge to glenohumeral stability because the hanging position it is the joint responsible for transferring force to the closed end of the kinetic chain. Make sure to keep your shoulders in a tightly packed position throughout the exercise to ensure stability.

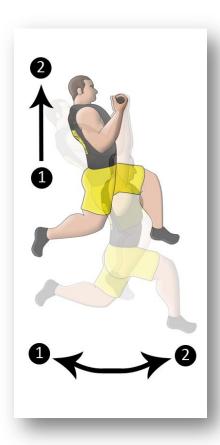
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12-Agitation Pull-up Variations

Leg Movement: Adding leg movement during pull-ups is also a great challenge to core stability by reinforcing conscious core bracing. It requires stabilizing the force transfer from the pull of your upper-body while simultaneously stabilizing movement coming from the movement of your legs. Not only does this take core stability, but it also takes a fair amount of athleticism and coordination. If you are a relatively uncoordinated guy or gal, start into this variation only after you've mastered the other pull-up core stability techniques. Include leg movements such as a running motion, front to back scissoring and abduction motion (like that during a jumping jack) to your pull-ups. The movements aren't limited to these three. Be creative and come up with some of your own.



13-Running Pull-up

Maximum Strength: Tests like the three rep max pull-up are great for testing upper-body pulling strength, but there is more to the maximum strength conundrum than simply putting weight on a dip belt and pulling up to the bar. Even though working to simple rep maxes with weighted pull-ups is great for developing maximum pull-up strength, there is more than one way to skin the proverbial cat (or whatever else you feel like skinning). If you want to take your maximum strength to the next level, you have to be willing to push the envelope, try something new and think outside the box. To start you on your way, here are two of my favorite ways to increase maximal pull-up strength besides hitting weighted rep maxes.

- Supramaximal Negatives: Creating maximal tension is crucial for improving maximal strength. Using the eccentric portion of the pull-up, while overloading it, is a great way to increase the intensity of pull-ups without following the same dogmatic routine of just overloading the entire motion. Even greater is the fact that the loads used during negatives can be far greater than those used for training the concentric motion, allowing for even more tension to be generated. Start with a load ten percent greater than your projected pull-up one rep max and shoot for negatives of about three to five seconds. Progress by either increasing weight at a given time or by trying to descend for longer times at a given weight. Keep your grip either neutral or pronated.
- belt, loading pull-ups from multiple sources is great for cranking up the difficulty and creating more tension. My favorite way to load pull-ups using two sources is by using an x-vest and a jump stretch band around the waist. The movement is initially overloaded because of the additional weight of the x-vest and the continual tension of the band adds even more tension and difficulty. You can program these by working to a traditional one, three or five rep max.
- Mixed Grip: These are great for pushing limit strength because the strength of your grip isn't as much of a limitation. Liken mixed grip pull-ups to deadlifting with a mixed grip. Your pull on the deadlift is much stronger because your grip is so much more stable; the same is the case with pull-ups. The loading form you choose is up to you. Just be sure to program an even number of sets and alternate which hand is pronated and which is supinated.

Relative Strength and Muscular Endurance: Training pull-ups using the repetition effort is typically executed one of two ways: one set or multiple sets to failure. There is no denying the fact that this is a great test of relative upper-body strength and endurance, but it doesn't mean that pulling endurance always has to be trained this way. Similar adaptations can be obtained by using multiple methods. The goal is only to improve the amount of work the muscles can do in the pull-up pattern.

• Density Training: In place of traditional repetition effort pull-up training, density training for pull-ups is a great, and maybe superior, alternative. Density training is founded on adding more work to a given amount of time. For example, say you have five minutes to do pull-ups. The objective of density training is to fit as many pull-ups into those five minutes as possible. Having the body do more work in a given amount of time will produce gains in relative strength and therefore bolster endurance during pull-ups. Set a goal of getting a certain amount of pull-ups in during a given timeframe and continually try to achieve more work within that time frame. Once you have stalled out during a set amount of time, increase the time and set a new goal.

