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## TOP-55 PROWLER WORKOUTS

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We asked you for your favorite Prowler workouts and picked our top-55 favorites. Feeling frisky? Keep this list handy and choose a different option below every time you push the Prowler. Feeling conservative? Pick one option below and try to progress in some way over the course of six weeks. With this list, your Prowler options are endless.

1. "The Marathon: start with body weight or more in plates, and go as far as you can. Once you hit the wall, do 20 free-standing body weight squats. Go as far as you can with the Prowler again and as soon as you stop, do a 40-yard sprint. Repeat 5 times." - Dan Go Hard Ekstrom
2. "Death Rally: load up the Prowler with your body weight in plates, then do 20, 20-yard sprints for time. Try not to die." - Daven Williams
3. "Do 40 yards for 10 trips, while alternating high/low handles with 90 pounds. The hardest part becomes staring at the watch for 5 minutes afterward to see if you survived not getting the Prowler® Flu." - Gerald Santoleri
4. "I bought one for in our gym to push down our 30-yard walkway. After deadlift day, we add plates every other trip until we can't move it the full 30 yards. Then, we work back down." - Brian Sealock
5. "Just push 'til you puke! Do 30-yard sprints on asphalt (down and back). Then, add two more plates and repeat. Continue until vomiting occurs. Then, do at least two more runs!" - Todd Marcoullier
6. "Just do 10, 40-yard Prowler sprints. It's all you need." - Levi Taylor
7. "Pulling my Prowler with my harness for a straight mile with 150 pounds on it after a squat training session. Awesome and people love to treat you like Rocky as you pass by on the road. Feels better than cake on a cheat day." - Jerome Cook
8. "Prowler hill sprint: 40-yard sprint with at least 100 pounds. All low handles. 10-15 reps or until dead." - Ryan Oglevee
9. "Buddy Runs: sprints using the high handles, with a Prowler® that is loaded with one of your training partners who is encouraging (berating) you to keep your feet moving as fast as possible. Switch pusher/rider after each sprint." - Jon Hayes
10. "Load it with 45 's and push 25 feet. Superset with 10 heavy tire flips, use a 10-minute time cap, and do as many rounds as possible." Luke Sweet
11. "Sprint with Prowler 30 yards each way. Then, add another two plates and do it again. Repeat process «til projectile vomiting occurs. Then, do two more runs!" - Todd Marcoullier
12. "Do $4 \times 20 \mathrm{~m}$ Prowler pushes followed by 20 m sled sprints followed by 5 reps each target Turkish get-up (32-pound KB) followed by 5 reps clean and press with a kettlebell ( 64 -pound KB). Take all the equipment to the local park at the weekends." - Mike Heeney
13. At our camp in Afghanistan at 7500 feet, we do Prowler suicides to simulate pulling/ pushing a casualty. The best workout we found is as follows: Load Prowler with $1 \times$ 45 -pound plate, push 25 m . Sprint back to start and grab another 45 -pound plate and sprint back to Prowler. Load Prowler ( 2 x 45 -pound plate) and push 25 m . Sprint back to start and grab another 45-pound plate and sprint back to Prowler. Load Prowler (3x 45 -pound plate) and push 25 m . Sprint back to start and grab another 45 -pound plate and sprint back to Prowler. Load Prowler (4 $\times 45$-pound plate) and push final 25 m . Rest one minute and reverse the process." - Dan Ferriter
14. "Prowler Suicides: push the low handle 10 yards, high handles back, low handle 20 yards, high handles back. Fastest time wins."-Pat Lion
15. Simple and easy-load Prowlerto appropriate weight, depending on the person this could be different, do a 15 -yard sprint with the high handles, then jump through the Prowler, over the low handles, turn around and push back with low handles. Do this at least 10 times, more if you wish. Track times with a stopwatch for best results." Jonathon Leitch
16. "I strap my son in the harness and he pulls 2 $\times 20$ yards each to finish his workouts. Then, he hops on the back and makes me pull him around." - Grant Christiansen
17. "Get three or four people together and use somewhere between 90 and 180 pounds. Push 80 feet, run back and do 10 sledge swings per arm. Do these 'Indian Style' for 10 rounds. So basically the Prowler and sledge never stop swinging." - Bryan Benzel

## It doesn't matter where you are from It's what you BECOME

 GE YOUR BECOME GEAR HERE 》18. "3 x Giant Set: 40-yard chest press, 40-yard row, 20-yard reverse fly, 20 pull-throughs. Finish with $5 \times 20$ yard pushes with as much weight as possible. I wrote an article for SCJ (this month's issue) on the benefits of using a sled - using the Econo Prowler as an example." - Nathaniel Jenkins
19. "First, load it. Push until you can't anymore. Wait until breath returns. Repeat 2 and 3 a few times. Turn Prowler around, repeat 2 and 3 until home. Additional benefit is that if I do this at 5:30AM - I get to piss off the neighbors with their perfectly manicured lawn." - Jason Beaudoin
20. "To date, the nastiest Prowler session I inflicted on myself: Post ME upper. 160 feet there and back with 90 pounds on Prowler® 2. Rest one minute followed by Prowler® Shotguns for 20 reps with the low handle, 20 reps with the mid-high parallel bars. Then, rest one minute followed by 160 feet there and back again. Rest one minute followed by the Prowler with a 50 foot rope row for two lengths. Go right into Prowler shotguns back to start 15 reps! Rest one minute and unclip rope, then repeat attempted, but fail due to spins. Managed to get into my studio gym bathroom and ended up on the nice cold ceramic tile floor stripped down to boxers. I laid there for an hour on the verge of projectile Prowler flu contemplating 'why?' LoL!" - Michael Arthur Guerra
21. "Do hand-over-hand uphill pulls - 4 sets $\times 125$ pounds. Do backward and forward drags -4 sets $\times 180$ pounds. Tennis shoe blow-out pushes, 4 sets of pyramid sets increasing to over 500 pounds for 20 yards." - Charles Gardner
22. "Ladder at 20, 40, 80, 100 yards. Two to three ladders." - Steve Bogle
23. "40 yard on-the-minute sprints with 50-60 percent of body weight. The faster you push, the longer you get to rest. 8-10 repeats for a finisher." - Jenica Allen
24. "40 yards each way with a group of three. Everyone gets a turn each trip. Load one plate each side: and go down and back. Then, add 25's to each side: down and back, 25's off plate on: down and back. Rinse repeat until someone passes out, pukes or dies. First one to quit has to put all the gear away, and gets made fun of mercilessly until we do it all again and someone else quits first." - John J Brooks
25. "I use it to take my full body GPP to another level: High parallel bars for 100 feet, Mid -horizontal bar for 50 feet, Low-horizontal bar 50 feet, Pull back (Prowler in front of you) with straps for 25 feet, and Chest push (Prowler behind) with straps 25 feet. As many rounds as possible in 15 minutes. When using the straps, I like to use soft D cable attachments, then grab one with each hand, stand in between the two straps, and push or pull." - Bryan Stellfox
26. "We have our wrestlers use it to perform their step-knee-step technique, so they will build explosive power when they shoot their double legs." - Eric Semifero
27. "Attach a long rope to the Prowler, push it 40 yards, sprint back and then pull it to you. Repeat." - Max Keirn-Whiting
28. "Favorite Prowler workout so far: use the Econo Prowler and load 45's on each side. Do 30-yard sprints on asphalt for however long it takes to get to 100 total. Did it this past Saturday for charity. Took me right at two hours and I raised $\$ 2,800$ for a local teen with cancer. l'll send y'all the video when I get it fully edited." - David Allen
29. "Prowler Marathon: the day I received my Prowler $®$, I put 90 pounds on it and pushed it a half mile lap in my neighborhood. It took me 75 minutes!" - Zach Rounsaville
30. "Eight person workout. Place keg on Prowler® and have two people push the Prowler® for 25 meters. Each person drinks a beer. Rotate to next pair and repeat. Works best with rugby forwards." - Matthew Stafford
31. "Prowler shuttle on thick turf (weight dependent on individual, usually 25-45 pounds per side): 5 yards high, bring back 5 yards low, 10 yards high, bring back 10 yards low, 20 yards high, bring back 20 yards low, and Puke. Do this five times if still able to move." - Zach Blanton
32. "This winter I have been pushing it on a back road overlooking Frenchman's Bay and Mt. Desert Island. The road is layered with sand and salt from the winter and it makes a horrific noise, but the view is unequaled. 20 trips of 40 yards or so." - Lucy Unger
33. "Prowler 20 yard shuttle runs $\times 315$ back squat for eight rounds." - Davin Cronquist
34. "Walk with a Prowler for 40 yards, choose a weight that is reasonably light/can keep constant speed while walking - like 90 pounds - follow this by 40 yards of walking lunges, followed by 40 yards of walking with the Prowler, followed by 20 goblet box squats, followed by 40 yards of walking with Prowler®, followed by 20 dumbbell or kettlebell swings, followed by 40 yards walking, followed by 20 bodyweight squats (by this point even bodyweight squats suck) and lastly followed by a 40-yard sprint with the Prowler. I use this for helping increase GPP and when I need to lean down a bit so I can make weight." - Ty Hamilton
35. "Prowler mile around an old track Indian run style. One guy pushes his turn, goes to the back of the line and jogs with the team until it is his turn again until a mile is completed." - Sam Luker
36. "Where I work, the main police station has a parking ramp inclined at 45 degrees. I put two 45-pound plates and push it up and pull it down walking backwards for 5 trips with the Prowler®, working to do 10 . Then, I run with a 50-pound weighted vest, make five trips, then walk five more. I do this afterhours though, because other cops see this and think this isn't 'normal' which scars me because they have guns. Thank goodness they can't shoot straight." - Jimmy Jam
37. "With 100 pounds, push 10 yards, then pull 10 yards for $3-5$ sets between regular lifting sets." - Carl Reinhardt
38. "Heavy upright Prowler drags down. Backward Prowler® drags back. Distance is about 30 yards, 3-6 sets, weight is as heavy as humanly possible." - Cj Appenzeller
39. " 100 kg - Okg challenge. 25 m low handle, 25 m high handle. 100 kg there and back, 90 there and back, $80,70,60,50,40,30,20,10,0$. Total of 22 lengths for time. Quickest time was 10.21 , slowest was 25.31 ! And you have to remove your own weights. Hahahaha!" - David Cross
40. "Prowler Mile: I used the turf in the gym which is 15 yards and went down and back with 90 pounds on the Prowler® for a total of 60 laps or 1,800 yards. It took me 76 minutes for the mile and 32 minutes for a half mile." - Ben Podbielski
41. "Steep incline hill pushes: 10 sets. On the first set, try and beat prior week's first set and total time for all 10 sets should be tried to beat from each week. Add 25 pounds to each set." - Joshua Harvey
42. "40-yard harness pulls, adding plates every two pulls until you get up to a max pull. Great for truck pull training -- adding an arm-overarm rope is great, too." - Keith Thompson
43. " 20 yard pushes $\times 8.40$ yard pulls $\times 4$. Tug of war with 2 " $\times 50$ ' rope $\times 5$. Push and release $8 \times 4$." - Jay Kearney
44. "Hook the ropes on the Prowler and add however much weight you want. Do the ropes for one minute, 15 seconds of slams, alternating, inside out circles, and jumping jacks. Then push the Prowler® 30-40 yards and pull it backward from the ropes." - Matt Johnston
45. "My training partners and I coin our most brutal prowler workout as "The Masochistic Mile." It consists of the four of us with three stations going one mile around the neighborhood. Here are the stations that we rotate: Load the Prowler with 180 pounds, 55 -pound kettlebell farmers walk with the Fat Gripz, Holding the Swiss bar overhead, Everyone stays on pace with the person pushing the Prowler, with the fourth person resting. The pusher goes to rest after his bout and we rotate accordingly." - Evan Wehner
46. "Five rounds for time: 5 tire flips, 25 sledgehammer swings each side, 25 burpees, and 40-yard Prowler push." - Jim Stone
47. "As a legitimate Prowler workout and not as a finisher: Backward Sled Drags (40 yards) $\times 2$, Forward Sled Drags (40 yards) x 2, Reverse Fly $\times 15$ reps, Forward Sled Fly $\times 15$ reps, Prowler Hi/Lo x 4 - Finisher" - Miguel Aragoncillo
48. "A. $4 \times 40$ sprint with 1 pps B. $4 \times 25$ heavy drags $3-4$ pps with spud strap C. $4 \times 40$ low handle with 150 pounds no stopping." - David Terry
49. "l put a board on mine so it can hold my sandbag loaded at 105 pounds. Sprint about 30-40 yds (width of cul de sac) take off sandbag and do 5 sandbag clean and press, minute rest, load sandbag on Prowler and sprint back, 5 sandbag front squats, repeat for 20 minutes." - Brandon McElroy
50. "30-yard push with 270 pounds, 20 Prowler jump-overs. Repeat four times." - Andy Sedar
51. "I hook a light band around my waist and use it like a jammer. I start with a little tension on the band, take a penetration step, and push it as far as possible. The weight added to the Prowler ${ }^{\circledR}$ is $50 \%$ of the person's body weight." - Ryan Carranza
52. "40 yard pushes. On the clock. One every two minutes. Alternate high/low drive. Complete 6 reps loaded 100 percent of your body weight. 6 Reps 50 percent of your body weight. 6 reps 25 percent of your body weight." - Kevin Doak Wisham
53. "Sitting hand-over-hand rope pull for 40 yards, then immediately pushing it back 40 yards." - Mike Mangione
54. "As a finisher, do Prowler suicides. 10 yards down, 10 yards back, 20 down, 20 back, 30 down, 30 back. And do two or three sets." - Jordy Anderson

