



# OLYMPIC WEIGHT LIFTING MANUAL

**JUGGERNAUT**  
TRAINING SYSTEMS

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art & design



# SNATCH 101



# CLEAN 101





## 11 LESSONS FROM THE RUSSIANS

BY COLIN BURNS

Last week I had the opportunity to travel to California to attend the Dream Team Clinic (one of the perks of being on Team Juggernaut haha), featuring Dmitry Klokov (you may know him from YouTube), Ilya Ilyin (2x Olympic gold medalist and World Record holder), Vasily Polovnikov (9x Russian Champion) and Zygmunt Smalcerz (US OTC coach) at Waxman's Gym.

This was a truly great experience to see such great athletes in action and to be able to be coached by them. I could go on for pages and pages about what I learned but here are 11 key points...

### 1. SIMPLIFY.

The amount of knowledge I gained from this seminar was not so much in the words spoken, but from what I saw and how they communicated with not just athletes, but also each other and the questions they received from the attendees.

Their lack of English probably helped more than it hindered their ability to get some things across. Were they very specific in what they wanted?

**Y**ou betcha. At the same time, the core concepts were not horribly complicated. In fact they were quite simple. There were many questions that they were almost confused about, showing facial expressions which to me said, “What the crap are you even talking about?”.

A few times they would have to try the movement before they could give an answer to what they were asked, simply because it wasn't a point that needed or had a lot of attention put on it. I think this is a huge thing, especially among the beginners. You don't have to teach every biomechanical detail to the athlete. The goal is to get them to do what is most optimal, not make them professors of weightlifting.

## **2. THEY JUMP.**

I should have counted the number of times they said the exact word “jump”. Perhaps the number of times they actually demonstrated a huge jump. Ilya jumping up, Klovov jumping across the platform, it is all about jumping. Of course I loved the crap out of this. Who doesn't love when credible sources back up a core concept you have been teaching?

Not only did they jump, but they exaggerated the concept of getting up on the toes during the lift. “More high up on toes”, of course in a Russian accent.

## **3. THEY SHRUG.**

Again, I loved the validation. Not that I need it, (but come on, who honestly wouldn't swim in the glory of having these 3 back you up) but it helps dispel some of the things people have been saying about at least 2 of these 3 lifters. “shoulders – ears”, again in a Russian accent. Just a side note, I may start using a Russian accent in all of my coaching.

Now after these last two things, I do need to note that they do not coach the so called jump and shrug the way some do.

There is no power position. At no point do they teach to stand all the way vertical before the full extension of the pull. There are some differences in which they reach the end result, but they still say jump, and they still teach the shrug.

## **4. BAR PATH OFF THE FLOOR.**

One of the things I really enjoyed, not necessarily from a coaching perspective, but as an athlete, was that they teach a straight bar path from the floor to the hip. They do not teach the bar coming towards the lifter at all from the floor.

While this is different from what I teach about getting the bar to come towards the lifter, I am conflicted because I have such a hard time getting the bar in myself- Most of the time it comes straight up.

This goes along with what they teach for foot pressure. Often people talk about getting the weight to the heel and the front of the foot comes up. Recently I have been discussing keeping the whole foot down with that big toe. They teach the weight in the mid foot or front of the heel and pushing with the whole foot.



They don't teach a shift in foot pressure from what I heard, but to always push with the whole foot, keeping the bar in a straight path from the floor to explosion. This seriously simplifies a lot of problems people debate in this country.

#### 5. WHAT YOU SEE IS NOT ALWAYS WHAT YOU THINK.

During the section where they discussed corrective exercises I learned a lot about what people have said or seen on youtube and other internet "resources", specifically from Klokov.

He demonstrated a lot of movements done improperly, knowing it was not the correct way, but in an attempt to address a certain weakness in the move-

ment. Specifically the pull from the floor to the hip, he said he does them both while too far behind and in front of the bar. I will say again that he knows this is not the way it is done in the lift, but said it is useful for addressing a weakness in either the back or the legs, depending on which way you do them. This should put a damper on everyone who says, "well I saw so-and-so do this on the internet".

Just because you see something doesn't mean you understand the intention, or the understanding that it may not be ideal but is being used to train a certain aspect, not to practice the actual movement.

#### 6. THEY DO NOT TRAIN CROSSFIT.

It was specifically asked if they did CrossFit for this or that. While they did say they do "CrossFit type exercises" it was also clarified, specifically, that they do not train CrossFit.

This does not mean CrossFit is evil.

This simply means that yes they do complexes and a lot of volume work with all sorts of different movements, and CrossFit has become a blanket term for many different things, but they do not and are not training to compete in CrossFit.

So stop it.



## **7. THE ELBOWS.**

One of the things that has been taking some thinking about is the position of the elbows. Ilya said to turn the elbows back in the overhead position.

This is different than what I have been taught and have thought in the past. After it was brought up again, Zygmunt said that it isn't so much about the direction, but more about everything being turned on. I must also note that they did not teach to reach up with the shoulders in the overhead position, but the shoulders were again, turned on, but in a more neutral position.

While Ilya's elbows are turned slightly back, his shoulders are not opened up in a way that we see when someone's chest is falling forward. He still has a VERY upright posture. This posture was talked about and praised extensively and I believe plays a huge role in the ability to turn the elbows back in the catch. I still think you cannot turn them back if the chest is falling forward, but while an upright posture is maintained it shows to be effective.

## **8. THE WRISTS.**

This goes hand in hand with the elbow position above. They teach a straight wrist, and not an extended wrist while the bar is overhead. The reason being that it puts excessive pressure on the wrist and elbow. I originally taught a straight wrist as well, but over time I started being more relaxed on this position. Looking at the overall picture, I think the extended wrist allows the bar to sit back a little, but is something that can be better managed with a more upright posture. Pretty sure world records have been set either way though.

## **9. THEY DO NOT DO THE SAME THING NOW AS THEY DID EARLY IN THEIR CAREERS.**

Stop trying to mimic what these athletes are doing after a decade or more of training. They all admitted that early on in their careers they did many more exercises for much more volume than they do now.

The time line I asked about was the first 3-5 years of their careers, so if you are in your first or second year, you clearly should not be trying to copy what these seasoned lifters are doing in their current training. In addition to this, their training blocks that they work with are a matter of months, not weeks.

Ilya spoke of his 10 month training phase. Now clearly this is someone at the top of the game, but if you are jumping from training idea to training idea every few weeks, perhaps it is time to reconsider your strategy.

## **10. THEY ARE STRONG. VERY STRONG.**

I doubt this really needs to be noted, but the base strength of these athletes is unreal. Besides their huge squat numbers which include back squats in the 300's (kg) and front squats 280kg and up, they are strong in every other way as well. Vasily pulling about 600lbs for a triple deadlift, cold, looked like a piece of cake. They are not just strong in the lifts, they are just stupid strong.

## 11. THEY DO NOT ALL DO OR THINK THE SAME THING.

The greatest thing about this seminar was that there was no magic bullet. I know many people hope for such a thing, asking about specific exercises, rep and set ranges, etc. but I was most excited about the variety of thoughts and programs from one to the next.

Vasily had a programming point of view that very much resembled what I have been exposed to. Ilya has a program that encompassed 10 months and went from swimming and rowing to a gradual inclusion of the lifts, to an ultimate elimination of everything but the lifts and squats. Klokov has a program that didn't really exist. He stopped having a strict program around 2004 I believe he said and does what he feels necessary until his very strict program starts during the last 3 weeks leading into a competition.

**W**hich one is better? Vasily has won 9 Russian national titles. Ilya has won 2 Olympic Championships and 3 World Championships. Klokov has won a World Championship and Olympic Medals. These are all ridiculously successful athletes with very different programs, while the core concepts of the lifts remain. Is what they teach the only way? No. Is what I am writing a 100% accurate depiction of what they do and teach? Unlikely. This is what I took from this seminar. I loved every minute of it.

## **THE CONCEPT THAT ATHLETES CAN BE SO SUCCESSFUL WITHOUT COMPLETELY OVER COMPLICATING THE TEACHING OF THE LIFTS IS SORT OF ENLIGHTENING.**

The concept that athletes can be so successful without completely over complicating the teaching of the lifts is sort of enlightening.

Why? Because that means there isn't some magic technique to make you lift a world record. You have to get it right, then work your ass off. After that, you have to do it some more. My day was made after spending just a minute with Ilya showing him some video of my lifts, he said my technique was "very good" and if I can just stay over the bar a little longer I could snatch 172. That, and to fix my jerk I need to "Jump more", as he put it...in English.

Bonus material included while I was training – Klokov called me either a "Strong man" or "strong for American"... there was some debate about it but I'm going to go with the first one. Ultimately it was awesome and if you weren't there, you should have been. It was great to get the information about their system directly from them, rather than so-called experts who spout their interpretation without ever having exchanged a single word.





# COLIN BURNS

## COACHING THE SNATCH

## 4 WAYS TO FIX YOUR LIFTS

BY COLIN BURNS

**E**very lifter goes through times when things just aren't right. You can't figure out why you are missing but it keeps happening. Nothing feels right, nothing moves right, and nothing is landing. Rather than resort to the extreme of demolishing everything and starting over, try these few tips to try to solve some of the issues, or just as survival strategies during the hard training phases that you just want to get through.

### 1. "WIGGLE YOUR BIG TOE."

I talk about foot pressure a little bit when teaching the lifts, but probably not as much as I should. Most of the time it is about the shift of weight from mid-foot to heel during the lift off. It wasn't until recently that I started focusing on another aspect...your big toe.

Take your big toe and stick it in the floor. Don't cram it into the floor—Just press it to the floor. This minor point has dramatically improved my consistency, especially when snatching.

I have had the pleasure of working with Ryan Brown and Dr. Quinn Henoch for the past few months. Most of my discussions with them involve me telling them that their magic tricks don't do anything and that they over analyze petty details. The fun in this is that I get to listen to them actually talk through the rationalization for these ideas. Through this, I have taken some of the concepts and applied them with different thoughts in mind, but the same ultimate goal.

Now when squatting, I do follow a few of their other ideas more specifically, particularly the foot and breathing stuff. In a squat, I can take the time to think about grabbing the floor with all of my toes, and eventually that will carry over into the pull of the lifts. But initially that is too much to think about. Starting simple and progressing is much more successful, especially when we are talking about such complex movements as the snatch and clean.

Why? Why would we want to think about putting our big toe on the floor? There are a few reasons, but the big one is stability. As you push the weight off the floor and shift your weight to the heel, it is very easy to let the front of your foot and toes pull up. They will ultimately need to come back down when you reach the top of the pull, but with that will be unwanted forward momentum. This rocking of the foot can and will cause some serious inconsistencies in your position on the lift-off as well as anything following. Simply putting your big toe down will help create a stable, consistent platform for you to push from, which in turn creates a more stable, consistent pull.

## **2. TEMPO DOWN.**

This is another issue that I return to very successfully when things start going poorly. All too often when a lifter starts getting frustrated, they start pulling harder, earlier, when they should be thinking about just the opposite.

Pulling too quickly can force a lifter to 'pull themselves out of position' where their legs are pushing harder than their torso can keep up with. This can cause the hips to rise faster than the shoulders.

The other side of the coin is that they start pulling with the arms or shoulders too fast, causing them to become upright far too soon, most likely causing the bar to come away from them. Slowing the tempo of the first part of the lift can allow the lifter to stay in position better, also helping with the second part of the issue, which is to stay over the bar longer and not rush to get vertical.

Rushing to get vertical will cause a low bar contact on the thighs, an early pull and resulting in the bar coming forward. The analogy I refer to is that of a baseball pitcher. The wind up is similar to the lift off from the floor to the knee. It isn't about applying force right away, it is about getting into position to apply force in order to achieve maximal acceleration.