Awesome Pull-up Workouts

Ok, enough talk it's time for action! Below you'll find six awesome pull-up workouts, each focused on a given quality that pull-ups develop. Rather than just manipulating volume and intensity you can add new dimensions to your pull-up workouts. There's a workout to challenge your core stability, one to make your grip monstrous, another to build powerful lats and there is a challenge workout. You'll also find one to build biceps of devastating proportions and another to make your pulling speed like lightening. So, good luck, have fun and enjoy the shit out of these pull-up workouts!

Pull-up Power Builder:

Exercise	Sets	Reps
Concentric Pull-ups (warm-	3	*[5 x 1]
up)		
Clap Pull-ups	3	5
Neutral Grip Pull-ups	5	3
(weighted)		

^{*}Indicates a cluster set. Each set consists of 5 sets of 1 rep with a 5-10 second break between each rep.

Pull-up Speed Builder:

Exercise	Sets	Reps
Pronated Pull-ups (warm-up)	3	4
Concentric Pull-ups	2	**[5 x 2]
*Speed Pull-ups (pronated)	6	3

^{*}Add resistance with a band or weight belt as needed. Keep resistance between 45% and 60% of your 1 rep max.

^{**}Indicates a cluster set. Each set consists of 5 sets of 2 reps with a 5-10 second break between each cluster of reps.

Core Workout:

Exercise	Sets	Reps
Plank (warm-up)	2	20-30 seconds
Glute Bridge (warm-up)	2	20-30 seconds
Concentric Pull-ups (warm-	2	[5 x 1]
up)		
Agitation Pull-ups	2	5-10
Pull-ups with Leg Movement	2	5-10
Transverse Pull-ups	2	6-8 each way

Grip Blaster:

Exercise	Sets	Reps
Supinated Pull-ups (warm-up)	3	5
Grip Switch Pull-ups	2	5 (each grip)
Towel Pull-ups	2	6-8
Supramaximal Dead Hangs	2	Max time

Bi Shredder:

Exercise	Sets	Reps
Pronated Pull-ups (warm-up)	3	5
Neutral Pull-ups	2-3 minutes	*AMAP
Supinated Pull-ups	2-3 minutes	AMAP
1 Minute Pull-up Challenge	1	AMAP
with Pronated Grip		

^{*}As many reps as possible during the 2 to 3 minute total set. Make sure to avoid complete fatigue during the 2 to 3 minutes. Keep each set 1 to 2 reps shy of fatigue.

Challenge Workout:

Challenge	Sets	Reps
Neutral Pull-ups (warm-up)	3	5
Clap Pull-up Challenge	1	As indicated by challenge
Triangle Challenge	1	As indicated by challenge

I hope you have as much fun with these workouts as I had designing them and trying them out! I've given you the basis to start from, progression and future programming is up to you. Pick the variables that will give you the most bang for your buck—then take your pull-up programming to the next level. Remember, everything works for a little while; the trick is to know when to manipulate your training and make the changes. This is what takes observation, intuition and skill.

Conclusion

Everyone with a pulse knows that life is about getting out of bed in the morning, grabbing the day by the throat, shaking the shit out of it and saying, "you belong to me!" That's why I took six months out of my life to plan, research, experiment and write in order to give you an awesome resource for the king of all bodyweight exercises. Progression and creativity are the things that make life worth living, and you deserve more than just the bland and tired renditions of pull-up programming.

This manifesto is about enlightenment to change perspectives on an exercise that can completely revolutionize a person's training. So the next time you include pull-ups in your program reference this book and use the pre-made workouts as a starting point. If you feel like bringing out your inner-nerd, check out the anatomy section so you're clear on what muscles are doing what. Check yourself by conquering the challenges I wrote for you and then make up some of your own. When you do, email me and coach me on how to do them because I would love to give your workout a shot! We're all in this together, so let's make sure we take care of each other.

Thank you for reading. I hope that you have gotten as much out of *The Pull-up Manifesto* as I have put into it. Good luck and Get Stronger.

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