## ...and our favorite...

55. "Prowler Suicides: start with an empty Prowler and go down and back 50 yards. Add 2 plates, go 40 yards. Add two 25, go 30 yards. Move up to 2 plates a side and go 20 yards. Add two 25 and go 10 yards. NOW...repeat the process, but go backwards work down in weight, but longer distance. You will not be able to walk. Mind you, these are done at a fast pace...no walking!" - Josh White

## ELITEFTS STAFF



## 5-4-3-2-1 PROGRAM FOR SIZE AND STRENGTH

## KARSTEN JENSEN



## "How often should I train each muscle group?"

This is a common question that I often receive from athletes, fitness clients, and coaches and trainers that I work with. Almost any textbook on training will include some guideline for how often to train, but ultimately the answer lies in how you ride the stress-recovery wave. Any good session imposes a stress on the body, depletes your resources, and reduces performance. From this state of depletion, we all have to recover and super-compensate to be ready for the next session. One major difference between athletes is how long it takes to become ready for the next workout.

If you feel that you are not ready for your next workout, the typical solution might be to train less. However, you can also attempt to recover faster, eloquently expressed in the following ways:
"Most athletes are not over-training, they are under-recovering." - Dr. Rob Rakowski
"You can let it happen or you can make it happen." - Charles Staley

The bottom line is that the ideal training frequency may not be as cut and dry as we would like it to be. Two newer research articles and one classic book provide some guidelines on training frequency:

- When training is volume equated, twice per week training results in greater increases in muscle mass compared to once per week training. However, once per week training results in solid gains. ${ }^{(1)}$
- There is no solid data to indicate if three times per week training results in greater gains in hypertrophy than two times per week training. ${ }^{(1)}$
- Maximum improvement in strength from the muscle group being trained is a twosecond maximal isometric contraction once per day. ${ }^{(3)}$
- Higher frequency training is associated with the possibility of overtraining and it might be beneficial to periodize training frequency. ${ }^{(1,2)}$

In addition to the above resources, it is worth noting that Pavel Tsatsouline has been a strong promoter of high frequency training with his Power to the People and Grease the Groove programs.

A part of my work is to teach courses for individuals who would like to become certified personal trainers. They are often well read, but their minds are looking for straightforward answers to questions. When they ask the question, "How often should I train each muscle group?" they expect an answer that is one constant number. For example, they want to hear an answer such as "once per week" or "twice per week."

However, as indicated by the fourth point above, a real key to progress might lie in not always using the same training frequency (i.e. periodizing it). The 5-4-3-2-1 program is a program that aims to take advantage of periodizing training frequency by training one lift five times per week, one lift four times per week, one lift three times per week, one lift twice per week and one lift once per week. Every few weeks, when a plateau is reached, the lifts are rotated so the high frequency lifts now are trained with a low frequency and vice versa.

Who could benefit from the 5-4-3-2-1 program? Different options are provided below, but fundamentally the 5-4-3-2-1 program is for you if:

- Your goal is muscular size, strength, or a combination thereof
- You train five days per week
- It makes sense for you to focus all your efforts on five major exercises
- You have trained your exercises once or twice per week for the last few months or longer



## How to Get Started with the 5-4-3-2-1 Program

## Step 1: Pick five lifts (or patterns).

Below is a well-rounded group of five patterns, but you can choose any pattern that suits your goals.

1. Lower Body Hip-Oriented - LB (Hip)

Examples: Good Morning, Stiff-Legged Deadlift, Conventional Style Deadlift
2. Lower Body Knee-Dominant - LB (Knee)

Examples: Olympic Style Squat, Front Squat, Hack Squat
3. Upper Body Push - Push

Examples: Bench Press, Overhead Press, Dip
4. Upper Body Pulling - Pull

Examples: Pull-Up, Lat Pulldown, Seated Row
5. Grip or Trunk-Oriented - G/C

Examples: Farmers Walk, Get-Ups, Abdominal Rollout


## Step 2: Choose your preferred frequency for each pattern based on which aspect you want to improve the most.

|  | High frequency | Medium frequency | Low frequency |
| :---: | :---: | :---: | :---: |
| \# / Week | $4-5$ | 3 | $1-2$ |

You can choose the frequency for your chosen patterns based on one of two major strategies:

1. Create an even stimulus throughout the body.
2. Train a specific area as hard as possible.

The first example below shows a fairly evenly distributed stimulus throughout the body.

| LB (Hip) | L.B (Knee) | Push | Pull | CC |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | 5 | 1 | 4 | 3 | 2 |

In the next example, there is a strong upper body emphasis by assigning an upper body pattern to both high frequency spots in the program.

| L.B (Hip) | L.B (Knee) | Push | Pull | CC |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | 1 | 2 | 4 | 5 | 3 |

In this next example, there is a strong lower body emphasis by assigning a lower body pattern to both high frequency spots in the program.

| L. 3 (Hip) | L. 3 (Knee) | Push | Pull | CC |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | 5 | 4 | 3 | 1 | 1 |

In this example, there is a strong trunk emphasis by assigning grip/core to the high frequency spot in the program.

| L. 3 (Hip) | L.B (Knee) | Push | Pull | CC |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | 2 | 4 | 1 | 3 | 5 |

Which of the two strategies you choose should be based on your goal but also your work capacity as it applies to one workout. Before you choose the lower body dominant template, you want to be
sure that your body-for example, your lower back—can handle both the squat and deadlift in the same workout.

Based on the lower body dominant example, here is what your weekly template would look like. You can switch up the exercise order or use any superset structure, if any at all, that you prefer.

| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
| :---: | :---: | :---: | :---: | :---: |
| A1. LB (Hip) <br> A2. Pres <br> B1 Pull | A1. LB (hip) <br> A2. Pres <br> B1. Grip/Core | $\begin{aligned} & \text { A1. LB (hip) } \\ & \text { B1. Pull } \\ & \text { C1. LB (knee) } \end{aligned}$ | A1. LB (hip) <br> A2. Pres <br> B1. Grip/Core | A1. LB (hip) <br> A2. Pres <br> B1. Pull |

Based on your goals, work capacity, and time to train, you can choose more than one exercise for a specific frequency. For example, you could include both a pull-up and seated row as pulling exercises. Additionally, the 5-4-3-2-1 program will also work with four or three weekly training days.

## Step 3: Choose specific exercises and structure them for each training day.

Let's proceed with the lower body example. The next step is to choose specific exercises. As far as choosing specific exercises, here are two main guidelines:

- You could use the exact same variation on each training day (in which case you should definitely vary the repetition bracket).
- You could use different variations of the same pattern on each day (in which case you could keep the repetition bracket constant between training days).

In the example below, variation between each training day is applied.

Day 1
A1. Conventional Style Deadlift
A2. Overhead Barbell Press
A3. Chin-Up

Day 2
A1. Narrow Stance Good Morning
A2. Barbell Bench Press
A3. Abdominal Rollout
Day 3
A1. Conventional Style Deadlift from Deficit
B1. T-Bar Row with Chest Support
C1. Front Squat
Day 4
A1. Wide Stance Good Morning
A2. Overhead Dumbbell Press
A3. Farmers Walk
Day 5
A1. Snatch Grip Deadlift
A2. Dumbbell Bench Press
A3. Pull-Up

## Step 4: Choose repetition brackets for each training day.

Choose the repetition brackets and overall volume based on your goals (size, strength, or a combination) as well as your work capacity. A primary guideline is to divide whatever weekly volume you choose between the different training days. ${ }^{(2)}$

You really have to choose the specifics based on your needs and preferences. With that said, here is an example for a combination of size and strength. The two major principles applied are:

- A lower repetition bracket is used to train the exercises that are in the program with a high frequency.
- A slightly different repetition bracket is applied to the different days of the same exercise (type).