You do not see a pitcher racing through the wind up, just as you should not race through the first pull. In the end it doesn't really matter how fast it comes off the floor. What matters is how fast you can get it going at the top of the pull.

### 3. STOP MISSING.

As obvious as this may be, it is harder for many to accept. Someone who goes to max effort all the time misses every time they lift. The more you miss, the better you get at missing. This is not isolated to those who lift to max effort every day though. You could very well be working on a submaximal percentage and for whatever reason still be missing something every time you step on the wood.

This is a good time to back up and get to a place where you can make lifts. After you become consistent, then you can start kicking up the intensity a little bit. In the end, you get good at what you practice, and you don't want to practice missing lifts.

### 4. POSTURE UP.

Many times when you are feeling off your game, you start to compensate. When you don't have the confidence in your pull, it is common to start to "dive" under the bar.

By this I mean your chest falls forward, hips will shift back a little in an attempt to get your shoulders lower, faster. Unfortunately, this doesn't work. Posture is vital to the catch position. You cannot compromise posture in order to gain depth. The return is not there. It doesn't matter how fast you get under it if you get under it in the wrong position. Focusing on keeping your chest up and good posture in the catch can keep you in a better position, making the catch stronger and allowing you to make small adjustments when things aren't quite on.

None of these are ground breaking technical breakthroughs, but they have all proved extremely useful at times when it feels like I am doing everything right, but it is ending so wrong. We are quick to jump to the large issue and make big adjustments, but sometimes it is something as subtle as your big toe, or the tempo of the movement.

The weightlifting movements are so technical that the smallest adjustment can make the biggest difference. Give one of these a try next time you aren't sure what is wrong, or just keep them in the toolbox for future reference.





# REID WORTHINGTON 340# CLEAN AND JERK COMPLEX



## THE CLEAN

As Reid breaks the bar from the floor, he is looking down. This gives him a couple of options. He can either adjust his gaze during the lift, which causes a problem because a fixed gaze is important for good balance, and moving it during the lift can throw the athlete off.

The other option is to keep looking down, which may cause Reid to tilt forward in an effort to maintain his original focal point in his field of vision. The simplest way to fix this is to draw a mark on the wall (or just pick one that's already there) and make sure to keep the eyes focused on that point throughout the whole lift. I recommend a mark on or just slightly above eye level when standing.

As the bar passes Reid's knees, he starts pulling the chest up just a tad early. This can cause the weight to shift forward on the feet too soon, leading to a multitude of problems, not the least of which are losing power at the top and pushing the bar forward.

My favorite drill to address this is the halting deadlift followed by a clean. In the halting deadlift, the lifter will perform a clean pull, but stop as the bar gets to the top of the thighs, before bringing his shoulders back into the power position.

Pause and hold at this position for about two seconds – there should be tension on your glutes and hamstrings, the bar should feel “heavy” on your elbows (i.e. you shouldn't be pulling on it with your arms,) and your whole foot should be flat on the ground, weight balanced just slightly to the rear. From there, lower the bar to the floor, and perform the clean.

## THE JERK

Reid initiates the dip by driving the hips slightly back, and then bringing them forward under the shoulders before reversing direction into the drive. At 340#, or around 84% of Reid's best jerk, he is able to make the lift without trouble. At true max weights, however, this back-then-forward motion is likely to force Reid onto his toes, causing him to drive the bar forward off the shoulders.

To fix this, I'd recommend that Reid practice the jerk dip with light-to-moderate weights with an object just behind him, like a PVC pipe or dowel standing upright. If the object is placed in the right spot, it will serve as an indicator – if he touches it, Reid will know he sent his hips back rather than moving straight down.

Reid's speed and footwork is very good. The only recommendation I would make is to adjust the position of the rear leg, so that the knee is a little bit more bent and closer to being under the hip. This would allow Reid a greater degree of control over the weight.

I would have Reid work on drop jerks with a pause at the receiving position. To perform this exercise, the lifter takes the bar on his back with knees relaxed, and jumps his feet out to the split position (the bar stays on his back, it does not go overhead.) This is an exercise the lifter can do for a lot of reps with light-to-moderate weights, without taxing the shoulders. Additionally, I would like to see Reid pause his jerks up to 70-75% (and occasionally heavier) for two seconds in the receiving position. This will demand that he receive the bar in a position in which he is stable and under control.

## ADRIAN VANVLECK 225# CLEAN & JERK





## THE CLEAN

Adrian's set position is pretty good. I would like to see him keep his head up a little bit more as he breaks the bar from the floor. I might also like to see him set the hips slightly higher, as Adrian appears in this video to have quite long arms. A lifter with a long-limbed build will often find themselves more comfortable and in a position which better uses their levers with the hips slightly higher than lifters with longer torso/shorter limb anthropometry.

As the bar approaches and passes the knees, Adrian's back looks a little bit soft. Being strong in this position is crucial, as any softening of the back will tend to pull the lifter out of position and reduce his ability to transmit force to the bar.

There are often dual causes here: a lack of flexibility in the hamstrings (particularly up high near the glutes,) and a lack of strength in the spinal erectors. The Romanian Deadlift is a great exercise to address both of these issues. When performing the RDL, make sure the knees stay "soft" and relaxed. Go only as far as possible while keeping the knees from moving forward and the back from rounding. Over time, focus not only on increasing the weight, but on improving the range of motion in which you can correctly perform the exercise.

Adrian transitions into a good power position, but as he does so, he pushes the bar forward, away from his center of mass. This causes a host of issues, including the bar being forward as the lifter goes under it, and a loss of the vertical force which could be imparted to the bar.

In Adrian's case, the pushing forward of the bar appears to be happening in conjunction with (rather than after) the transition, so the most important thing to work on is the movement around the knee. I'd recommend cleans from blocks which place the bar just below the knees, so that Adrian can focus on the movement of the knees without relying on the momentum of the pull from the floor to carry him through.

## THE JERK

Like Reid, Adrian initiates the dip by pushing the hips back, rather than by moving straight down by bending the knees. Unlike Reid, Adrian does not relocate the hips to stack beneath the torso, instead driving the bar up from a hips-behind-shoulders position. Since the bar is now moving forward, Adrian has to follow it to get his torso under, rather than moving straight down.

To correct this issue, I would have Adrian practice jerks with a short pause in the dip position, using light-to-moderate weights. This will allow Adrian to focus on a straight dip and drive. This drill is best done with someone watching or a video camera so that the athlete can be corrected or self correct on every set.

**T**he forward dip and drive is likely the cause of the issues with Adrian's split. Upon receipt of the bar, Adrian's front shin is angled forward (rather than vertical,) his ribcage is pushed out (rather than being stacked between hips and shoulders, keeping the spine neutral) and his back leg is nearly straight (rather than being bent.) Though this issue may originally stem from the dip and drive, it is likely habit now, and will need to be addressed on it's own.

I would recommend pressing from the split position with light-to-moderate weights. This exercise can help the lifter establish comfort in a correct split, but it is crucial that it be done with weights which allow the athlete to maintain perfect strictness. The legs and torso should not move at all.

## WHAT'S YOUR FAVORITE JERK VARIATION?



# ARIEL STEPHENS, 101KG CLEAN & JERK





## **THE CLEAN**

As the bar passes Ariel's knees, her feet turn out to the sides. This can cause the lifter to be slow and out of position at the readjustment. This is not a common issue, nor one I've had to fix before. So far, we have primarily used cueing: focusing on pushing with the feet through the pull, to stay anchored. I am also considering just nailing Ariel's shoes to the floor.

As the bar approaches her hips, it drifts slightly forward, causing Ariel to push her hips to follow the bar. This will often cause the lifter to be forward through the finish, driving the bar away from her center of mass and looping it through the turnover.

To fix this, we are training cleans with a two second pause below the knees. This allows Ariel to stop and think about the next step, and concentrate on pushing the bar back towards her as it passes the knees and comes into the upper thigh/hips.

Ariel has a slight "float" at the top of the finish before initiating the pull under the bar. At Colin Burns' suggestion, we have been working on tall cleans to improve Ariel's speed and aggression through the turnover.

## **THE JERK**

Ariel does an admirable job of getting under a heavy bar quickly. However, she struggles to recover from the receiving position. Her split is a little longer and deeper than is ideal, and as she fights the weight, her hips slip slightly behind her shoulders and make it difficult for her to stand. It is better to meet the bar as high as possible – unlike the clean, there is no rebound effect to be gained by going into a deeper receiving position, but the deeper split is significantly more precarious and harder to recover from.

Ariel is training power jerks, to work on driving and stopping the bar high, as well as the aforementioned drop jerks and press from split, to help establish the correct receiving position.

## 3 COMMON MISTAKES

2013 USAW CHAMPION IN THE SNATCH AND TEAM JTS ATHLETE, COLIN BURNS, SHOWS YOU 3 COMMON MISTAKES IN THE SNATCH.

The snatch is one of the most complex movements in all of sport and requires technical mastery to excel. Colin will show you how to correct...

- Bar floating away from your body off the floor
- Knocking the bar away from your body with your hips
- Flipping the bar over, instead of turning it over and driving yourself under.



# IMPROVE YOUR CLEAN

PAN-AM GAMES QUALIFIER AND TEAM JUGGERNAUT ATHLETE, COLIN BURNS, SHOWS YOU HOW TO IMPROVE YOUR CLEAN.

Colin demonstrates 3 common issues in the clean and how to fix them.

In this video, Colin will show you how to...

- 1-Properly distribute your weight in your foot at the start of the lift**
- 2-Stop the bar from drifting away from you at the hip**
- 3-Keep constant tension on the bar and pull your self under the bar faster**

Check out these great tips from Colin, plus how to balance your deadlift and clean training...



# IMPROVE YOUR JERK

PAN-AM GAMES QUALIFIER AND TEAM JUGGERNAUT ATHLETE COLIN BURNS SHOWS YOU HOW TO IMPROVE YOUR JERK BY ELIMINATING THESE 3 COMMON MISTAKES.

Colin shows you how to fix these 3 mistakes in this video...

- 1-Floating forward in the dip before the lift**
- 2-Failing to get your head through to finish the lift**
- 3-Not getting your front foot far enough in front of you**

Check it out and learn...





# 10 THINGS YOU NEED TO KNOW BEFORE STARTING WEIGHTLIFTING

BY COLIN BURNS



**T**he nature of the sport of Weightlifting is such that it creates a sort of persona in each of us once fully committed. Some of these traits are great, and others are slightly less than desirable; that is until, of course, you have them. It is at that time they become a necessary evil. There are exceptions to every rule, so these are in no way absolutes. Given my experience in the sport of Weightlifting, this is a list of 10 things anyone who is interested in becoming a weightlifter should consider before diving in.

## 1) YOUR THUMBS ARE GOING TO HURT

This is a simple fact of life in weightlifting. Your thumb is constantly being crushed between the bar and your other fingers, so yes, it is normal. Over time, you will develop a very appealing callus as well as potential loss of sensation in most of your digit, but stand fast- you will be more powerful than everyone around you.

## 2) YOUR KNEES ARE GOING TO HURT

You squat often, and you push a lot of weight. You don't get to reach your hips back and keep your shins vertical, because posture is too important. You will likely develop tendonitis at some point in one knee or the other, then you will complain about it for the rest of your career. This will not stall training though. After all, it's just pain, nothing structural.

### **3) YOUR SOUL IS GOING TO HURT**

Hours in the gym with your hands on the bar will cause you to become more in tune with your primal self. This will of course give you greater insight into what is wrong with the rest of humanity. Why don't they squat? How do they live without squatting or putting something heavy overhead in one or two quick movements? More importantly, WHY would someone want to live without squatting? Questions like these will vex you to eternity.

### **4) YOUR PANTS WILL NO LONGER FIT**

Lets face it, who wants to be able to wear normal jeans anyway? We consider it a great badge of honor to be required to get our jeans tailored in order to be able to go into public in something other than loose fitting athletic pants or spandex. But let's be serious. Why in the world would you need to go out in anything else? With all of the work you have put in, spandex is the only option. Quads are to be displayed for all.

### **5) YOU WILL NOT HAVE A SOCIAL LIFE**

How can you expect to make an international team if you are out having beers on Thursday night? Isn't Friday a big day for the lifts? Friday night is out too because you have those heavy squats. Saturday night? Not a chance. You are completely wiped out and wouldn't risk having your one day off be wasted with a hangover. Don't drink? You still can't go out because your internal clock is tuned so finely that you start shutting down about 9:30 anyway, whether you like it or not. Sunday is recovery for Monday... This is a vicious cycle.

### **6) YOU WILL DEVELOP AN ELITIST MENTALITY TOWARDS ANYONE DOING THE MOVEMENTS LESS THAN PERFECTLY.**

This snobbery will gain you many enemies in CrossFit, and many friends in Weightlifting. Even those who come from a CrossFit background will begin to cringe at the local CrossFit competitions where people from other gyms clearly don't have a weightlifting guru like yourself to enlighten them in the ways of the barbell. It is clearly their own fault that they have not gone the extra mile to seek you out. You will sit in the back at weightlifting meets and chuckle to your other weightlifting convert about how you can't believe these people made a national meet with technique like that. Even other weightlifters are not immune to a weightlifters judging eyes.

### **7) ALL OTHER SPORTS NOT UNDER THE REALM OF A CERTAIN DRUG TESTING BODY ARE ON DRUGS**

Everyone- Powerlifters, CrossFitters, the Chinese Badminton Team (well they probably are...), and your local high school Underwater Basket Weaving Team are all gassed to the gills with the latest cocktail of performance enhancing substances.

It doesn't really matter if they are or aren't, it's the simple fact that they don't have to deal with the unrelenting practices of a group of people who spontaneously arrive at your front door at 7am on a Friday morning while you are trying to enjoy your breakfast to stalk you from that point on until they get to see you pee in a cup. While we are on it, who signs up to be that person anyway?

#### **8) YOU WILL UNDERSTAND THE PROPER TERMS FOR THE SPORT AND THE MOVEMENTS INVOLVED, & WILL GROW IRRATIONALLY ANNOYED BY THOSE WHO SAY THEM**

The sport is called "Weightlifting". Something deep inside of you will boil the next time a person says "oly". "Clean" does not mean clean or power clean, it means "Clean". "Squat Clean" is a redundant term and should not be used in front of fellow weightlifters, as you will receive very strange looks, and be assumed a CrossFit spy. Anyone who giggles at the word "snatch" is immediately reprimanded for their lack of maturity and blatant disrespect for the sport. Attempted "Squat Jerks" are to be met with surprise and awe at the ability to simply try such a movement in America, even if it is missed.

#### **9) YOU HAVE TO PICK A SIDE**

The two major parties in weightlifting are the Catapulters and the Triple Extenders. It is required that you pick a side. No one wants to play Switzerland. You must know, and recognize, the major players from both your side as well as the opposition. This is so you know who to properly ridicule in secret at national meets, like catty school girls about to haze the new kid. Once you have chosen, there is not switching sides. Doing so will only leave you in weightlifting purgatory, an outcast from both sides. No one wants a traitor. It should be noted that you don't need any coaching experience, scientific biomechanical knowledge, or even an ability to cite a single research paper to argue either side. You just need to know someone else who claims to have said experience or knowledge.

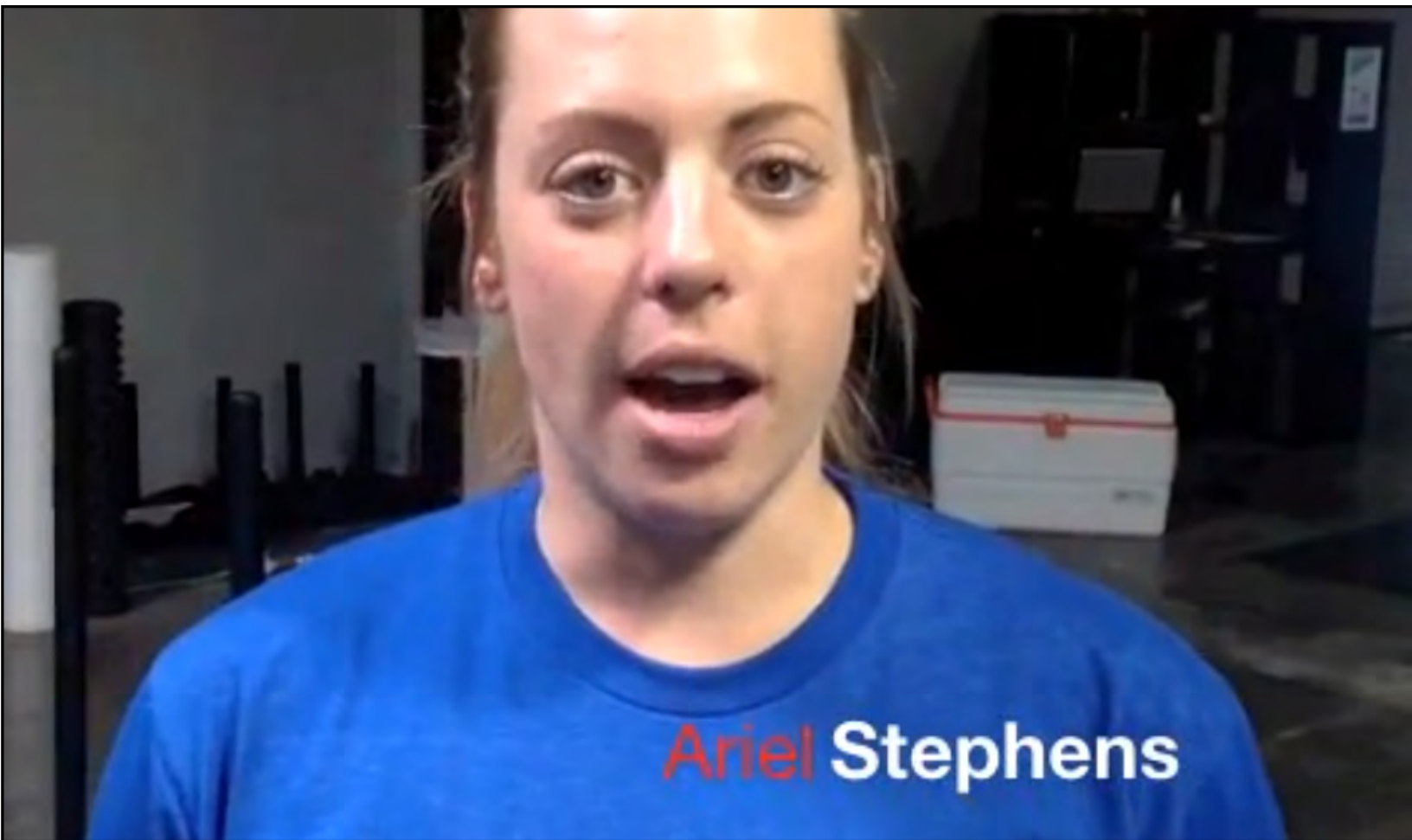
#### **10) ALL OTHER GOOD ATHLETES SHOULD BECOME WEIGHTLIFTERS**

It is all too easy to get so engulfed with the sport that you become a zealous representative who is responsible for converting all other great athletes from all other sports into the sport of weightlifting. Football has become the biggest consumer of great potential weightlifters, selfishly trading in our possible Olympic Medals for millions of dollars. Many other team sports hold highly prized talent as well, but it is not as abundant.

Weightlifting is a small, relatively unknown sport in this country, but full of pride. Having knowledge of these 10 things (and knowing that they were written with tongue firmly planted in cheek) will give you a better chance to assimilate yourself into the weightlifting community.

Good luck, and see you on the platform!

## WHAT'S YOUR FAVORITE CLEAN VARIATION?





# A GUIDE TO YOUR 1ST WEIGHTLIFTING MEET

BY JACOB TSYPKIN

Look, at some point you're going to have to do it. Nothing you do is really going to count until you do it for white lights on a competition platform. And deep down, you know that. I'm here to help you feel more prepared going into your first weightlifting meet. Yes, you're ready for a meet. Shut up.

This is always the immediate response when I suggest that someone compete. "I don't feel like I'm good enough," "my form still sucks," "I'll look funny in a singlet." SHUT UP. I don't care. Competing makes you better almost immediately. The experience itself will give you a clearer view of what you need to improve, and provides motivation to train harder. And EVERYONE looks good in a singlet – that's just science.

My lifters will compete, if at all possible, within 4-6 weeks of starting the sport. It's a crucial part of the experience. Can you snatch? Can you clean & jerk? Then you can compete.

It's also worth noting that in most of the country, meets are few and far between. We're spoiled here in Northern California, where we are lucky enough

to be part of the very active Pacific Weightlifting Association – there is usually at least one meet per month within 2-3 hours of us. Most of you aren't so lucky, and your local weightlifting committee may only hold 2-4 meets per year. Don't squander opportunities.

Ariel Stephens did her first weightlifting meet on a week's notice, having trained the lifts a couple of times each, wearing a swimming race suit and a pair of Vibram FiveFingers. There is no reason for you not to compete, so quit talking yourself out of it.



# THE BEFORE STUFF

**APART FROM THE SNATCH AND CLEAN & JERK, THERE ARE SOME THINGS YOU SHOULD KNOW BEFORE YOU SHOW UP TO YOUR FIRST MEET.**

## **KNOW YOUR WEIGHT CLASS.**

This one seems obvious, but there is an important rule here: do NOT cut weight for your first meet. Seriously. Figure out what weight you are during the middle of the day having eaten as much as you normally would. You want to be well fed and watered. Don't increase the stress of your first meet for the slight possibility of placing better in a lower weight class. This meet will be the first of many competitions – worry about making weight another day.

## **KNOW THE RULES.**

No one is going to expect you to have the USA Weightlifting rulebook committed to memory, but don't be that guy who's surprised when you get red lighted for dropping the bar before the judges give you the down signal.

It's important that you know all the rules which apply directly to you when you're on the platform. Know what you're supposed to wear and what you're not supposed to wear, know what equipment is allowed or disallowed, know where you can use athletic tape and where you can't. You don't want your first meet to be tainted by a great lift that you would have had if you didn't know the athletic tape can't go all the way around the back of your leg. Furthermore, this meet is a foundation for all of your future competitions – start getting into the habit of knowing, understanding, and being prepared for minutiae.

## **THAT CONFOUNDED METRIC SYSTEM.**

If you're a weightlifter headed to your first meet without a coach, odds are you train in pounds. If it's going to be your first time working with kilos ever, you want to be prepared. Bring a conversion chart with you so you know what you want your lifts to be. Know the colors which correspond with plates of each weight. You can go to <http://pendlaybar.com/> to practice recognizing a certain weight on the bar.

## **A CLOCK?**

What is this, CrossFit? Well, no, but there is a time limit. Once the bar has been loaded and platform is ready, the lifter has one minute to attempt his lift (the attempt has not started until the bar has passed the lifters knees.) If the lifter is following himself (that is, if he takes an attempt, and there is no one else between him and the next attempt,) he'll have two minutes instead of one. You don't need to do anything crazy here, but once or twice, do a workout where you're taking lifts on the minute, or at least your heavy attempts. This will give you an idea of how long it takes you to approach the bar, get set up, and take a lift.

### ASK QUESTIONS.

Go into your first meet ready to learn. Weightlifting is generally a community of friendly people who will be glad to help you. Make friends as quickly as you can, and if you can find someone more experienced than you to give you a little guidance, so much the better.