Day 1
A1. Conventional Style Deadlift: $5 \times 2-4$
A2. Overhead Barbell Press: $5 \times 5-7$
A3. Chin-Up: $5 \times 10-12$
Day 2
A1. Narrow Stance Good Morning: $5 \times 4-6$
A2. Barbell Bench Press: $5 \times 5-7$
B1. Abdominal Rollout: $5 \times 10-12$.

## Day 3

A1. Conventional Style Deadlift from Deficit: $5 \times$ 5-7

B1. T-Bar Row with Chest Support: $5 \times 10-12$
C1. Front Squat: $1 \times 15-20$

## Day 4

A1. Wide Stance Good Morning: $5 \times 5-7$
A2. Overhead Dumbbell Press: $5 \times 8-10$
B1. Farmers Walk: $5 \times 1$ minute (or equivalent distance)

Day 5
A1. Snatch Grip Deadlift: $5 \times 3-5$
A2. Dumbbell Bench Press: $5 \times 8$-10
A3. Pull-Up: $5 \times 10-12$.

Use the program until you feel that you have reached a plateau. Then do an active rest week and spend that time creating your next program. Every time that you create your program, choose the exercises and frequencies based on your goal. However, it would generally be beneficial to rotate a high frequency exercise to a low frequency and a low frequency exercise to a high frequency.

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## KARSTEN JENSEN

Karsten Jensen, MSc Exercise Physiology, has helped worldclass and Olympic athletes from 26 different sports for over 20 years. Many of his athletes have won Olympic medals, European Championships, World Championships, and ATP Tournaments. Karsten is the first strength coach to create a complete system of periodization, The Flexible Periodization Method - the first complete method of periodization dedicated to holistic, individualized, and periodized (H.I.P) training programs. The Flexible Periodization Method is offered through live and online workshops as well as private coaching and consulting. Contact Karsten at karsten@yestostrength.com or visit his website at www.yestostrength.com to learn more.

# 8 -week base bullong procram For bisylufires 

## JOE SCHILLERO



Over the past few weeks, you have probably seen social media flooded with memes and quotes either promoting New Year's resolutions or making fun of them. The exact same stuff gets recycled with each January. But when you clear away all the positivity and negativity, I think most people on both sides can agree that the toughest part of taking on a new training goal is establishing something you can stick to consistently.

There are plenty of programs out there that boast effectiveness and seem alluring, but how many of us have started the "perfect" program and then realized within a few weeks that it is not sustainable? Especially if training is not your number one priority and you are balancing a family, work, and/or school, spending hours at the gym every single day just may not be feasible (or optimal).

I am a firm believer that during busy and highstress times in life, it is important to establish your training minimums that you know you
can accomplish no matter how crazy things get or how exhausted you are. Even if it's half the volume and frequency of what you would ideally like to do, establishing consistency in an area of your life (like training) that benefits your physical and mental strength will carry over to other areas of your life too. Sometimes dedicating a few days per week to going in and "punching the clock", even when you are not hitting huge numbers or feeling awesome, is what you have to do. In all honesty, you will be surprised how much strength you can gain with a program that seems "too simple."

I have trained with and written many different program variations, and they all have their pros and cons. This particular program has the busy lifter in mind, is three days per week, and sessions should be able to be completed in about an hour once you get in the swing of things. It also requires minimal setup and equipment (everything should be available in your average gym). Eight weeks is a short training cycle but if you can be consistent for that time, you will have two months of solid training in the books and break past the February/March time when most people fall off with their New Year's training resolutions.

At the end of these eight weeks you will have...

- ...established consistency and habits.
- ...practiced technique.
- ...built momentum by beating your rep counts from the beginning of the program if you follow the RPE instructions correctly (these small "victories" will set the tone for training moving forward).
- ...established rep PRs and maxes to build upon in future programs (l would not recommend repeating this exact program over and over).


## Some notes before you get started:

- The training days can be distributed however you like, and the nice thing about a three-day setup is that days can be adjusted easily if traveling or if you encounter a scheduling conflict.
- This program is based on daily maxes and RPE (rating of perceived exertion), so you don't have to know your "true max" before starting the program. This was designed with keeping those that haven't been training heavy or consistently recently in mind.
- RPE is listed on a ten-point numerical scale (one being easiest and 10 being heaviest you could go or the hardest you could push).
- The program is designed into two blocks, where your goal should be to beat your Block 1 numbers in Block 2.
- In a program setup like this, there's nothing wrong with leaving a session feeling like you could have done more. If anything, that is what we want: for you to leave each session ready for the next one, not mentally and physically destroyed.
- If movements are listed as A1 and A2 (B1/B2, etc.), it means that those two movements are supersetted with each other.
- Primary movements should have two to four minutes between top sets (initial light warm-ups can be done more quickly).
- Secondary and assistance movements should be done with less rest ( 30 to 90 seconds). Remember, this is designed to be time-efficient and assistance work is often done as a circuit.


# Download 8-Week Base Building Program 



Week 2 - Block 1





Week 5 - Block 2


## Week 6 - Block 2



## Week 7-Block 2

| Day 1 |  |  | Day 2 |  |  | Day 3 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Primary Movement | Weight | Reps | Primary Movement | Weight | Reps | Primary Movement | Weight | Reps |
| Squat | Work up to set of 5 (RPE 8 or 9) - Beat Week 1 Weight. |  | Bench Press | Work up to set of 5 (RPE 8 or 9)-Beat Week 1 Weight. |  | Deadlift | Work up to set of 5 (RPE 8 or 9)Beat Week 1 Weight. |  |
| Supplemental Movement | Sets | Reps | Supplemental Movement | Sets | Reps | Supplemental Movement | Sets | Reps |
| Squat Volume | 3 | 8 | Spoto Bench (Pause 1 inch off chest) | 3 | 8 | Machine or Cable Neutral Grip Rows | 3 | 6 |
|  | 90\% of Primary Bench |  |  | 90\% of Primary |  |  | RPE: 9 |  |
| Assistance Movements | Sets | Reps | Assistance Movements | Sets | Reps | Assistance Movements | Sets | Reps |
| A1. RDLs -4 sets of 8 |  |  | A. Seated Dumbbell Shoulder Presses -3 sets of 8 |  |  | A1. Rear Leg Elevated Split Squats- $3 \times 6$ each leg |  |  |
| *controlled negative, and squeeze glutes and lockout |  |  | B1. Cable Tricep Pushdowns - 3 sets of 20 |  |  | *Holding dumbells or kettiebells |  |  |
| A2. Chin-Ups - 4 sets of 8-12 reps |  |  | B2. Alternating Dumbbell Curls - 3 sets of 12 |  |  | A2. Hanging Leg Raises - $4 \times \mathrm{x}$ Max Reps |  |  |
| *Use extra weight or band assistance if needed to get reps. |  |  | *6 reps each arm, alternating |  |  | *If you can do at least 10 reps of knees to elbows, then use straight legs. |  |  |
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Week 8 - Block 2



## JOE SCHILLERO

Joe Schillero is a competitive powerlifter with an elite total in the 220 lb weight class. He has his Master's Degree in Exercise Physiology and is currently the Fitness \& Wellness Director at Ohio University. He chose to begin competing in powerlifting in order to give himself a training goal following recovery from a severe heart infection several years ago, and since then has finished top 3 at APF Senior Nationals, and represented the USA at WPC Worlds. Joe also speaks frequently in various venues regarding Coaching, Student Development, and Mental Health. His daily goal is to humbly educate others to the best of his ability as he continues to grow himself as a lifter and as a coach. He can be contacted at joeschillero@gmail.com.

## THE ISOMETRIC DEADLIFT CYCLE THAT TOOK MY DEADLIFT TO 800 POUNDS IN 22 MONTHS

## MATT LADEWSKI



For years I was frustrated with my deadlift. I came out of the gate very fast, deadlifting 675 at 220 in my second meet. But from that point in 2002 until 2014, I was stuck between 675 and 710. Finally, after some knee problems that lead to surgery, I was able to make some progress. This was the turning point in my training.

This is the point where l implemented isometrics. I was looking for some improvement but not at this rate. My deadlift jumped from 711 in March to 740 in November (eight months later). By December of 2015, I dropped down to 219 and increased my PR to 760. Fast forward to December of 2016 where I leveled up with 800 at 239. Every training cycle has been slightly different, but since 2014, isometrics have been included in my meet prep and my progress has not stopped.

There is nothing good about isometrics except the strength gain. You won't get a good muscular pump except in your low back. The set-up takes time and breaking it down afterward is worse. Then you have the brain pain. Your head is guaranteed to feel like a volcano that is about to blow. Isometrics are so terrible, in fact, that I am going to give you the exact cycle I use. If you are willing to go through everything I lay out, I am willing to give it away.

I listed a few reasons for doing isometrics but there are two that I feel are most important. Heavy deadlifts will give you, at most, a half second at any specific position. Isometrics will give you five to six seconds at the one specific position that will also produce results at 15 degrees above or below that point. Multiply that by six repetitions and you have done 30-36 seconds of work in that position opposed to less than six seconds for six full max effort reps.


On a serious note, isometric deadlifts can help you blast through sticking points. For those looking to stay in a weight class, your body weight will change very little. You can set the positions specifically needed to build the exact spot in your deadlift. And lastly, the only equipment you will need is a bar, rack, and some weights. I have run this cycle with little manipulations for my last five meets with amazing success. Each run has been slightly different but each cycle has set me up to easily break my personal record.

Another benefit that people overlook is being able to make corrections while doing isometrics. When you pull into the pins, if you're forward you can arch into it, flex your lats, and pull the bar into you. Your training partner will have six seconds to look at, evaluate, and help you adjust the position. This is feeling and thinking while you do it. Often we go on autopilot or we slow way down. With isometrics, you just need to keep pulling like a madman and make technical corrections as you are coached. So when you perform a max effort pull for a record, you can course-correct as you get out of position.

Before I go into the details I want you to watch the video of my last isometric workout so you have an idea of how they are structured. This specific workout is a little different because I take singles at the end, but what I want you to see is the rotation between isometrics and speed deadlifts. The singles were done at the end rather than taking a heavy single the following week. I did not take an opener or any other heavy single after this workout at 22 days out from my meet.


## The Cliff Notes

- The isometrics replace both dynamic effort and max effort work. My second lower body day is just assistance work.
- This peaking cycle consists of two, twoweek cycles.
- I use two different pin positions changed weekly. I use Pin 2 and Pin 3 for the first cycle. I then use the same pins but stand on a half-inch mat for the second cycle.
- Pin positions are at and slightly below my sticking point.
- Each isometric is five to six seconds long.
- I do four to six isometric deadlifts per workout.
- One to two speed (CAT) deadlifts are done between isometrics.
- Each isometric is a max effort pull against the pins.
- I use a deload the week before starting each isometric cycle.


## The Setup

In an elitefts rack with the one-inch hole spacing, I will set the bar in the bottom of the rack if pulling into Pin 2 or on Pin 1 if pulling into Pin 3. About $60 \%$ bar weight is used for the isometric deadlifts. It needs to be light enough that you can apply maximal force for the full six seconds but heavy enough that you don't tear a callus when the bar slams the pins.

Tearing a callus can be a major problem if you use a bar with extreme knurling or you pull too far from the start into the pins. This is why the pins are set up as such. You must also take care of your hands. If you tear a callus this close to the meet, you might not heal enough to hold a PR weight. I recommend having the Ript Skin System on hand just in case you do get even a small tear. It happened on one of my first isometric cycles. Don't make the same mistake as me.


## The Program

This is written as my program with my pin selections. I typically missed three to five inches off the floor and this is used improve my pull off the floor. It has taken me five cycles to complete all six pulls in each of the four workouts. I use this cycle twice a year. I do my isometrics on Friday so I have all weekend to recover. I do not list out my assistance for my non-isometric day but it is important that you know that it is there.

## Week 1 (50 Days Out)

Superset Three to Six Rounds

## Isometric Deadlift Against Pin 2

- $60 \% \times 5-6$ seconds
- Start counting once the bar hits the pins.
- Rest two minutes.


## Speed/CAT Deadlift

- 55\% Bar Weight
- 10-20\% Accommodating Resistance
- Two singles with 20 seconds rest or one double (reset, not touch and go)
- Rest two minutes then repeat.


## Assistance Work

Superset:

- Yoke Bar Good Mornings, $4 \times 12$
- Band Leg Curls, $4 \times 15$


# Reverse Hypers, Long Strap, $5 \times 25$ 

Split Squats, $4 \times 12$ Each Leg
Ab Wheel, $4 \times 10$

## Week 2 (43 Days Out)

Superset Three to Six Rounds

## Isometric Deadlift Against Pin 3

- 5-6 seconds
- Start counting once the bar hits the pins.
- Rest two minutes.


## Speed/CAT Deadlift

- 60\% Bar Weight
- 10-20\% Accommodating Resistance
- Two singles with 20 seconds rest or one double (reset, not touch and go)
- Rest two minutes then repeat.


## Assistance Work

Superset:

- Yoke Bar Good Mornings, $4 \times 12$
- Band Leg Curls, $4 \times 15$

Reverse Hypers, Long Strap, $5 \times 25$
Split Squats, $4 \times 12$ Each Leg
Ab Wheel, $4 \times 10$

## Week 3 - Deload

## Dynamic Effort (39 Days Out)

Only assistance work.

## Max Effort (36 Days Out)

Good mornings for multiple sets of six. No deadlifts.

Assistance work for low back, hamstrings, quads and abs.

## Week 1, Cycle 2 (29 Days Out)

Superset Three to Six Rounds

## Isometric Deadlift Against Pin 2

- Stand on half-inch mat.
- $65 \% \times 5-6$ seconds
- Start counting once the bar hits the pins.


## Speed/CAT Deadlift

- 55\% Bar Weight
- 10-20\% Accommodating Resistance
- Two singles with 20 seconds rest or one double (reset, not touch and go)
- Rest two minutes then repeat.


## Assistance Work

- Reverse Hyper, Short Strap, 4-6 x 15

Superset:

- Leg Extensions, $4 \times 12$ (two-second squeeze)
- Back Raises, $4 \times 12$
- Pulldown Abs, $5 \times 15$
- Rest two minutes.


## SHOP STRONGMAN $\rightarrow$



## Week 2, Cycle 2 (22 Days Out)

## Superset Four Rounds

## Isometric Deadlift Against Pin 3

- Stand on half-inch mat.
- 5-6 seconds
- Start counting once the bar hits the pins.
- Rest two minutes.


## Speed/CAT Deadlift

- 65\% Bar Weight
- 10-20\% Accommodating Resistance
- Two singles with 20 seconds rest or one double (reset, not touch and go)
- Rest two minutes then repeat.

After the four isometric/speed deadlifts, I worked up taking a heavy single that was close to my opener. In this workout, I pulled 711 plus some chains, and my opener was 730 at the meet.

## Assistance Work

- Reverse Hypers, Short Strap, $4 \times 15$

Superset:

- Leg Extensions, $4 \times 12$ (two-second squeeze)
- Back Raises, $4 \times 12$
- Pulldown Abs, $5 \times 15$

At this point I started my taper going into the meet, doing only dynamic deadlifting. After this session, I did not need to take an opener, as my heavy single was included in the workout. I knew that from this point forward I would not get any stronger but I could hurt my progress if I got greedy. I was also a grumpy bastard and knew I needed some rest. It all paid off in the end.


## The Results

The results speak for themselves. Adding that much to one lift after years of stagnation is enough proof that isometrics are worth their weight in gold. I was too hard-headed to quit and kept looking for answers. Thankfully, I found it before I quit. Now before you jump into a similar cycle, you need to think about a few things.


## Considerations and Recommendations

Before you think about trying this cycle, all the pieces need to fit together. I have not pushed my squat while I have been doing this cycle. I did enough to squat 600 in briefs in a full meet but I am most likely done with heavy squatting due to the knee issues it causes me. I have never done circa max squatting in the same meet prep. So, for those of you who will do circa max or other heavy squatting, you may want to do this as a two-week cycle and not four.

For those of you who want to peak for a deadlift meet or who are taking a token squat, you can run this as is, only adjusting the pin settings. You must also consider everything I have done over the last 13 years before I started isometrics. Your GPP and recovery levels need to be high enough to recover from this intense work. You might not be ready for this cycle but a cycle modified for you could be done. If you have any questions or need help setting up your cycle please contact me at regionbarbell@gmail.com. Good luck!


## MATT LADEWSKI

Matt Ladewski is the owner of The Region Barbell Club in Munster, Indiana and has been involved in the sport of powerlifting for 16 years. As he continues to pursue bigger numbers of his own on the platform, his attention has recently shifted to coaching his many athletes, including a WPF and an AWPC champion. A columnist and the social media manager of elitefts, Matt shares his training knowledge and experience as he writes about both his own training and the coaching of his athletes. Matt's best competition lifts include an 835-pound squat, a 550 -pound bench press, and an 800-pound deadlift.
www.regionbarbell.com/about.html

## 16-WEEK POWERLIFTING/BODYBUILDING HYBRID PROGRAM

## PETE STABLES



Let me make this absolutely clear. I'm not trying to butcher any of the programs that I reference in this article. But also know that this was the most fun l've had in years. It completely changed my physique and led me to take the BPU British powerlifting record in the $100-\mathrm{kg}$ raw with wraps class.

Here it is...

## Weeks 1-6

A classic bodybuilding split using variations of the lifts that you would use in your regular powerlifting routine. For example, if you normally use a low bar position with a belt on when you squat, your transition would be to that of a high bar squat, sans belt. An incline bench press would replace the classic flat bench press, and a sumo deadlift takes the place of a conventional pull and vice versa.

## Week 7

Off

## Week 8

Everyday max testing plus $5 \times 5$ at 60 percent following each tested lift using the competition lifts.

## Week 9-14

A linear powerlifting progression as laid out below. When training clients, l've also found that 5/3/1 works particularly well for the purposes of this program.

## Week 15

Off

## Week 16

EDM testing plus $5 \times 5$ at 60 percent using the lifts that you intend to replicate in the upcoming bodybuilding cycle.


Istumbled uponthis method oftraining completely by chance when I found and became interested in John Meadows' methods. I had been riding a linear powerlifting progression for quite some time and had reached a stage where I yearned to try something a little different to that which I had become accustomed. My goal, like many, has always been to be bigger and stronger, and I have an equal love for both bodybuilding and powerlifting alike. The issue was that trying to combine both styles in a single session left either the hypertrophy work or the strength aspect not receiving the full attention required to reap the results that I had been chasing. If I put my heart and soul into lifting heavy first in the workout, the assistance work, especially the final exercise or two, lacked the enthusiasm placed upon them had they been priority number one or indeed been trained completely separately.

The other issue for me is that following any set program for too long and with little variation left me burned out, and my physique and strength started to stall or even deteriorate. Honestly, switching from a linear progression to higher rep, higher volume workouts was a breath of fresh
air. I loved the fact that I didn't have to record my weights or add pounds to the bar at every session. Anyone who has spent a considerable amount of time following a linear progression will have born witness to the fact that the ever increasing load can be a physical and psychological cross to bear without sufficient rest. This bodybuilding template allows you to only work as hard as you are able at any particular time (although even on a day when you feel less than stellar, a typical leg workout of this variety is akin to a secular baptism by fire). Not to mention the fact that spending an entire session on just arm work is, to quote Winston Churchill, "fucking awesome."

I followed this Mountain Dog-inspired protocol by default for six weeks. I was due to take my wife away for her birthday and decided to test my one-rep maxes before we left, partly due to joining a new gym and wanting to show everyone there that there was a new alpha male in town. Also, I had hopes that my strength hadn't plummeted from all the fun l'd been having.



As it turned out, the only other person in the entire gym to film my max on that particular day was 'Geraldine.' Short-sighted, hard of hearing and no dab hand with an iPhone, she had clearly seen it all before and was unimpressed by the presence of a 102-kg 'alfalfa male' in her dojo. Nevertheless, I proceeded to dominate a $15-\mathrm{kg}$ PR squat, triumphantly extending a metaphorical middle finger in the direction of Geraldine's complete lack of interest. "Take that, Grandma!"

On returning from holiday, I transitioned back into powerlifting because I had a meet approaching. I couldn't believe how much strength I had gained from my bodybuilding endeavors. Suffice it to say that the meet went pretty damn well. When I arrived home, I transitioned back to the bodybuilding phase to see if I could replicate my prior success in both my own training and that of my clients.