### GOALS

If you go into your first weightlifting meet with the attitude “I’m here to win,” you’re an idiot. Yes, it

does happen. Weightlifting is a small sport and depending on how talented you are and how strong your local weightlifting committee is, it’s possible that you could place well. However, in your first meet, it is my opinion that you should be attempting to go 6 for 6, or at the least 5 for 6 with the only miss being your last clean & jerk. Why? Because missing lifts is stressful, and you’re already going to feel stressed out enough. You want each lift to make you look forward to the next one more, not make you worry. Take risks next time. Today, have fun and...

Learn how a meet runs. This is another important reason to get into a meet early on. The more meets you have under your belt by the time you are putting up competitive numbers, the more likely you will be to do well in those meets.

Being good at the snatch and clean & jerk is obviously the bulk of being a successful weightlifter, but understanding the details of how a meet works can be the difference between silver and gold. In competition, you’ll get practice at counting attempts, timing your warm-ups, estimating what other lifters are capable of, and keeping track of things like each lifters bodyweight which can be relevant to the final results. Furthermore, you’ll get to fine tune your competitive mindset, which is a skill set nearly as crucial as the lifts themselves.

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THEN YOU CAN COMPETE.**



**M**ake Friends. Like most strength athletes, weightlifters are generally pretty cool. And since the sport is so small, they're usually very happy to meet new lifters and willing to help out where they can. Your first meet should bring with it some new friendships, and maybe even new training partners.

### **WHAT TO BRING**

This stuff is mostly pretty obvious, but I figured a checklist may be handy.

Here are some of the most important things to make sure you have with you on game day:

- 1. Weightlifting Shoes**
- 2. Singlet (hopefully a sweet one with a dragon on it or something)**
- 3. The rest of your training gear. Knee sleeves/wraps, belt, tape. You may want to bring some chalk just in case.**
- 4. A notebook to write down warm-ups**
- 5. Your USA Weightlifting membership card. You'll need this for your registration. You can bring it out, or just bring it in digital format on your smartphone.**
- 6. Food, water, supplements (including Red Bull,) and anything else you like to use before a workout (such as nSAIDs.)**
- 7. Layers of clothing to stay warm, and maybe even a pillow if you'd like to lie down and relax after you weigh-in.**

### **DETERMINING YOUR LIFTS**

Every weightlifting meet comes with six important decisions: your three attempts in the snatch and clean & jerk. There are all kinds of things you can do with your attempts in a meet. You're given two changes per attempt, and athletes will often use them to jockey for position in an attempt to place higher.

You should not do anything of the sort.

Your opener should be something you can hit for 2-3 doubles in a training session. You should be able to take it 1-2 times in the back (for the snatch, not the clean & jerk) with 100% confidence, and then walk out and absolutely smoke it for your first attempt. Your second attempt should still be something you're confident in, and not more than a 3-4kg increase from the first on the snatch, and not more than 5-6kg on the clean & jerk. The third attempt can be a bit more risky, but something you typically make at least two out of three times in training.

That pretty much covers it. Keep it simple, take reasonable increases and make lifts.

On that note – if you miss a lift, REPEAT IT! Don't be that guy who goes 0 for 3 because you couldn't keep your ego in check.



## **ON ARRIVAL**

Now that the planning is out of the way, let's talk about what to do once you arrive at the venue. The first thing you should do is get your bearings. Before you worry about getting weighed in, (because you didn't cut weight so you're not in a rush to eat) take a look around. Find a place to keep your things and claim a space of your own. Having a place to camp out, especially if you have someone in attendance with you, will lend you a bit of extra stability throughout the day.

Find out who's in charge and introduce yourself. Let them know it's your first meet. You'll usually find them to be friendly, accommodating, and grateful that you're at their competition. Take this opportunity to ask any questions you may have about how the meet will run, anything you should know about the venue, and the like.

Next check out the warm-up area. Figure out where the bars and plates are, where the chalk is (often there's only one chalk bucket,) and how far you'll be from the competition platform and marshal table (the table where you will declare your attempts and changes.)

Lastly, go to the competition platform itself. If it's open, step onto it to feel the surface and decide on a focal point to keep your eyes on when you lift – pick something which won't be moved, or obscured by the judges or the crowd.

## **REGISTRATION AND WEIGH-IN**

Once you've got the lay of the land, you can head to the registration table (or booth or car or whatever.) Here, you'll show your USAW card and in return you'll be given an attempt card. Take this to the weigh-in room, where you'll stand in line with a bunch of people, at least one of whom will probably be very unhappy because they are hungry and dehydrated. Here's another opportunity to make some new friends – but maybe leave the guy who's struggling to make weight alone until after he's eaten.

When you weigh-in, the official will ask for your openers. Though he or she will probably be able to convert from pounds to kilos for you, it's best if you know the numbers beforehand. An important note on this subject – if your number in pounds doesn't convert precisely to kilos, round down, not up.

## **FROM WEIGH-IN TO WARM-UP**

For most people, the 90-120 minutes between weighing in and starting warm-ups will be the most stressful part of the meet. The absolute most important thing you can do at this time is try to stay relaxed (did you bring that pillow?)

Eat as you would before any other workout. Same goes for supplementation and hydration. Try to keep things as similar to a normal training day as possible. Take the opportunity to pay attention to the session before yours (assuming you're not the first session of the day) and get an idea of the pace and details of the event. Talk to other lifters and, if you're lucky, find someone in your session who's lifts are similar to yours, and you'll be able to "follow" them during the warm-up. They probably won't mind.

## WARMING-UP

The first thing to do before you start warming up is figure out how many lifts into the session you will take your first attempt. Since weightlifting “follows the bar,” the weight only ever moves up – there is no round robin style rotation such as what you’d see in a powerlifting meet. So, if Johnny snatches 100kg, and his next lift is 102kg, and Billy is the next lift with 103kg, Johnny will have to “follow himself,” meaning he will lift twice in a row.

Head to the marshal’s table, where the cards with opening attempts written on them will be laid out. Find your card, and it’s fairly easy to get a reasonable idea of how many lifts will occur before your first attempt happens. You’re not going to get it perfectly right, and that’s fine.

**IT'S BETTER TO BE A LITTLE BIT AHEAD OF THE CLOCK THAN A LITTLE BIT BEHIND IT, SO START A FEW MINUTES BEFORE YOU REALLY NEED TO AND SLOW DOWN A BIT IF YOU GET TOO FAR AHEAD.**

Let’s say there are ten total lifters in your session, and you’re opening with 90kg. There

are three lifters opening with 70kg, two opening with 80kg, two opening with 85kg, you at 90kg, and two more at 100kg. The lifters opening with 70kg will likely take all three of their attempts before you open – that’s nine lifts. The lifters opening with 80kg will likely take at least two attempts before you open – that’s another four lifts. The lifters opening with 85kg will likely take one attempt before you open – that’s two more. There’s no need to worry about the guys opening with 100kg, because they’ll open after at least your second attempt.

So, you have a rough total of 15 lifts before you take your first attempt.

You can count attempts roughly as minutes. The next step is to write down your warm-ups, based on attempts. Assuming your last warm-up for the snatch will be 90kg (hitting your opener once in the back room,) your warm-up should look something like this:

**3 lifts out (when there are three lifts before your first attempt,) take 90kg (last warm-up.)**  
**6 lifts out, take 85kg**  
**9 lifts out take 80kg**  
**12 lifts out take 70kg**  
**15 lifts out, take 60kg**  
**18 lifts out, take 50kg**  
**21 lifts out, take the bar, etc.**

Since you are the 16th lift of the session, this means you should be done with your general warm-up (rolling out, stretching, etc) and taking the empty bar roughly 5 minutes or a little more before the session starts.

Particularly in your first meet, it’s better to be a little bit ahead of the clock than a little bit behind it, so start a few minutes before you really need to and slow down a bit if you get too far ahead.

## ON THE PLATFORM

So, you're warmed up, your name has been called, and the one minute clock is now running. You should be chalking up as the lifter before you finishes his lift.

The most important thing to remember as you approach the bar is this: you have time. Don't rush yourself. With 30 seconds remaining on your clock, a buzzer will sound, to let you know where you're at.

Upon approaching the bar, find the focal point which you located earlier. Once you're set on it, don't take your eyes off of it unless you absolutely have to.

DO NOT rush your set-up. This is probably where I see the most new lifters miss their attempts – they get too excited and hurry through their set-up. Behave exactly as you would in training.

Once you stand up with the lift, WAIT WAIT WAIT for the down signal! This may be a referee saying "down!" or a buzzer going off. Even for my most experienced lifters, I can be heard shouting "wait wait wait hold it!" on every single attempt. This is probably the single silliest way to miss a lift in competition, so be ready to hold that bar!

Once the first attempt is done, it's smooth sailing. Head straight to the marshals table and declare your next attempt (even if you're taking the automatic 1kg increase, you should officially declare it within 30 seconds, otherwise you will not be allowed to make any changes.)

Try and pick your attempts so that you don't have too long a rest between lifts. Stay relaxed and follow the same process for every lift. After the snatch, have a light snack and hydrate, and perform the same process for the clean & jerk, with the following changes to your warm-up: 1) instead of working up to your opener, work up to about 5kg under your opener, and 2) your last 3-4 warm-ups in the clean & jerk should give you 4 attempts between lifts rather than 3, since the clean & jerk is heavier and more taxing.

If you're opening with a clean & jerk of 120, your warm-up would look something like this:

- 4 attempts out, take 115kg**
- 8 attempts out, take 110kg**
- 12 attempts out, take 105kg**
- 15 attempts out, take 100kg**
- 18 attempts out, take 90kg**
- 21 attempts out, take 70kg**
- 24 attempts out, take the empty bar**  
**(if you take the bar before clean & jerks.)**

That's about it. Get out there, learn, enjoy yourself, and make friends in the community. Your first meet should be a challenging, fulfilling, and fun experience.



## WEIGHTLIFTING AND PHYSIQUE

BY JACOB TSYPKIN

**LET'S FACE IT: YOU'RE PROBABLY NOT THAT GOOD.**

I don't mean that in a mean way, mind you. You're probably average. That's just how numbers work. On the upside, that already puts you way ahead of me as a weightlifter.

On the downside, you're probably not going to the Olympics.

So what does that mean for your training?

In my experience, most people who aren't going to be internationally competitive weightlifters figure it out at some point, and sometime after that, they realize that maybe they should change something. That maybe there is a way to train that allows them to train the lifts they love, but also have a reasonable focus on a more common goal – to get jacked.



**T**hey may even realize that training like this most of the time will let them stay physically healthier in the long run. And, something that is rarely brought up in articles like this one: it might make them happier, too. If you haven't reached that stage yet, this article is not for you. If you've figured out that you're more likely to look like Klovov than lift like Klovov, keep reading.

### **THIS IS NOT A BODYBUILDING PROGRAM.**

If I ever try to write you a bodybuilding program, slap me. Not because there's anything wrong with bodybuilding programs. I'm just not a bodybuilding coach. I don't know anything about the right balance of bicep to tricep, or symmetry, or, as you know if you have met me in person, tanning. What I do know about is exercises that will get you strong, and good at the snatch and clean & jerk.

Something else I know about, thanks to my penchant for turning down invites to social occasions to stay home and watch The YouTubes, is just how much variety there can be in a training program that still makes you good at weightlifting.

There's more than one way to skin a cat, and we could bicker endlessly about which "system" of training is best, I think it's at least safe to say that the Russians and Bulgarians have both produced amazing weightlifters, despite some very big differences in how their respective training schemes are generally perceived.

However, the Russians are definitely more jacked, and it seems reasonable to say that it's due to the variety of exercises they do, and the much greater volume of assistance work.

First, we'll discuss the role of our three principle modes: the classic exercises and their variations, major strength exercises, and assistance work.

### **THE SNATCH AND CLEAN & JERK**

If you want to improve the snatch and clean & jerk, you have to snatch and clean & jerk, heavy and often. That's no different here than in any other program I'd suggest. However, for the purposes of this template, I'm going to recommend training the snatch and C&J on separate days except for Friday, with multiple variations and assistance exercises.

Complexes will be heavily utilized, as the time under tension lends itself well to hypertrophy. Training sessions will typically end with an assistance exercise for the day's lift which will assist in physique development.

## MAJOR STRENGTH LIFTS

Nothing earth shattering here. Lots of heavy squatting, pressing, and pulling. A few differences you'll see here from the type of template I would typically write for a pure weightlifter:

- 1) More common usage of higher reps.** For obvious reasons, I think.
- 2) More heavy pressing.** Particularly, more strict pressing than I would usually program, as I feel that a lot of strict pressing can interfere with the development of the jerk, especially if you're unathletic like me.
- 3) More heavy pulling exercises.** Typically the volume of lifts in my programs is high enough that I don't feel there's a need for a ton of heavy pulling. But, if you want to be Backrocked Obama, it helps to pick up heavy stuff from the floor, a lot.

## ASSISTANCE EXERCISES

These fall into two categories:

**specific assistance** and **general assistance**.

**Specific assistance** exercises are those which are designed for the purpose of improving strength, confidence, and position in the classic exercises. For this template, I have tried to choose exercises which will also help you catch a sweet pump.

**General assistance** is everything else. I don't really organize things by muscle group, but this is where you would put those things. High rep kettlebell pressing (SICK delt pump, trust me,) rows, hamstring exercises, and the like fit into this mold.



## SCHEDULE AND TEMPLATE

### Monday

- Snatch variations
- Snatch assistance
- Back Squat
- Pressing/Pulling Assistance

### Tuesday

- Clean & Jerk variations
- Heavy Pressing OR Jerk from blocks
- Heavy Pulling
- Low back/abs/hams

### Wednesday

- Snatch variations
- Snatch assistance
- Front Squat
- Pressing/Pulling Assistance

### Friday

- Snatch
- Clean & Jerk
- Pressing/Pulling Assistance/Bro Session
- Low back/abs/hams

### Saturday

- Clean & Jerk variation
- Back Squat
- Heavy Pressing
- Heavy Pulling

**NOTE:** By manipulating rep ranges and exercise selection, this program could be used to train and taper for a meet. However, that task exceeds the scope of this article. As such, the below recommendations are meant solely for someone who is just training the lifts for fun while trying to get Duplex Double Stacked.

# EXERCISE SELECTION

This table is in no way all-inclusive. It's just a list of the common exercises I use, for general strengthening and assistance, apart from the obvious (back squat and front squat.) Below the table, I have included descriptions and/or videos of exercises which may not be familiar to you.

**Squatting**  
**Heavy Pulling**  
**Heavy Pressing**  
**Pulling Assistance**  
**Pressing Assistance**  
**Hamstrings**  
**Low Back**  
**Abdominals**  
**Back Squat, 3-5 second pause at bottom**  
**Snatch grip Russian deadlift**  
**Push Press** (front or behind)  
**Pullup/Chin** (vary grip width)  
**Kettlebell press in dip position** (vary bilateral, unilateral,, alternating)  
**Glute Ham Raise**  
**Back Extension**  
**Planks** (front and side)  
**Front Squat, 3-5 second pause at bottom**  
**Russian deadlift from deficit**  
**Press**  
**Pendlay Rows**  
**Incline dumbbell press**  
**The Death March**  
**Back Raise**  
**Hollow Rock**  
**1 ¼ back squat**  
**3 pause clean deadlift**  
**Snatch grip push press**  
**Dumbbell Row** (any variation)  
**Bar or ring dip**  
**One legged Romanian Deadlift**  
**Snatch grip back extension**  
**Weighted Situp** (vary position of load)  
**1 ¼ front squat**  
**3 pause snatch deadlift**  
**Klokov Press** (snatch grip press from behind-the-neck)  
**Supine Row**  
**Standing dumbbell press** (vary bilateral, unilateral, alternating)



**Leg Raises** (hanging and lying, all directions)  
**Back squat from pins**  
**Romanian deadlift**  
**Close grip bench press**  
**Facepull**  
**Seated dumbbell or kettlebell press** (vary bilateral, unilateral, alternating)  
**L-Hold**  
**Front Squat from pins**  
**Snatch grip Romanian deadlift**  
**Plank Walk**

**Russian Deadlift:** I didn't come up with this name. It was called this by a friend of mine, who's coach is an actual Russian, so. Anyway, it's stiff legged deadlift done with a very low chest, level with or even slightly below the hips. These can be done with a snatch or clean grip, and I really like doing them from a deficit.

**Three Pause Snatch/Clean Deadlift:** Starting from a deficit, pause for a 2 count at your start position (when the bar is level with the top of the platform you're standing on – your weight should still be forward on your feet, shoulders more or less directly over the bar,) again when the bar is just below the knees (the weight has shifted to the heels, the shins are vertical, and the shoulders are in front of the bar) and again at the hip (snatch) or upper thigh (clean) BEFORE transitioning into the power position (the weight is still in the heels, the knees have not moved forward under the bar, the shoulders are still slightly forward of the bar.)

**Kettlebell Press in Dip Position:** Using one or two kettlebells, move into your dip position for the jerk, keeping a strong chest, flat back, and weight in your heels. Maintaining this position, press. I find this helps me feel strong in the dip with heavy weights. I'm also not a big kettlebell guy, but this is one exercise I actually prefer them for, because you can rack them deeper. I like alternating most, but all variations are good.

**GO FORTH, SLING KILOS,  
AND GET JACKED.**

## THE DEATH MARCH:



## SNATCH GRIP BACK EXTENSION:

Holding the bar in your hands with the width you snatch from, do a back extension, and use the lats to sweep the bar into the hips as you ascend.

## WHAT'S YOUR FAVORITE SNATCH VARIATION?



# FIXING THE SNATCH AND OVERHEAD SQUAT POSITION

BY COLIN BURNS



The snatch is quite possibly the most technical lift in all of weight training. The combination of strength, power, timing, and mobility is quite unique to this movement.

For most, the greatest area of concern when learning the snatch is positioning during the receiving phase. Of course this is the same bottom position for the overhead squat, both of which are used in training for weightlifters and Crossfitters.

There are a few things to look at if this position is a trouble spot for you, and I will cover some of the more common problem areas and sometimes unaddressed issues.

It seems that whenever people are trying to fix their bottom position of the snatch and overhead squat, they always dive right at their inflexible shoulders.

This concept that the shoulders require an unreal amount of mobility is the plague of many Crossfitters and weightlifters who struggle with the snatch and overhead squat.

We are going to use a highly sophisticated biomechanical analysis system on the picture above. First, look at the picture as it is. Take note of the arm and torso relationship, head positioning, and anything else you think is worth remembering. Now for the complicated part... Take your hand, either hand, and cover up the bottom half of the photo so you can only see from the china logo on his singlet and up. No leg should be exposed.

From what you see now, do you think this position is much different from when he is standing tall at the completion of the snatch? I don't think it would be far off. The point I'm trying to make with this elementary demo is that the relationship between the arm and torso should change very little from standing tall with the bar to the bottom of the snatch.



**I'M** sure every one of you has already told me through the screen, "Then how come I feel it in my shoulders every time I try to overhead squat?" The relationship will not change much, but there is a huge change in muscle activity. I think there is more of a weakness in the upper back and posterior shoulder than a lack of mobility to reach the desired position.

The lack of strength needed to maintain the external rotation of the shoulder seems to be the most noteworthy when watching those new to the movements. Don't get me wrong, there is definitely some mobility necessary and some people truly have an issue with this aspect. I simply contest that this is often thought of as the only thing that needs to be addressed, rather than one on a list of things that can be adjusted, and the required mobility of the shoulder is often times highly overestimated.

## **THE RELATIONSHIP BETWEEN THE ARM AND TORSO SHOULD CHANGE VERY LITTLE FROM STANDING TALL WITH THE BAR TO THE BOTTOM OF THE SNATCH.**

So how can we make it better? The position and mobility of the shoulder can be greatly influenced by grip width. Many coaches and athletes teach the points about how grip width effects the pull, but unfortunately, you still have to catch and stand up with the weight. The entire lift should be considered when choosing a grip. A wider grip will allow for more movement around the shoulder and a shorter distance for the bar to travel.

In turn, it is a weaker position overhead, and can sometimes allow too much internal rotation at the shoulder in new lifters, leading to missing lifts forward or weakness resisting a miss backwards. This rotation is also a common compensation for a forward lean of the torso. Some people will actually start to rotate before they even begin to descend in an overhead squat.

When not due to a weakness, this can sometimes be due to laziness on the lifter's part, and other times can be nothing more than a bad habit. On the flip side of the grip coin, a more narrow grip will require the bar to travel further, requires a bit more mobility in the shoulder, but is stronger overhead. I find a more narrow grip is also much more resistant to the internal rotation that can be so easy to get into with a wider grip. These points among others go into finding a sweet spot that will differ from lifter to lifter. Now, in order to reach that position in a squat, clearly there needs to be more movement somewhere if it is not around the shoulder.

I believe the hips are where the mobility issues more commonly lie. How many times have you watched someone struggle with an over head squat, seeing their hips shoot backwards causing their chest to fall forwards folding like an accordion, yet they complain of shoulder flexibility? If you can hold the bar in a proper position while standing tall, then you probably have the flexibility, at least in the shoulder, to keep it there for the overhead squat or snatch. We need to look further down the kinetic chain.



### LOOKING BACK AT THE ACCORDION EXAMPLE, WHAT NEEDS TO BE FIXED? POSTURE.

**F**or a lot of people, a better posture is accomplished by opening up the stance. A wider base will not only be more stable, but it will create room for you to sit your hips down between the feet, rather than being forced out behind them. As the feet widen, so must the knees, and in order for this to happen some of you may need some serious work on adductor flexibility. They will need to be able to lengthen significantly more to get the knees out and allow the glutes and quads to still do the majority of the work of standing up.

The last place of common weakness is the erectors. I only list this area last because I believe the hips are a significantly larger issue for most as it relates to mobility, and the erectors are more often simply a strength issue. These guys play a huge role in keeping that upright posture during the catch all the way through standing up. In addition to keeping the torso upright, these muscles can help prevent the “tail tuck” which causes a loss of rigidity in the trunk as well as a reduction in tension in the hamstrings, neither of which is a desirable outcome.

**R**emember, there are always exceptions. Some lifters will have unbelievable mobility and strength in their shoulders and will get away with a less upright posture. Some lifters will catch the weight with a rather narrow stance. A large reason they can do this is their exceptional ankle flexibility. This doesn't really seem to be something you can change all that much, depending on your age, but it is still worth knowing that it can have a great influence on how the rest of the body can move.

All of these joints and muscles involved depend on the others to achieve an optimal position. The key is finding the combination of strength and mobility in each of these areas to find what brings the best results for you or your lifters. Hopefully some of these ideas will help escape a little bit of that shoulder tunnel vision that many people fall into, and allow you to address the big picture of these movements with more effectiveness.

## HOW DO YOU HOOKGRIP?



# WEAKNESS INTO STRENGTH

BY ARIEL STEPHENS

**"OUR DEEPEST FEAR IS NOT THAT WE ARE INADEQUATE. OUR DEEPEST FEAR IS THAT WE ARE POWERFUL BEYOND MEASURE. IT IS OUR LIGHT, NOT OUR DARKNESS THAT MOST FRIGHTENS US."**- Marianna Williamson

**W**hy would we be afraid of greatness? Don't we, as athletes, strive to be great every day? But, what is greatness? What does greatness encompass? How do we become great? Greatness, is a loaded word. Many people have different ideas of what it means to be great. However, I think that most people can agree that it means to be better, the best. Better than someone else, better at a specific task, and/or better than you were the day before. How do we know if we are great and who decides it?