So who can benefit from this bastard child of some of the most proficient methods ever created? First and foremost, I wouldn't recommend this way of lifting to a beginner. It is much better suited to an individual who already has a few years of hard labor under his belt. Understand that this doesn't mean someone who has milled around, chopping and changing programs, not really progressing in strength or size for the past couple of years. To get any form of return from this method of training, you have to:

- Have a good, solid strength base. I like to use something close to Rippetoe's guide for the everyman, which is to say that you should be at least squatting 180 kg , benching 140 kg and deadlifting 220 kg .
- Know how to apply intensity to your lifts but simultaneously be able to autoregulate your training. The bodybuilding portion of this routine isn't a time to screw around and let intensity take a backseat. Performed correctly, it can be brutal.
- Rotate the three big lifts. For me, six weeks of beltless high bar squatting improved my overall squat strength (where I usually use a low bar position and a belt). On my second six-week cycle, I switched back to my regular low bar style and presto! I had gained strength! The same applies to the bench press. On my bodybuilding cycle, I kept to a shallow incline, and when it came time to deadlift, I pulled conventional in contrast to the sumo stance that I used during my powerlifting phase.


The two-week transitional phase between cycles is used as a one-week recovery period where only light, low intensity conditioning is performed followed by a three-day split the next week, where you perform a new everyday max (EDM) using your competition lifts. These are then to be followed by $5 \times 5$ at 60 percent of your new EDM. The goal for the $5 \times 5$ portion is to be as explosive as possible throughout the entire range of motion and also to practice the lifts you will be using in the upcoming six-week cycle.

The everyday max is taken from Paul Carter's 'Base Building.' The idea is to perform a single rep that you could take any day of the week. It should be heavy enough that you would need to psyche yourself up to hit it. You can work up to this same number after every six-week period without need of adding more weight.

The way to tell that you have become stronger will be observed by how fast you move that bar. If your first attempt at that particular weight was somewhat of a grinder, but six weeks later, you stand up so fast that the bar practically leaps off your back, you have gained strength. If you really must test your true one-rep maxes, the prior week's rest should accommodate you potentially hitting some decent PRs. However, as Mr. Carter says, "One-rep maxes should be saved for meet day." I would agree, unless you don't plan to compete.

If following 5/3/1 for the six-week strength cycle, don't take a deload. Instead, follow two straight cycles back to back.

Use your own judgment with the assistance work, but I would aim to use exercises that you didn't use during the bodybuilding phase. Pick two or three and stick with them for the entire block.

Too often, we never really know which supplementary movements work for us because we never give them enough time to produce any tangible results. I hate dumbbell rows and would perform them once in a blue moon. However, I stuck with them for the entire six-week run and now l love them because they brought some really apparent symmetry to my back and thickened up my lower lats noticeably. If following a three-day total body routine, forget any assistance work aside from chins or rows.

The beauty of this routine is quite simply that neither strength nor aesthetics need play second fiddle to one another. They do, in fact, make great playmates if they are, in turn, given their chance to shine.


This is the split that I used for the two phases:

## Phase 1

## Weeks 1-6

## Monday:

- Pre-exhaust cable chest fly, $4 \times 12$
- Incline barbell bench press, $4 \times 8$
- Decline dumbbell bench press, $4 \times 15$
- $\quad$ Side raises, $3 \times 25$
- Machine overhead press, 25-20-15-10


## Tuesday:

- Dumbbell rows, $4 \times 12$
- Conventional deadlifts, $4 \times 8$
- Lat pull-down, $4 \times 15$
- Rev cable fly, $3 \times 25$
- Shrugs, 25-20-15-10


## Thursday:

- Leg curls, $4 \times 12$
- High bar beltless squats, $4 \times 8$
- Leg extensions, $4 \times 15$
- Calf raise, $3 \times 25$
- Leg press, 25-20-15-10


## Friday:

- Cross body curls, $4 \times 12$
- Superset with close grip bench, $4 \times 8$
- Hammer curls, $4 \times 15$
- Superset with skull crushers, $4 \times 15$
- Ez bar curls, 25-20-15-10
- Superset rope push-downs, 25-20-15-10

You don't have to increase the weights each week, nor do you have to record your sessions if you don't want to. As long as you're working all out and achieving an insane pump, you're following the program. Due to the high intensity and overall volume achieved, recovery is a crucial factor. As John Meadows recommends, it would be wise to have an intra-workout nutrition protocol in place before starting this program.

## Week 7

Rest

## Week 8

Max testing using the lift variation that you intend to incorporate in phase two. Follow each lift with $5 \times 5$ at 60 percent of your tested max. Perform each lift on a separate day.

## Phase 2

## Weeks 9-14

## Monday:

- Flat barbell bench press, 6X 4 (choose a load that you can accomplish six sets across with)
- Incline barbell or dumbbell bench press, 4 $\times 6$
- Seated behind the neck press or dumbbell press, $2 \times 8$-10


## Wednesday:

- Deadlift, $3 \times 3$
- Weighted chins, $6 \times 4$
- Barbell rows, $4 \times 6$
- Seated cable rows, $2 \times 8-10$


## Friday:

- Low bar belted squat, $6 \times 4$
- Front squat or leg press, $4 \times 6$
- Barbell lunges, $2 \times 8-10$

For these six weeks, you should aim to increase the load anywhere from 2.5 kg to 5 kg weekly. If the increase causes you to have to break up the sets, stick with that load until you're able to perform all the sets unbroken.

## Week 15

Rest

## Week 16

Max testing followed by $5 \times 5$ at 60 percent using the lift variations that you intend to use in the bodybuilding phase.


## PETE STABLES

Pete Stables is a strength coach, competitive Powerlifter, writer for elitefts.com and author of the best selling ebook The Skinny Guys Guide to Building More Muscle.
"As a former endurance athlete and self-confessed bag of bones, I had a truly uphill battle to build any respectable strength or appreciable muscle mass. I have spent years honing my craft which culminated in taking the BPU British record for powerlifting in the 100kg Raw with wraps class in 2014. I currently hold a 272.50 kg deadlift, 260 kg squat and a 160 kg bench press, with a goal of hitting 180 kg this year in competition.

## HOW I BENCHED 500 POUNDS AS A TEENAGER

## DAVE TATE



## The Beginning

Thisallbeganwhenmydadsignedmeupataneighborhoodbarbellclub.Iconsiderthistobethefirst "real"trainingldidafterspendingonestupidyearjerkingaroundwith someweightsinthegarage. The training was basic linear periodization, and although you'll see it was flawed as hell, I did make really good gains off of it. This phase laid the foundation for the lifter l'd eventually become.

## Some Back Story

For a young kid just starting out, I sure was anal.
Back then I recorded everything - and I mean everything. My workout log book not only had my sets, reps, and poundages, but also how I felt that day, my last meal before training, even my Biorhythm. (l'm not sure what the point of that was except to let me know that I should look forward to having a shitty day.)

I took this approach because I wanted to understand everything about getting strong so I could eventually tweak it and make it better. What's interesting is that despite all my record keeping, things changed very little - except for my poundages.

Basic linear periodization is essentially limited block training (which has been around for years), but with less exotic names. So instead of nasty Eastern European sounding phases like "accumulation" and "intensification" we have the user-friendlier hypertrophy and strength.

Interestingly, those old school Eastern European names are making a comeback as of late, but no matter how many different ways you try to dress up this pig, it's still a limited form of block training.


## Basic Linear Periodization - By the Numbers.

## Phase: Hypertrophy

(high volume - low intensity)

- Duration (in weeks): 4-6
- Intensity: 50-70\% range
- Reps: 8-20
- Sets: 3-5
- Rest: 2-4 minutes
- Goals: conditioning, build muscle mass


## Phase: Strength Phase

- Duration (in weeks): 4-6
- Intensity: 75-86\% range
- Reps: 4-6
- Sets: 3-5
- Rest: 2-4 minutes
- Goals: strength


## Phase: Power

- Duration (in weeks): 3-4
- Intensity: 86-93\%
- Reps: 3-5 reps
- Sets: 3-5
- Rest: 3-5 minutes
- Goals: Power


## Phase: Peak

- Duration (in weeks): 2-4
- Intensity: 93\% plus
- Reps: 1-3
- Sets: 2-3
- Rest: 4-7 minutes
- Goals: PR's, meets


## Phase: Transition (Active Rest)

- Break after training
- Duration (in weeks): approximately 4



## Setting Up This System

Set up is simple; which is also the system's greatest drawback.

You'd basically find a meet and count backwards in time. The volume starts high and the intensity (as expressed as percentage of one-rep max) was low. Every phase, and every week, you upped the intensity and dropped the volume.

The trick to avoiding problems is to be as accurate as possible when choosing your 1RM. If you guess that your 1RM in the squat is 540 but it's really more like 500, you'll be okay for the first couple phases, but God help you when it comes time for triples.

For accessory movement, there aren't percentages listed, something that has messed up many overzealous novice lifters. I received good advice early on that saved me a lot of trouble, namely to train the accessories easy until they needed to be hard. In other words, in the first phase l'd do stiff-leg deadlifts for 3 sets
of 8 with a weight that I could've likely hit 3 sets of 20 . Leaving reps on the table here early on is key to avoid overtraining down the road.

By the end of the hypertrophy phase I was usually as heavy [bodyweight] as I was going to be, and my weight would then start to drop with each successive phase. I attributed this to the fact that all the hypertrophy work was gradually phased out, and eventually even the accessories were eliminated. If you're a young guy who likes his guns and upper pecs, this sucks.

Intensity wise, you never come close to failure until around week seven as the goal through each phase is to never miss a lift. If it's week nine and you start missing lifts, you definitely are concerned. "Is my training program completely retarded?" becomes a reoccurring anxiety.

After the meet, the idea was not to train at all for a good four weeks to recover before starting up again with the hypertrophy phase.


## Benefits of the System

## There are numerous benefits to training in this fashion:

## Ease of setup.

As noted earlier, setting up a plan like this is a breeze, even for beginners. Once a proper 1RM is established, each week the intensity is raised and volume is lowered. Weights are rounded up to the nearest 5 or 10 pounds (no, no PlateMates)!

Gear is not introduced until well into the program, usually raw until the sets of 5 . Then we add suits and go straps down; at 3's we go straps up.

I always preferred to go without gear for as long as possible; until I felt the percentages start to creep up on me.

## Gives time to get used to the heavy weight.

The biggest mistake rookies make is going too heavy too soon. The long buildup to heavy weights helps keep the young guys reigned in.

The specific goal per phase is good for beginners.

The different blocks allow beginners to avoid distractions and key in on one strength quality at a time.