Since there are so many factors that play into 'greatness', I'll focus on personal greatness. The only way to become better than you were the day before, is to be smart. Notice that I did not mention specifically, that it is to work harder. Training smart means backing off when you are injured, pushing when you are

not, eating in way that will maximize your training/competition potential, learning to be mentally tough, and developing your weaknesses into your strengths.

If you ask yourself why you currently don't think you are great, what is the answer? More than likely, your answer involves something that is holding you back. Your weakness(es). A weakness can be in the form of strength, agility, athletic ability, even being genetically ungifted for a certain movement, but one of the most important weaknesses that people often ignore, is mental weakness.

If you cannot harness the thoughts in your mind, how can you expect to become the greatest athlete that you can

be? You can train the hardest and have the best technique, but a lack of self confidence can end a competition or game before it starts. You may be the best in training, but if it doesn't transfer over into competition, then what does it mean to you? That you are the best training athlete?

If that is your idea of greatness, then you have achieved personal greatness and should not be disappointed. If it's not, then continue reading. Self confidence is everything. I spent 12 years swimming to be great and achieving mediocrity. Why? Because I constantly doubted myself.

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Yes, I am not exactly genetically designed to be an elite swimmer, but I did not achieve personal greatness. **It wasn't because I didn't work hard, it was because I constantly compared myself to every other collegiate swimmer and doubted my abilities. It was exhausting!**

Last March, when I began weightlifting, I decided that I wanted to be great. It didn't mean that I still didn't have my doubts, but it meant that when it was time to train and compete, those doubts had to diminish. I remember my coach telling me that I would clean and jerk 100kg and snatch 75 kg before 2013. I laughed. I wasn't sure if I was capable of achieving this, but if someone else thought I could achieve this, then why shouldn't I believe it? From this point on, every time I trained or competed, I told myself that I was strong and com-

petitive. I wasn't married to the numbers, I was in love with the confidence I felt every time I approached the bar.

It is important to remember that your mental strength is just as important as your physical strength. Think about this. If you have a certain movement that you describe as your weakness, ask yourself why. More often than not, athletes will train their strengths more than their weaknesses. How many times have you heard someone say, "If I make my strengths as strong as I can, it will compensate for my weakness(es)."

It makes sense, right? Wrong. This may work for awhile, but not forever.

As much as you may absolutely hate training your weakness(es), it is a necessity to achieve your personal greatness. Training a weakness can develop that movement that has always held you back while training your mind to trust your body. When you train something that you hate doing, you are training your mind to overcome the negative thoughts toward that movement. When I say train, I mean really train it. Train and approach your weakness(es) like you do your strengths. Become confident in your competitive self to optimize your potential. Use training to overcome your negative thoughts. This will translate to competitions.

**W**hen a doubt creeps into your mind, reassure yourself that you are strong, you are competitive. Don't let your hard work go unnoticed due to your inability to harness your mind.

As long as you train smart, the physical strength will come. In combination with your mental preparation, you will give yourself the best opportunity to achieve personal greatness. Don't be afraid to be great.

## **GPP FOR WEIGHTLIFTERS**

**BY JACOB TSYPKIN**

**U**nless you are at least a national level competitor, weightlifting is generally not considered a seasonal sport. Therefore it may seem counterintuitive to plan off-season training for a weightlifter. However, I have found that brief cycles of a GPP bias in training serve my lifters well. It breaks the monotony, serves to increase work capacity prior to the next training cycle, and gives the weightlifters a chance to do some other activities that they enjoy. This article is a short one, and will not fully outline the training schedule of a weightlifter in their "off-season." Instead it will present five of my preferred methods and modalities for developing GPP in weightlifters.

### **1. UNILATERAL STRENGTH WORK**

Walking lunges, Bulgarian split squats, and step-ups for squat type movements. The Death March ([link to video:http://www.youtube.com/watch?v=2o\\_lal2jpQc](http://www.youtube.com/watch?v=2o_lal2jpQc)) and single leg RDLs for lower body pulling. Single arm dumbbell presses, push presses, and various types of rows for the upper body. Done for high reps and in circuits, these are great for conditioning. Used with moderate reps and a focus on perfect mechanics and quality of contraction, you can use unilateral work to eliminate muscular imbalances (I'll usually have my lifters do a few extra reps on the weaker side.) Heavy weight and low reps can help break plateaus and prepare you to get strong in your next phase of training.

### **2. BODYBUILDING**

You know you want to bro out every once in a while. Work on that bench and catch a pump. It's okay. I do too.

My lifters actually do some type of isolation work fairly regularly, but typically with very high reps for prehab purposes. Stuff like band facepulls and tricep push-downs, light bicep or wrist curls to help prevent wrist and elbow issues, band leg extensions to help prevent knee pain. During the off-season, I like to work in some bench press, curls, heavy tricep work and the like. I find this helps the lifters joints hold up better during cycles of hard training. Also, chicks love biceps.

### **3. SPRINTING**

Although some Russian texts seem to suggest runs up to 1000m, I think 400m is about as far as it should go. Realistically, my lifters focus on 20-100m repeats, with plenty of recovery in between. Occasionally we will do them with a shorter rest for more of a conditioning stimulus, but I think the real benefit comes from the max effort stuff.

### **4. KETTLEBELL, DUMBBELL, AND BARBELL COMPLEXES**

Go for volume, not load. Stick to mostly strength movements, and very simple variations of the lifts. I like deadlifts, RDLs, Pendlay rows, front squats, push presses, back squats, etc. Move through sets at a quick pace with rests long enough to allow you to keep good form but short enough to keep your heartrate up. A sample complex we have used many a time:

**5 Romanian deadlifts**

**5 hang power cleans**

**5 front squats**

**5 push press**

**5 Pendlay rows**

(Typically our guys will do this at around 135#, ladies around 85#. Three sets with a few minutes in between should be plenty.)

### **5. CROSSFIT**

YUP. I SAID IT. Come at me bro.

I come from a CrossFit background. CrossFit was my reintroduction to strength training, and my first real exposure to weightlifting. It's definitely the best thing to happen to strength sports in the U.S. in roughly forever. And not just because of the increased fan base. CrossFit workouts, applied properly, are great GPP for weightlifters.

What does "properly applied" mean? Well, it means you're not doing "Murph." I keep it at a limit of 10 minutes at the beginning of the GPP phase, closer to 3-6 minutes later on. As far as movements go, I like to use stuff that would typically be applied as an auxiliary movement. Back extensions, back raises, weighted situps, toes-to-bar, kettlebell swings, dumbbell squats and push presses, handstand pushups, dips, pullups (even the kipping kind – I promise you, they have their place.) For extra conditioning stimulus, rowing is great. Jump rope and a bit of running (400m or less) works for athletes who don't have knee or ankle issues.

### **AN IMPORTANT REMINDER**

You're still a weightlifter. Keep the volume of your "off-season" exercises relatively low, and don't do all of the above at once. You will have more than one off-season. Pick one or two of the suggested modalities and focus on them for a GPP phase. Play with one or two others next time around. Take the view that your GPP work is there to help develop you as an athlete and keep you healthy in the long term.

# TEACHING THE PULL

BY COLIN BURNS

The debate about how coaches should teach the pull in Olympic Weightlifting has been ongoing for quite some time. After discussing the topic with a few well established coaches, I have realized a few simple facts.

First, there are two sides to every debate. Good versus Evil, Dogs versus Cats, Packers versus Bears, Michigan versus Ohio State (go blue!), etc. Any position will have opposition.

Second, no matter how hard you try, you will never change the mind of someone who has entrenched themselves on a side, no matter how right or wrong you may be.

And third, it doesn't matter if the other side doesn't agree. If you believe that what you teach is better, you should be happy the competition is using an inferior system! That being said, I am going to discuss how I learned, what I teach, and why I believe it to be the optimal way to perform the pull in Weightlifting.

I will use the Snatch movement as the frame of reference for this discussion. The entire pull will be covered, but because the pull from the floor attracts little controversy I will cover it briefly. I will focus primarily on the pull after the barbell has reached the knee.

## THE FIRST PULL/LIFT-OFF:

The first pull, or lift-off, is the movement of the barbell from the floor to just above the knee. This phase is probably the most technical segment, and some believe it to be the most crucial aspect of the entire pull. The reason for this belief is that any mistakes occurring early in a lift will cause problems later in the movement.

This is one reason behind teaching the lifts from the top down, but correcting errors from the bottom up. Fixing problems earlier in a lift will often, but not always, solve problems later on. As the barbell separates from the floor, the hips should be higher than the knees, and the shoulders above the hips. In addition to this, the shoulders should be over or slightly in front of the bar.

This relationship between the hips, shoulders, and barbell should be maintained through the duration of the first pull. The weight should be in the middle of the foot at the start, and should shift to the heels as the barbell separates from the floor. This causes the initial movement of the barbell to be towards the lifter. (Garhammer, J. "Biomechanical profiles of Olympic weightlifters". *Int. J. Sport Biomechanics* 1(2): 122-130, 1985.). The entire first pull, as many before have stated, is a misnomer. It is predominantly a push with the legs. Everything else involved is responsible for holding position.

The tempo of the Snatch is not to be ignored. The position from the floor to the knee is so crucial that when many lifters think about speed too early in the lift, they tend to lose position. Speed off the floor can be developed later in a lifter's career, after they have ingrained the proper movement pattern.



The pull from the floor to the knee is like the wind up of a pitcher's delivery in baseball. Speed can be developed with practice, but proper position must always be maintained to take full advantage of the movement.

### THE TRANSITION

The part of the lift that connects the first and second pulls is the transition. Some people teach a three pull breakdown, in which case this is the second pull. This is when the lifter takes advantage of the tension built up in the hamstrings through the first pull to accelerate through the top of the second pull.

Research has shown the barbell will accelerate off the floor, slow slightly in the middle of the movement, then accelerate again to peak velocity as it nears the top (Garhammer, J. "Biomechanical profiles of Olympic weightlifters". Int. J. Sport Biomechanics 1(2): 122-130, 1985.).

Because of this, it isn't until the bar passes the knee that acceleration should be the focus. A useful cue is, "smooth off the floor, then accelerate past the knee". This acceleration will not peak until the top of the second pull.

**A USEFUL CUE IS,  
"SMOOTH OFF THE FLOOR,  
THEN ACCELERATE  
PAST THE KNEE".**



The actual transition phase is when the lifter repositions their hips beneath the shoulders, with the knees still bent, to prepare to push vertically.

Some people use the term "power position" or "high hang" for this position. This movement has been dubbed the "double knee bend" in the past and while yes that does happen, I do not believe it is something to be taught.

If coached properly, the "double knee bend" will happen naturally and in a more fluid

manner than if an attempt is made to break it down.

One useful cue I use to get a lifter to perform the "double knee bend" is to tell the lifter to "jump". Will the lifter actually jump? No. Is this one cue (of many) that can be used to make an athlete move a particular way? Yes! When you tell an athlete to jump, they will naturally put themselves in a position to get vertical.

In weightlifting, vertical is truly the name of the game. This movement will not be identical to the maximal vertical jump, but it can be an effective tool to get an athlete into position. That being stated, it is not the only way, nor does it work with everyone.

## THE SECOND PULL

**A**fter the lifter has reached the end of the transition, or power position, the second pull is technically simple. “There is a rapid straightening of the legs and torso with a subsequent lifting onto the toes and raising of the shoulder joints up and back during the ‘explosion’.” (Roman, R. *The Training of the Weightlifter*).

The elevation of the shoulder is sometimes referred to as a shrug. There is much debate surrounding this aspect of the movement. One perspective is that this elevation of the shoulders is finishing the pull upward. Some say that the shrug is the beginning of pulling under the bar. I believe that the shrug succeeds in both.

This shrug is an ideal movement to keep tension on the bar throughout the change of direction. It allows the legs to complete their ballistic push without having to cut the movement short in an attempt to quickly get under the bar. Elevating the bar with the trapezius is significantly stronger than pulling with the arms alone, so it seems that not using such a tool would be unwise.

The final aspect of the second pull that is debated is the elevation onto the toes at the end. “As the bar reaches the upper third of the thighs, the trainee should rise onto the toes with a powerful effort, fully extend the knees and hip joints while simultaneously forcefully shrugging the shoulders and bending the arms.” (A.A. Krabov, “Teaching the Technique of the Competition Exercises”; *The 1983 Weightlifting Yearbook*).

This quote taken out of context can be somewhat confusing as it relates to when things are happening, but it is the purposeful mention of rising to the toes that should be noted. Whether this is a result of actively pushing to the toes or a follow-through from the push through the heels is reasonable to debate.

Let us revisit the baseball pitcher analogy. Imagine how well they would be able to throw the ball if you told them they had to keep their trail foot on the rubber after they release the ball. Sure, maybe one or two pitchers could still throw well, but performance would suffer in the vast majority.

I have just described one of a countless number of ways to teach what is happening through the pull in the sport of Weightlifting. There is no single method that “the rest of the world” uses, nor is there a single way that works best for everyone. Many athletes and coaches have been successful using a variety of methods from all parts of the world.

Also, one must remember that each lifter will likely show slight variations in all positions as a result of limb lengths, flexibility, and a range of other factors.

**TO SUCCEED IN THIS SPORT,  
ONE MUST TRULY BELIEVE IN  
WHAT THEY ARE DOING AND/OR COACHING.**

**W**hat we don't want to do is to alienate a potential tool for development, whether it falls within the parameters of our "camp" or it is something the "other side" uses. We are all either educators, practitioners, or both, and we should be open to the possibility that someone else may know things that we don't, and we should take that as an opportunity to learn.

In casual conversation with a three time Olympian, I jokingly said, "it almost looks like you have been doing this (Weightlifting) for a while". His reply was "I'll figure this out yet." The implication that someone who has been immersed in this sport for 40+ years still has so much to learn should not be ignored.

There is no single method for how to teach the pull or any other aspect of the lifts, just like there are different thought processes on programming. This is what gives sport its flavor! What we need to avoid is taking the exception to the standard and making it the new standard.

As Bob Takano wrote, "...if one or two lifters favor a certain anomalous technique, while well over 95% of the medal winners prefer a more standard technique, a well-educated coach will be able to study the biomechanics and determine whether this new technical variant is really advantageous or simply an idiosyncrasy that may be unique to the anatomy of the lifters in question."



## SUPPLEMENTARY WORK FOR THE OLYMPIC LIFTS

BY DONOVAN FORD

The classical lifts are important to becoming a master of the platform but even the most elite lifters supplement accessory exercises to save their bodies. Nothing tears down your body like the full classical lifts.

In a basic twelve-week training cycle the weightlifting athletes at the Olympic training center have 108 workouts.

Of those 108 workouts 36 of those will be some variation of the snatch and clean and jerk. To break it down even further 12 of those workouts are actually the classical lifts done from the floor. So anyone that believes to be the best you need to only snatch and clean & jerk is foolish.

**T**he Bulgarian methods of maxing out everyday works for very few athletes so keep that in mind. After seeing this breakdown you are probably wondering if only 12 of our workouts are snatch and clean from the floor what do the other 96 workouts of our training cycle consist of.

Coach Zygmunt is very big on adding supplemental exercises to help make improvements in the lifts. Here are a few things the resident team does at the Olympic training in conjunction with performing the classical lifts.

## **BLOCK WORK**

Not many gyms in America have blocks to lift from but it is a growing trend in the US. So if you don't have some get some. At the Olympic training Center we spend 8-9 weeks of a training cycle lifting from blocks.

Lifting heavy weights from the floor is tough on your body. Snatching or cleaning from the blocks cuts out the added stress of pulling weights from the floor. It's also important in isolating areas of your pull where you might need a little extra work for example working on speed in the final pull or pulling the bar past your knees. On a weekly basis we work in descending order.

Monday is from the knee position, Wednesday from bellow the knee and Friday is from the floor. We also do a lot of combination lifts from the blocks. For example instead of doing a double in the snatch or clean off the blocks you can add in a snatch or clean pull before each lift.

The pull before the lift allows you to focus on a correct movement pattern of the bar without going overhead or completing the entire lift. Zygmunt tells me if I pull the bar high and straight enough the lift should be achieved.

## **JERK FOOTWORK**

Another focus to our training is working on footwork for the jerk. Overhead strength can be gained by variety of overhead exercises but footwork is just as important. The feet in the jerk need to be trained in weightlifting just like any other muscle.

Zygmunt has several different exercises to help train the feet but a few of my favorites he calls 'jump to split' and 'press in split.'

Jump to split your start with the barbell on your back as if you were doing a back squat, then jump your feet in a jerk stance without going overhead. This is great movement for a few different reasons. It helps train you to have quick feet getting to your split jerk position.

Another benefit of this exercise is to help improve your balance and stability with heavy weights in the jerk position. Because the weight on your back and not overhead you can work up to heavier weight loads then you can get over your head and still get the benefit. Most importantly you gain the benefit of the split jerk while saving your shoulders from too much stress.



**A** well-rounded exercise to help with overhead strength and balance is pressing in the split position. Starting in your split jerk position and holding the barbell in a clean grip, strict press the bar overhead.

The benefits of this movement are similar to the other except you are adding a pressing element that helps with overhead strength and stability and also helps with overall balance in the jerk.

## **SQUATS AND PRESSES**

Our main focus in training, aside from the classical lifts, are squats. Yes everyone knows weightlifters front and back squat but leg strength is one of the most essential factors in weightlifting. We do a lot of traditional front and back squats but we also do many rack squats and split squats to help build our legs strength. Coach Zygmunt is huge on rack squats because it helps work on strengthening the sticking point in front or back squats.

**OUR MAIN FOCUS IN TRAINING,  
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LEG STRENGTH IS ONE OF THE MOST ESSENTIAL  
FACTORS IN WEIGHTLIFTING.**

I call myself a strong squatter but even I have a sticking point in the squat. Secondly comes overhead strengthening. Getting weight overhead is the final result but your shoulder strength only improves so much by doing the lifts. The resident lifters constantly do sotts press and single arm dumbbell pressing to improve overhead stability. My favorite exercise for working on my overhead strength in the snatch is snatch grip push press. The more my push pressing ability rose, my ability to snatch heavier weights did also.

I am sure for most people I am preaching to the choir on this subject, but this is very important stuff. Zygmunt coaches several of the top weightlifters and this is the kind of stuff we do. It's not the only way to have success in the sport but it is definitely something to think about in your training.

Especially if you feel you are getting beat up by doing the full lifts too often. I could write for days about all the things we do in our training at the Training Center but these are some of the most important in my training.

# SQUAT DEVELOPMENT FOR WEIGHTLIFTING

BY JACOB TSYPKIN

Since the press was eliminated from competition in 1972, weightlifting has become a completely lower body dominant sport. Yet – not surprisingly – there is much debate over the best methods by which to develop leg strength for weightlifters. Sometimes – very surprisingly – there is even debate over the need for weightlifters to have strong legs.

In this article I will attempt to dispel some common myths pertaining to the squat in weightlifting, and outline the methods I use to improve the squat in my weightlifters, with the goal of using the developed leg strength to improve results in the snatch and clean & jerk.

## SOMETIMES, PEOPLE ARE JUST WRONG.

I would first like to clear up some misconceptions about the role of squatting and strength in weightlifting. To be clear, most of these are held by people who are outside observers, perhaps participants in other strength sports but not competitors in weightlifting. Still, let's get these ideas out of the way so that the questions that may accompany them need not hinder us later on.

### 1. WEIGHTLIFTERS AREN'T STRONG

I really have no idea how this happened, but a surprising amount of people think that weightlifters aren't strong. Somehow, the fact that speed, position, rhythm, and timing are all just as crucial as strength in weightlifting, has led some to believe that people who put nearly 600lbs overhead aren't strength athletes. I'll just leave this here for you:



**T**hat is 75kg Idalberto Aranda of Cuba, back squatting a laughably easy 280kg. Close to 4x bodyweight, no wraps, not even a belt, with such ease that he literally throws it over his head when he's done. He is rumored to have squatted 310. Though he is perhaps an extreme example, it is probably safe to say that weightlifters train to be strong, and succeed at it.

Myth dispelled. Moving on.

## **2. RESERVE STRENGTH**

The concept of reserve strength works like this: If a weightlifter has a 80kg clean & jerk, and a 100kg back squat; if he increases his back squat to 120kg, then 80kg will represent a relatively smaller percentage of his maximal strength, and the weightlifter can now make the 80kg clean & jerk even if the lift is mechanically suboptimal. Because of the relative lightness of the load, the lifter can make small corrections to position during the lift which he would not be able to make if the load were heavier relative to his absolute strength.

While this concept seems sound on the surface, we must consider what those numbers represent.

A weightlifter who clean & jerks 80 and back squats 100 is clean & jerking 80% of his back squat. Soviet manuals suggest that 80% is an ideal ratio. If the weightlifter increases his back squat to 120, and his clean & jerk stays at 80, he is now only clean & jerking 66% of his back squat. If the lifter increases his C&J to 90, he is still only now clean & jerking 75% of his back squat. He has become less efficient. Perhaps he can make the lift with smaller variances in form, but that just means that his form has worsened.

Only if the lifter increases his clean & jerk to 96kg, has his efficiency remained optimal. A 16kg improvement in the C&J is unlikely merely from increasing the back squat by 20kg, except in some very particular circumstances. Over time, the back squat will increase to 120, and the clean & jerk to 96, but biasing training towards quickly increasing the back squat will likely reduce efficiency, and be detrimental to the lifters long term competition results.

There are obviously exceptions to this rule. Aranda, in the video above, had a best C&J of 205.5kg, or 68% of his best back squat if the rumor of 310 is true. Usually, larger lifters will tend to be less efficient relative to their max squat. However, the vast majority of readers are not major exceptions, and almost none of you are Aranda. If you have a 200kg back squat and a 120kg clean & jerk, you don't have "reserve strength," you have crappy technique.

### 3. ALL MAXES, ALL THE TIME

This one probably stems from the so-called "Bulgarian System" that no one really understands (myself included.) A lot of folks seem to think that weightlifters just max their squat every single day (this applies to the snatch and clean & jerk as well.)

While this is certainly an approach used by some coaches and athletes, and one which I have used in certain circumstances, it is safe to say that the vast majority of lifters do simple volume work at some point in their training. Volume forms the crux of the program which I utilize, and most of the coaches and lifters I work with use a lot of volume in their programming.



### 4. ALL FRONT SQUATS, ALL THE TIME

Not completely certain where this one came from, but I suspect it may be also have risen from the "Bulgarian System" people. While there are instances of weightlifters who do not back squat, or who predominantly front squat, most weightlifters should and do back squat.

BS dealt with. Let's move on.



# RULES OF SQUATTING FOR WEIGHTLIFTERS

WHEN DEVELOPING THE SQUAT TO IMPROVE THE SNATCH AND CLEAN & JERK, THERE ARE SOME IMPORTANT KEYS TO REMEMBER. THESE SHOULD GUIDE YOUR TECHNIQUE, YOUR PROGRAMMING, AND THE PREVALENCE OF THE SQUAT IN YOUR TRAINING.

## 1. YOU ARE A WEIGHTLIFTER.

You compete in the snatch and the clean & jerk.