Beginners often have what's know as training ADHD, where they want to blast up their bench while adding an inch to their arms and improve their body composition. This style teaches them to have their eyes on just one prize at a time.

For example, during the hypertrophy phase the goal is gaining size. The weight on the bar is not important. During the strength phase on the other hand, poundage is key while hypertrophy is no longer a concern.

## It's good for training in groups.

Because the goals are clearly defined, you can have athletes of differing strength levels train together and still make progress. It's very convenient for the overworked/underpaid college strength coach.

## These cycles are as old as time.

Every powerlifter has done some program like this. If it didn't at least sort of work, no one would have passed it on to the next generation; unless the next generation was a bunch of retards who didn't deserve to be strong.

Here's a sample basic linear periodization program:

| Week | Squat Day <br> Monday | Bench Day <br> Wednesday \& Saturday | Deadlift Day <br> Thursday |
| :---: | :---: | :---: | :---: |
| 1 | Squat 55\% for 3 sets 15 <br> Good Morning 2 sets 15 <br> Weighted Sit Ups 2 sets 20 | Day 1 Heavy Day <br> Bench 50\% 3 sets 12 <br> Close Grip Bench 3 sets 10 <br> Incline Bench 3 sets 10 <br> One Arm DB Press 3 sets 10 <br> Pushdowns 4 sets 15Day 2 Light <br> Day <br> Dumbbell Presses 3 sets 10 <br> Side Raises 3 sets 10 <br> Front Raises 3 sets 10 <br> Barbell Extensions 3 sets 10 | Deadlift 50\% 3 sets 12 <br> Stiff Legs 3 sets 8 <br> Barbell Rows 3 sets 10 <br> Shrugs 3 sets 12 <br> Abs 5 sets 20 |
| 2 | Squat 60\% 2 sets 12 <br> Good Morning 2 sets 15 <br> Weighted Sit Ups 2 sets 20 | Day 1 Heavy Day <br> Bench 60\% 3 sets 10 <br> Close Grip Bench 3 sets 10 <br> Incline Bench 3 sets 10 <br> One Arm DB Press 3 sets 10 <br> Pushdowns 4 sets 15Day 2 Light <br> Day <br> Dumbbell Presses 3 sets 10 <br> Side Raises 3 sets 10 <br> Front Raises 3 sets 10 <br> Barbell Extensions 3 sets 10 | Deadlift 55\% 3 sets 10 <br> Stiff Legs 3 sets 8 <br> Barbell Rows 3 sets 10 <br> Shrugs 3 sets 12 <br> Abs 5 sets 20 |


| 3 | Squat 65\% 3 sets 10 <br> Good Morning 2 sets 15 <br> Weighted Sit Ups 2 sets 20 | Day 1 Heavy Day <br> Bench 65\% for 3 sets 8 <br> Close Grip Bench 3 sets 10 <br> Incline Bench 3 sets 10 <br> One Arm DB Press 3 sets 10 <br> Pushdowns 4 sets 15Day 2 Light <br> Day <br> Dumbbell Presses 3 sets 10 <br> Side Raises 3 sets 10 <br> Front Raises 3 sets 10 <br> Barbell Extensions 3 sets 10 | Deadlift 65\% 2 sets 8 <br> Stiff Legs 2 sets 8 <br> Barbell Rows 3 sets 10 <br> Shrugs 3 sets 10 <br> Abs 5 sets 20 |
| :---: | :---: | :---: | :---: |
| 4 | Squat 70\% 3 sets 8 <br> Good Morning 2 sets 15 <br> Weighted Sit Ups 2 sets 20 | Day 1 Heavy Day <br> Bench 70\% 3 sets 6 <br> Close Grip Bench 3 sets 6 <br> Incline Bench 3 sets 6 <br> One Arm DB Press 3 sets 8-10 <br> Pushdowns 3 sets 10-12Day 2 Light <br> Day <br> Dumbbell Presses 3 sets 8 <br> Side Raises 3 sets 8 <br> Front Raises 3 sets 8 <br> Barbell Extensions 3 sets 8 | Deadlift 70\% 3 sets 5 Stiff Legs 2 sets 5 <br> Barbell Rows 3 sets 6 <br> Shrugs 3 sets 6 <br> Abs 3 sets 20 |
| 5 | Squat 74\% 4 sets 6 <br> Good Morning 2 sets 15 <br> Weighted Sit Ups 2 sets 20 | Day 1 Heavy Day <br> Bench 75\% 3 sets 5 <br> Close Grip Bench 3 sets 6 <br> Incline Bench 3 sets 6 <br> One Arm DB Press 3 sets 8-10 <br> Pushdowns 3 sets 10-12Day 2 Light <br> Day <br> Dumbbell Presses 3 sets 8 <br> Side Raises 3 sets 8 <br> Front Raises 3 sets 8 <br> Barbell Extensions 3 sets 8 | Deadlift 74\% 3 sets 5 <br> Stiff Legs 2 sets 5 <br> Barbell Rows 3 sets 5 <br> Shrugs 3 sets 5 <br> Abs 3 sets 12 |


| 6 | Squat 78\% 3 sets 5 <br> Good Morning 2 sets 15 <br> Weighted Sit Ups 2 sets 20 | Day 1 Heavy Day <br> Bench 80\% 3 sets 5 <br> Close Grip Bench 3 sets 6 <br> Incline Bench 3 sets 6 <br> One Arm DB Press 3 sets 8-10 <br> Pushdowns 3 sets 10-12Day 2 Light <br> Day <br> Dumbbell Presses 3 sets 8 <br> Side Raises 3 sets 8 <br> Front Raises 3 sets 8 <br> Barbell Extensions 3 sets 8 | Deadlift 78\% 3 sets 5 Stiff Legs 2 sets 5 Barbell Rows 3 sets 5 Shrugs 3 sets 5 Abs 3 sets 10 |
| :---: | :---: | :---: | :---: |
| 7 | Squat $82 \% 2$ sets 5 <br> Good Morning 2 sets 15 <br> Weighted Sit Ups 2 sets 20 | Day 1 Heavy Day <br> Bench $85 \%$ for 3 sets 5 <br> Close Grip Bench 3 sets 6 <br> Incline Bench 3 sets 6 <br> One Arm DB Press 3 sets 8-10 <br> Pushdowns 3 sets 10-12Day 2 Light <br> Day <br> Dumbbell Presses 3 sets 8 <br> Side Raises 3 sets 8 <br> Front Raises 3 sets 8 <br> Barbell Extensions 3 sets 8 | Deadlift 84\% 2 sets 5 Stiff Legs 2 sets 5 <br> Barbell Rows 2 sets 5 <br> Shrugs 3 sets 5 <br> Abs 3 sets 10 |
| 8 | Squat $87 \% 3$ sets 3 <br> Good Morning 2 sets 15 <br> Weighted Sit Ups 2 sets 20 | Day 1 Heavy Day <br> Bench 88\% for 3 sets 3 <br> Close Grip Bench 2 sets 3 <br> Incline Bench 2 sets 6 <br> One Arm DB Press 2 sets 6 <br> Pushdowns 2 sets 8Day 2 Light Day <br> Dumbbell Presses 2 sets 6-8 <br> Side Raises 3 sets 10 <br> Front Raises 3 sets 10 <br> Barbell Extensions 3 sets 10 | Deadlift 86\% 2 sets 3 Stiff Legs 2 sets 3 <br> Barbell Rows 2 sets 3 <br> Shrugs 2 sets 3 <br> Abs 2 sets 8 |


| 9 | Squat 90\% 2 sets 3 <br> Good Morning 2 sets 15 <br> Weighted Sit Ups 2 sets 20 | Day 1 Heavy Day <br> Bench 92\% 2 sets 3 <br> Close Grip Bench 2 sets 3 <br> Incline Bench 2 sets 6 <br> One Arm DB Press 2 sets 6 <br> Pushdowns 2 sets 8Day 2 Light Day <br> Dumbbell Presses 2 sets 6-8 <br> Side Raises 3 sets 10 <br> Front Raises 3 sets 10 <br> Barbell Extensions 3 sets 10 | Deadlift 90\% 2 sets 3 <br> Stiff Legs 2 sets 3 <br> Barbell Rows 2 sets 3 <br> Shrugs 2 sets 3 <br> Abs 3 sets 10 |
| :---: | :--- | :--- | :--- |
| 10 | Squat 93\% for 3 <br> Good Morning 2 sets 15 <br> Weighted Sit Ups 2 sets 20 | Day 1 Heavy Day <br> Bench 94\% for 2 sets 1 <br> Close Grip Bench 2 sets 3 <br> Incline Bench 2 sets 6Day 2 Light <br> Day <br> Side Raises 3 sets 10 <br> Front Raises 3 sets 10 <br> Barbell Extensions 3 sets 10 | Stiff Legs 2 sets 1 |
| 11 | Squat 95\% for 3 <br> Good Morning 2 sets 15 <br> Weighted Sit Ups 2 sets 20 | Day 1 Heavy Day <br> Bench 96\% for 2 sets 1 <br> Close Grip Bench 2 sets 3 | Deadlift 96\% 2 sets 1 <br> 12 <br> Squat 97\%-100\% for 1 <br> Good Morning 2 sets 15 <br> Weighted Sit Ups 2 sets 20 <br> Day 1 Heavy Day <br> Bench 98\%-100\% for 2 sets 1Deadlift 98\%-100\% 2 |

## To excel in the face of opposition, I will. Driven, I am.

## Pitfalls

There are many pitfalls to training in this fashion. Since this is familiar territory for many of you, l'll try to keep this brief:

Percentage based training is always skewed. Always. Let's get one thing straight: a competition max is not the same as a training max. Fact is, a good competition max is often $10 \%$ higher than a training max. This is extremely important because if you base all your numbers off an inflated percentage, you'll be in for a world of hurt.

Sure, at first you'll be fine, when that $70 \%$ is really an $80 \%$, but wait until that $80 \%$ you're supposed to do 3 sets of 5 with is really $88 \%$ and tell me how those sets feel.

The end result is that guys start taking sets off because it's too difficult. Three sets becomes two or even one "HIT" set, which only leads to more problems down the road.

## Peaking can be tough.

This system is geared towards peaking for one meet per cycle. Most guys would usually shoot for three main meets per year, with the odd bench or deadlift-only meet thrown in along the way just to stay sharp.

Thing is, what if you were like me and you compete a lot? If you schedule two meets one week after the other it can be done; basically, you set the first meet of the series at $98 \%$, essentially turning that meet into another training session, and peak as normal for the second meet.