Neither the back nor the front squat are contested events in the sport of weightlifting. While there may be times for some lifters when it is appropriate to prioritize squatting strength at the temporary expense of results in the competition lifts, this is limited to particular individuals in particular circumstances.

If you show up at a meet, go 2/6, and finish last, no amount of “but I back squat 3x bodyweight!” is going to make you feel better about getting your ass kicked. **YOU ARE A WEIGHTLIFTER. TRAIN THE SQUAT ACCORDINGLY.**



## 2. GRINDERS ARE OKAY. SHITTY SQUATS ARE NOT.

Really this one applies to all strength athletes, but it's of particular importance for weightlifters.

While a powerlifter may risk injury, either chronic or acute, by doing shitty squats all the time, he can still win a meet with a heavy below-parallel good morning. Regularly squatting in this fashion is detrimental in a more direct way for the weightlifter, because it will influence the way he interacts with heavy loads in the snatch and clean & jerk.

Squatting with an inclined torso and rounded back will lead to these traits carrying over to the competition lifts, and that's going to lead to misses. An occasional ugly squat on a PR attempt is okay, and probably inevitable, but the majority of your squatting should be done with good positions which effectively approximate the positions of the snatch and clean & jerk.

## 3. HIGH BAR BACK SQUATS

I will make this clear now. The low bar back squat does not carry over effectively to the lifts. It leads to a less than ideal bottom position in the snatch. IT MOST CERTAINLY DOES NOT MIMIC THE PULL FROM THE FLOOR. Weightlifters high bar back squat. This is only a debate amongst people who don't actually know what they are talking about. That is all.



# NOW. LET'S GO TO WORK.

## METHODS

The primary method I use is based on the same framework as the program Coach Pendlay uses at MDUSA. It is a variation of the so-called Texas Method. The setup is very simple. On Monday, back squat for volume. On Wednesday, front squat, usually heavy triples. On Saturday, attempt to back squat some type of PR.

We typically push the set of 5 in the back squat more than any other rep range, something else I picked up from Coach Pendlay. It seems to carry over to the clean & jerk better – probably because of the increased time under tension. In my experience, lifters are also less likely to sacrifice form for a new PR set of 5 than they are for a new PR single.

Closer to a meet, we will lower the volume and increase the intensity, and do more front squatting than back squatting. I generally don't do much work with percentages, and I also don't often dictate changes in rep ranges, but prefer to let them happen naturally.

When a lifter can no longer perform 3 sets of 5 on Monday, we'll move to 4 sets of 4. When he has failed a new 5RM attempt two weeks in a row, we'll move to 3RM. However, for the sake of having a concrete example of the program, the following is a depiction of how this may look over the course of 12 weeks, with a 13th taper week, at the end of which the lifter competes.

### DISCLAIMER:

This is an example of the basic framework I use to develop the squat. The reality is that it is more fluid and variable, dependent on individual needs and circumstances. As Coach Pendlay once told me, "Theory and practice are the same in theory, but not in practice."

Also, this program assumes that the lifter has already gone through and moved beyond a basic linear progression for developing the squat.

**"THEORY & PRACTICE  
ARE THE SAME IN THEORY,  
BUT NOT IN PRACTICE."**

All of my lifters start their training with 3x5 back squat on Monday and Saturday and 5x3 front squat on Wednesday until they can no longer make improvements. Then they switch to the program outlined here.

**ALL NOTATION IS SETS x REPS WHERE LOAD IS NOT INDICATED,  
LOAD x REPS x SETS WHERE LOAD IS INDICATED.**

### **WEEK 1**

Monday Back Squat 75%x5x3

Wednesday Front Squat 75%x3x5

Saturday Back Squat 5RM

(I actually advocate starting somewhat conservatively,  
a very hard but not quite maximal set of 5)

### **WEEK 2**

Monday Back Squat 3x5, add load from previous Monday

Wednesday Front Squat 5x3, add load from previous Wednesday

Saturday Back Squat 5RM

### **WEEK 3**

Monday Back Squat 3x5, add load from previous Monday

Wednesday Front Squat 5x3, add load from previous Wednesday

Saturday Back Squat 5RM

### **WEEK 4**

Monday Back Squat 4x4, add load from previous Monday

Wednesday Front Squat 5x3, add load from previous Wednesday

Saturday Back Squat 5RM

### **WEEK 5**

Monday Back Squat 4x4, add load from previous Monday

Wednesday Front Squat 6x2, add load from previous Wednesday

Saturday Back Squat 5RM OR 3RM

(DO NOT move to 3RM unless you have missed your new  
5RM attempt for two weeks straight)

### **WEEK 6**

Monday Back Squat 4x4, add load from previous Monday

Wednesday Front squat 6x2, add load from previous Wednesday

Saturday Back Squat 5RM or 3RM

### **WEEK 7**

Monday Back Squat 5x3, add load from previous Monday

Wednesday Front Squat 6x2, add load from previous Wednesday

Saturday Back Squat 5RM or 3RM



## WEEK 8

Monday Back Squat 5x3, add load from previous Monday  
Wednesday Front Squat 6x2, add load from previous Wednesday  
Saturday Back Squat 5RM or 3RM

## WEEK 9

Monday Back Squat 5x3, add load from previous Monday  
Wednesday Front Squat 6x2, add load from previous Wednesday  
Saturday Back Squat 5RM or 3RM

**\*Use SMALL increases in weight, particularly on Mondays and Wednesdays. You should not miss reps on Monday or Wednesday. You are putting work in, not setting records. (If necessary, stay at the same load for a few weeks at a time. Saturday is your day to make PRs.)**

## WEEK 10

Monday Front Squat heavy single (**NOT maximal**),  
**then 90%x2x2 \*90% of today's single**  
Wednesday Front Squat heavy single (**NOT maximal**),  
**then 90%x2x2 \*90% of today's single**  
Saturday Front Squat 1RM

## WEEK 11

Monday Front Squat 1RM  
Wednesday Front Squat heavy single (**NOT maximal**),  
**then 90%x2x2 \*90% of today's single**  
Saturday Front Squat 1RM

## WEEK 12

Monday Front Squat 1RM  
Wednesday Front Squat heavy single (**NOT maximal**)  
Saturday Front Squat 1RM

## WEEK 13 (Taper and Competition)

Monday Front Squat 85%x1x1  
Wednesday Front Squat C&J opener for single  
Saturday No squatting  
Sunday Compete

## BREAKING PLATEAUS

**Like anything else, eventually this will stop working, and you will need to do something to move past your current limitations.**

The program outlined above is a mix of intensity and volume work. To break through plateaus, I typically just use a program which biases either volume, or intensity. The methods I commonly use are presented here.

## VOLUME: SMOLOV JUNIOR

I have seen quite a few variants of Smolov Junior floating around the internet. This one may or may not be the “correct” or “original” one. I’m not sure. Whatever it is, it seems to work pretty well. Rather than the traditional 4 days/week that Smolov calls for, I stick to our normal Monday-Wednesday-Saturday schedule for this program. It alternates between 4 rep schemes:

**3x9**  
**4x7**  
**5x5**  
**6x3**

**The first four workouts would look like this:**

**Monday** Back Squat 70%x9x3  
**Wednesday** Back Squat 75%x7x4  
**Saturday** Back Squat 80%x5x5  
**Monday** Back Squat 85%x3x6

**For the next workout, go back to 3x9 and move up by 5%. Do the same with each of the following workouts. For the third cycle, increase by 2.5%.**

After that, you can back off for a week, and retest your back squat, at which point you may choose to repeat Smolov Junior, or return to our regularly scheduled programming. Though there is an intensification phase for Smolov, which I assume could be adapted for Smolov Junior, I have never tried to use it with my weightlifters.

## PROS

### 1) LOTS OF SQUATTING.

If you need to gain size, this will likely help. And it's more than likely going to push your squat up, unless you are one of those few individuals whose strength endurance is good enough that high volume squatting doesn't necessarily improve 1RMs.

### 2) INCREASED WORK CAPACITY.

Squatting like this will help improve your tolerance to heavy lifting in general, which is definitely a good thing.

## CONS

### 1) IT IS GOING TO KICK YOUR ASS.

Not as bad as the original Smolov, but bad enough that you can expect your snatch and clean & jerk to take a hit. It's also an absolutely terrible way to squat if you're trying to lose weight, because you are going to need to eat your face off.

### 2) NO FRONT SQUATS.

I suppose you could work in a heavy single front squat before your back squats once or twice a week, but beyond the first cycle, the last thing you're going to want to do is more squatting.

## INTENSITY: DAILY SQUATTING

**AND HERE ARE THE FAMED 'DAILY MAXES.' BUT LET'S CLEAR A FEW THINGS UP ABOUT HOW THIS WORKS.**

### 1. A DAILY MAX IS NOT A TRUE MAX.

Don't expect to hit a PR every day. Set a minimum number that is a goal for you to work up to – probably around 80% or a little bit less of your PR. Try to hit that every day, and gradually bring that number up to 90%. **Occasionally, when you feel great, go big. You should almost never miss a rep.**

### 2) FIND THE RIGHT BALANCE BETWEEN BACK AND FRONT SQUATS.

I think most lifters should do 2:1 back squat:front squat, but that may not be what works best for you, particularly if you are a weak front squatter.

This method is about functional, not structural adaptation. It's practice with heavy weights. So if your front squat is what needs to come up most, that may be what you do more frequently.

### **3. DAILY SQUATTING DOES NOT HAVE TO BE A DAILY SINGLE.**

**This is generally how I prescribe the program: Start by hitting 80% of your max in either the back or front squat at least 6 days/week.** Gradually increase that number over time. Occasionally do a double with your daily weight or a little bit higher. Occasionally do 2x2 with slightly below your daily weight.

### **4. INCREASE ALL WEIGHTS GRADUALLY.**

**When you go for a PR, it should be a SMALL PR.** If you make it, call it a day. Bring up your daily weight gradually, a few workouts at a time. Let yourself adapt. If you don't, this can end poorly.

## **PROS**

### **1) TASK SPECIFIC.**

Weightlifters train to do one rep, this method will get you good at doing one rep.

### **2) HIGH FREQUENCY SQUATTING, PROGRAMMED INTELLIGENTLY, WON'T HAVE MUCH OF AN EFFECT ON YOUR SNATCH AND CLEAN & JERK.**

It's relatively easy most days and you can get through it in about 10 minutes.

### **3) SHOCKINGLY, THIS WAS A GREAT WAY TO DEAL WITH MY KNEE PAIN.**

My knees feel far better doing this than they did when I was squatting 3x/week, and I am squatting heavier than I have in close to a year. I have heard similar reports from other lifters.

## **CONS**

### **1) IF YOU DO NOT CHECK YOURSELF, YOU WILL WRECK YOURSELF.**

Let your ego take control and you will pay the price.

### **2) TO BE DONE CORRECTLY, A LIFTER NEEDS TO KNOW HIMSELF PRETTY WELL.**

This is a very intuitive method and you need to be fairly experienced to employ it correctly.

## **CONCLUSION**

It is clear to any critical observer that developing leg strength is crucial for the weightlifter. It is also not as complicated as it may seem at first glance. I hope that if you choose to try the outlined program, you find it beneficial.

**However, of greater importance is understanding the foundations upon which this program is built, and those are what I hope you take away from this article.**





**"AS TO THE METHODS, THERE MAY BE A MILLION  
AND THEN SOME, BUT PRINCIPLES ARE FEW.**

**THE MAN WHO GRASPS PRINCIPLES CAN  
SUCCESSFULLY SELECT HIS OWN METHODS.**

**THE MAN WHO TRIES METHODS, IGNORING  
PRINCIPLES, IS SURE TO HAVE TROUBLE."**

**- RALPH WALDO EMERSON (1803-1882)**