But what if your meets are staggered four weeks apart? What do you do then?

## The breaks are long.

Some people just lose too much with the long active rest period. It never affected me that much, and l'd even schedule this active recovery period for when football training camp started up. Once the actual playing season started and practices became much less taxing, l'd start powerlifting training again.

Again, I was a young lifter and nowhere near my training or strength limits. An experienced lifter closer to the top of their game can't afford taking such a long period of non-lifting without risking losing much of the previous cycle's gains.

## Abilities aren't maintained from cycle to cycle.

In my experience, much of the size built during Phase 1 would be a distant memory by the Peak Phase, and obviously, much of the single-rep performance attained in the Peak Phase would be gone by the time Hypertrophy started up again.

## The accessory work isn't well planned out.

Looking back, I can tell we didn't have a clue what we were doing when it came to planning accessory work. Everyone just followed what everyone else was doing.

Look at the deadlift day, for instance: I think the accessory exercises were picked out of sheer laziness more than anything else. You just finished doing deadlifts, "Hey, let's do stiff legs next. They help the deadlift, right, and we only have to strip some weight off the bar. Then we'll do bent over rows; shit, we don't even have to move!" The fact that the accessories never changed throughout the cycle was another big problem.


## Very little attention paid to technique.

The biggest thing I learned after moving to Westside was the importance of technique, hands down. The fact that basic linear periodization programs put so little emphasis on it is a big negative in my opinion.

For example, take any multiple-rep set of deadlifts. It's really only the first rep of a deadlift set that actually "works."

If you watch closely, the second rep is always better and faster than the first rep, 100\% of the time. It has to do with the stretch reflex, and the fact that during the second rep the hips are set higher and closer to the bar.

If they do multiple reps with a traditional deadlifting bar, which bends, the weights closest to the end of the bar will touch the floor before the bar has even settled. If you look closely, many times the weights closest to the lifters are still 3-4 inches off the floor when the weights on the far end touch. It's like doing a bench press and touching your chest on the first rep and having someone slip in a one-board for the rest of the set.

If you're going to do deadlifting for reps, you need to use a stiff bar. If you're looking for a real challenge try using a squat or fat bar.

Anyway, that's not an indictment of linear periodization per se, but an example of the type of technique that is never mentioned in typical periodization circles. I can think of dozens of examples just like this.

## Why I Moved Away From This System

I had a number of reasons why I moved away from this style of training, not the least of which being I had started college and was training at a gym that had zero powerlifters. So getting good training partners, even a good spot was a tall order, so I found myself looking to try something new.

Furthermore, I was young, in college, and wanted to be jacked.

## How Would I Change This System?

A better question would be how HAVE I changed it? Despite the previously mentioned pitfalls, I've used this basic periodization model with some lifters, especially intermediates (gym rats with decent lifting experience, not raw newbies). I first take a good close look at the lifter before deciding on this route.

How's the lifter's technique? How strong are they? How well do they recover? What's their lifting schedule like? What about their work/ school schedule?

All of these factors play a deciding role in whether this is the right road for them to go or not. Often, there are better-and faster-ways to reach their desired goal.


## But if someone is hell bent on doing it, these are the modifications to make:

## Use compensatory acceleration on all warmup sets.

Since there is no dynamic work whatsoever, perform all warm-up sets (between 40\% and their first work set) as explosive as possible. Actually, do all sets over 40\% as explosively as you can. I would go so far as to add in 2-3 additional explosive warm-up sets to get in even more dynamic work. Just take small jumps as you work up.

For example, let's say the program calls for 3 sets of 10 with 255. A traditional warm-up might be 135,185 , and 225 . In this case, l'd go with dynamic sets of 5 for $135,165,185,205,225$, and then start work sets.

## Select accessories based on weak points and cycle them.

Accessory work should still be meaningful and address the lifter's needs. I suggest sticking with the same accessories for three weeks before switching them up for something similar (i.e., stiff leg deadlift for Romanian deadlift). It's a good idea to try to hit a PR week three-rep maximum (not a 1RM). You should always be working on pushing your accessory work higher, either with heavier weight or more reps.

## Keep the volume more consistent.

The program starts with way too high a workload and comes down to an insufficient volume to maintain the abilities previously derived from the earlier phases. A more consistent, manageable volume throughout would help avoid this. Don't misunderstand - the volume needs to change and is a large part of programming, but the drop from week one to the end of the cycle is not the most efficient way to go about developing strength.

## Switch from a 12-week program to a 24 week program.

In between every week of the 12 week program should be a week of strictly dynamic work. This is a BIG change and something that will be covered in a future article BUT is one of the most critical changes l've seen to making this work.

So if week one calls for 315 for 5 in the squat, week two would be a dynamic workout, such as 8 sets of 3 with $40 \%$.

## Use special movements at the front of the cycle.

I suggest only using "real" squats in the very last phase of the cycle. Until then, use variations like band squats, box squats, reverse band squats, etc.

This slightly changes up the squat recruitment pattern, but also the different squat variations have different rep maxes, so by changing the lift you cycle the workload.

For example, let's say you can do 405 for 5 reps on back squats; you might be able to do 315 for 5 on the box. You're giving the same effort with each exercise, but exposing the body to vastly different workloads ( $315 \times 5=1575$ pounds, $405 \times 5=2025$ pounds). This is another hugeand very overlooked-lesson I learned from Louie Simmons.

## You can combine weekly squat variations in your program with inserting dynamic work every other week:

Week 1 ME: Reverse Band Squat
Week 2 DE: Free Squat for Speed
Week 3 ME: Band Squat
Week 4 DE: Speed Squat off Box
Week 5 ME: Squat with Chains
Note: ME stands for "Maximum Effort," which means building to a 1RM or 3RM, while DE, which stands for "Dynamic Effort,» implies speed work, i.e. 8 sets of 3 at $55 \% 1$ RM with 60 seconds rest between sets.

You get the idea.


## For squats, percentages should be based off a perceived max, not an actual squat max.

You never need to work up to a true 1RM. A perceived maximum is sufficient, and working up to a 1RM just isn't necessary and is often more trouble than it's worth (see: working off a training max versus a competition maximum).

## What you eat matters.

Guys starting out now have it easy. Today you have websites with real information, online stores to get the best gear, and supplements that actually work. When I look back at how I ate back then it depresses me. I feel like Marlon Brando in On the Waterfront: I coulda been a contender.

# Here's how Itypically ate back then: 

## Breakfast

Cereal and Ass-Flavored Protein Drink
This was back when all the shakes were not really shakes, just a nasty powder of mystery proteins that ended up floating on the top of the drink and looked like cottage cheese.

## Lunch

I bought lunch so I always bought two of them; typical school cafeteria kind of stuff.

## Snack

Coffee, Copenhagen, and corn nuts. I always had either early release from school (work related) or I cut class (long story for another day).

I would walk down to the local convenience store and buy corn nuts and Copenhagen and then spend the rest of the time sitting at McDonalds drinking coffee. After that I would head back for the last two periods of the day. How's that for wasted youth?

## Training Meal

This was always Mountain Dew and water.

## Dinner

Whatever my Mom made. She made great meals and we always ate as a family (table cloth, good dishes, etc.). Typically it was some kind of meat with vegetables and rice, potatoes, or yams. Thank God for this meal - it was about the only nutrition I consumed all day.

After dinner l'd eat whatever was in the house. Fortunately, we never had much junk food around that I could get into.

Before bed l'd have another nasty-ass shake or ice cream - usually ice cream.

## Conclusion

After taking a second look at this article, it does look like l'm dumping all over linear periodization when that really isn't my intention. Again, I made great gains off of this system and if it weren't effective, coaches would've abandoned it long before I ever showed up on the scene.

It's a good system — follow it with passion and determination and you'll do well. Make the modifications I suggested and it can be improved considerably.


## DAVE TATE

Dave Tate 'Under The Bar' is the founder and CEO of elitefts. com Inc.. Dave has been involved with powerlifting for over three decades, coach, consultant and business owner. He has logged more than 20,000 hours of strength consulting with professional, elite and novice athletes, as well as with professional strength coaches, authored 20 books and written more than 500 articles for magazines and prominent websites. Dave works as a business adviser, speaker, coach, and author, he shows how athletic disciplines teach valuable lessons for overall achievement. He lives with his family in London, Ohio.

## THE 12-WEEK TRAINING PROGRAM I WROTE WITH JIM WENDLER

## CALEB SEXTON



I was talking to Jim Wendler this week during our training session and told him I wanted to write another article for elitefts, but I wasn't sure what to write. Jim told me to write up a 9 or 12 week program based on the training we have been doing. After little thought, we wrote up a 12 -week program like Jim suggested. Here's what we developed:

Before starting this program, you need to find out an accurate training max (TM) for yourself. To find your training max, take your one rep max (1RM) and multiply it by 0.85 . This is now your training max. You will use your training max to calculate your work sets. Here is a example:

- Squat 1RM: 500
- Squat TM: $500 \times 0.85: 425$

Once you have determined each of your training maxes, you use those numbers to determine your work sets. To calculate your work sets, you will take your training max and multiply it by the percentages I will supply you with through the program. This program will be done in three-week cycles. After each three-week cycle you will add five pounds to your bench and overhead press, and you will add ten pounds to your squat and deadlift. Here is a example of one cycle:

## Week One

Set $1 \times 5$ (Training Max $\times$.70)
Set $2 \times 5$ (Training Max $\times$.80)
Set $3 \times 5$ (Training Max $\times .90$ )

## Week Two

Set $1 \times 5$ (Training Max $\times$.65)
Set $2 \times 5$ (Training Max $\times$.75)
Set $3 \times 5$ (Training Max $\times$.85)

## Week Three

Set $1 \times 5$ (Training Max $\times .75$ )
Set $2 \times 5$ (Training Max $\times$.85)
Set $3 \times 5$ (Training Max $\times .95$ )

Add 10 pounds to squat and deadlift training max. Add 5 pounds to overhead and bench training max then start next cycle.


## The Program

## Weeks 1-3

Example of how each week in the cycles are set up above.

## Main Lifts -5 Reps All Sets

Monday - Squat
Supplemental Work $-5 \times 5$ with first set
Wednesday - Overhead Press
Supplemental Work $-5 \times 5$ with first set
Friday - Deadlift and Bench
Supplemental Work - $5 \times 5$ with first set

## Accessory Work

Monday - Rows, Abs, Back Raises, Prowler
Wednesday - Chin Ups, Dips, Curls, Prowler
Friday - Abs, Back Raises, Prowler

## Weeks 4-6

## Main Lifts - 5 Reps All Sets

Monday - Squat
Supplemental Work - 50 total reps with first set
Wednesday - Overhead Press
Supplemental Work - 50 total reps with first set
Friday - Deadlift and Bench
Supplemental Work - 50 total reps with first set
Conditioning - Weight vest walk $\times 2$ miles, 4 days a week

## Accessory Work

Monday - Abs, Back Raises
Wednesday - Chin ups $\times 50$ reps
Friday - Abs, Back Raises


## Weeks 7-9

## Main Lifts - 5 Reps All Sets

Monday - Squat
Supplemental Work - $5 \times 3$ pause squat with first set

## Wednesday - Overhead Press

Supplemental Work - $10 \times 5$ with first set
Friday - Deadlift and Bench
Supplemental Work - Bench $10 \times 5$ with first set

Deadlift $5 \times 5$ with snatch grip, first set

## Accessory Work

Monday - Abs, Back Raises, Prowler
Wednesday - Chin Ups x 50 reps
Friday - Prowler

## Weeks 10-12

# Main Lifts 5x5, Last Set to a Rep PR (No Supplemental Work) 

Monday - Squat

Wednesday - Overhead Press
Friday - Deadlift and Bench

## Accessory Work

Monday - Abs, Back Raises, Prowler

Wednesday - Chin ups, Curls
Friday - Abs, Back Raises, Prowler

## Don't Sabotage the Program

This program is made to be followed strictly. If you sabotage this program you will not see as much progress through the twelve weeks. From what I have seen in the past with good programs, a lot of lifters will say that the program is not for them or that they didn't see the progress they wanted to with the program. What they don't tell you is all the extra lifts they added, or some other bullshit they did during the training program. That is what you call sabotaging the program. From experience with Jim Wendlers 5/3/1 program, I have found that if I I'm not a dumbass and I follow the program strictly, I continue to get bigger, stronger, and faster. Don't let that ego get to you - follow the program.


## CALEB SEXTON

Caleb Sexton is a senior at Urbana University studying Sport's Management. Currently an intern at elitefts, Caleb works at Fed Ex Freight and trains for powerlifting.

# 12-WEEK CONJUGATE PROGRAM FOR RAW POWERLIFTING 

## JOE SCHILLERO



The following is based off what I did for 12 weeks to improve my strength for the Squat, Bench, and Deadlift as a Raw Powerlifter. I based it off of a conjugate framework, utilizing max effort, dynamic effort, and repetition effort exercises. I rotated my max effort work with exercises I've found to benefit my raw lifts. I rotated supplementary exercises in 4 -week blocks, and kept most of the other smaller assistance work simple with a few variations here and there.

Keep in mind that this doesn't account for the time right before a meet, everything will need to be adjusted accordingly for within a few weeks of a competition. Also note that the supplementary and assistance exercises are designed in a way to help me with my weaknesses, they will vary from person to person. This isn't a "Westside" template that you might find somewhere online, this is a conjugate program manipulated to suit my needs and goals, so it will differ from a standard template.

## Competition Deadlift Style: Conventional

Areas of Weakness (These are areas I needed to focus on, but remember everything needs to get stronger as you look at any program): Glutes/ Hips (deadlift lockout/mid-squat), Shoulders/ Triceps (bench lockout).

## Notes Regarding Max Effort (ME) Work

*The ME lifts I chose are what l've seen benefit my raw numbers so far, yours may be different.
*As you can see in the program: I rarely worked up to ME singles two weeks in a row, I either switched back and forth from triples, or added some sort of accommodating resistance or specialty bar - I found that this kept me from stalling or beating myself up too bad. I used a similar concept with my supplementary work on OHP and Deadlifts, only working up to a max single or triple every few weeks. (l've found the most success recently by only pulling ME deadlifts every few weeks).

## Notes Regarding Dynamic Effort (DE) Work

*In this 12 week cycle I primarily used jumps and medicine ball throws for the beginning of my dynamic days (the previous 12 weeks I used standard barbell DE work - l've found the most success for myself through alternating using barbell DE work (speed squats/deads and speed bench w/ accommodating resistance) with
jumps and throws. This allows me to work on my explosiveness without aggravating some injuries that tend to bother me when I overdo it with barbell speed work. This is my personal setup and will vary from person to person.
*Don't overthink the jumps or throws, or overdo it with them. They are in this particular 12 week cycle simply to prime the nervous system and help improve explosiveness before training. If you aren't explosive enough with the prescribed work for that day, you need to use lighter ball/ lower box, or adjust volume.
*I made sure to still utilize CAT (compensatory acceleration training) in my program - I worked on this with my main lifts, but particularly when using accommodating resistance like chains, as well as on supplementary or lighter work.


## Notes Regarding Repetition Work

*Supplementary Exercises: I chose these based off my weaknesses or things that would help improve technique flaws - Again these will vary from person to person. Even things like the height of the board presses (2 board) are chosen specifically because that is the level right below my sticking point for bench.
*Accessory Exercises: Don't overthink these - They were chosen to keep balance, prevent injury, and gain muscle mass. They can easily be modified from person to person.
*When an exercise is noted as 'moderately heavy set of _' it means between 7-9 on RPE scale, depending on how I felt that week.

## Box Jump Progression

Week 1 - Test
Week 2 - 6 sets of 4 jumps @ 75\%
Week 3 - 5 sets of 3 jumps @ $85 \%$
Week 4-4 sets of 2 jumps @ 95\%
*After week 4 re-assess and start at week 1 again.

## Med Ball Throw Progression

Week 1 - Chest Pass against wall, 2-3 sets of 5 throws

Week 2 - Step and Chest Pass, 2-3 sets of 5 throws

Week 3 - Start at week 1 again, and adjust intensity/volume accordingly to how explosive you were (or weren't).

## Abbreviations

ME - Max Effort
DE - Dynamic Effort
OHP - Overhead Press
RB - Reverse Bands
BW - Bodyweight
Wtd - Weighted

## Week 1 - Start of Block 1

## Monday (ME Upper):

A. Bench Press
*Work up to ME Triple
B. Floor Press $3 \times 8$
C. Dumbbell Rows $4 \times 10$

D1. Triceps Pushdowns $3 \times 25$
D2. Bicep Curls $3 \times 15$

Wednesday (DE Lower):
A. Box Jumps
B. Sumo Deadlifts
*Work up to moderately heavy set of 5
C. Wide Stance Box Squats $3 \times 8$

D1. Cable Pull Throughs $3 \times 10$
D2. Abs w/ Spud Strap $3 \times 10$

Thursday (DE Upper):
A. Med Ball Throws
B. Standing OHP
*Work up to moderately heavy set of 5
C. Close Grip Bench Press $3 \times 8$
D. Chins 4 sets max reps (BW or Wtd)
E. Cable Rows $3 \times 10$

## Saturday (ME Lower):

A. Squat
*Work up to ME Triple
B. Hip Belt Squat $3 \times 8$
C. Glute Ham Raise $3 \times 8$
D. Weighted Abs $4 \times 10$

## Week 2

Monday (ME Upper):
A. Bench Press
*Work up to ME Single,
then 1-2 singles w/ reverse band
B. Floor Press $3 \times 8$
C. Dumbbell Rows $4 \times 10$

D1. Triceps Pushdowns $3 \times 25$
D2. Bicep Curls $3 \times 15$
Wednesday (DE Lower):
A. Box Jumps
B. Sumo Deadlifts
*Work up to moderately heavy set of 5
C. Wide Stance Box Squats $3 \times 8$

D1. Cable Pull Throughs $3 \times 10$
D2. Abs w/ Spud Strap $3 \times 10$

Thursday (DE Upper):
A. Med Ball Throws
B. Standing OHP w/ Swiss Bar
*Work up to moderately heavy set of 5
C. Close Grip Bench Press $3 \times 8$
D. Chins 4 sets max reps (BW or Wtd)
E. Cable Rows $3 \times 10$

Saturday (ME Lower):
A. Squat
*Work up to ME Single, then 1-2 singles $w /$ reverse band
B. Hip Belt Squat $3 \times 8$
C. Glute Ham Raise $3 \times 8$
D. Weighted Abs $4 \times 10$

## Week 3

## Monday (ME Upper):

A. Bench Press w/ Chains
*Work up to ME Single
B. Floor Press $3 \times 8$
C. Dumbbell Rows $4 \times 10$

D1. Triceps Pushdowns $3 \times 25$
D2. Bicep Curls $3 \times 15$

## Wednesday (DE Lower):

A. Box Jumps
B. Sumo Deadlifts
*Work up to moderately heavy set of 5
C. Wide Stance Box Squats $3 \times 8$

D1. Cable Pull Throughs $3 \times 10$
D2. Abs w/ Spud Strap $3 \times 10$

## Thursday (DE Upper):

A. Med Ball Throws
B. Standing OHP w/ Fat Gripz (or Axle)
*Work up to moderately heavy set of 5
C. Close Grip Bench Press $3 \times 8$
D. Chins 4 sets max reps (BW or Wtd)
E. Cable Rows $3 \times 10$

Saturday (ME Lower):
A. Squat w/ Chains
*Work up to ME Single,
B. Hip Belt Squat $3 \times 8$
C. Glute Ham Raise $3 \times 8$
D. Weighted Abs $4 \times 10$

## Week 4

## Monday (ME Upper):

A. Bench Press w/ 2 Board
*Work up to ME Single
B. Floor Press $3 \times 8$
C. Dumbbell Rows $4 \times 10$

D1. Triceps Pushdowns $3 \times 25$
D2. Bicep Curls $3 \times 15$

## Wednesday (DE Lower):

A. Box Jumps
B. Sumo Deadlifts
*Work up to moderately heavy set of 3
C. Wide Stance Box Squats $3 \times 8$

D1. Cable Pull Throughs $3 \times 10$
D2. Abs w/ Spud Strap $3 \times 10$

Thursday (DE Upper):
A. Med Ball Throw
B. Standing OHP
*Work up to moderately heavy set of 3
C. Close Grip Bench Press $3 \times 8$
D. Chins 4 sets max reps (BW or Wtd)
E. Cable Rows $3 \times 10$

Saturday (ME Lower):
A. Squat w/ SSB
*Work up to ME Triple
B. Hip Belt Squat $3 \times 8$
C. Glute Ham Raise $3 \times 8$
D. Weighted Abs $4 \times 10$

## Week 5 - Start of Block 2

## Monday (ME Upper):

A. Bench Press w/ Pause
*Work up to ME Triple
B. 2 Board Bench $3 \times 8$
C. Meadows Rows $4 \times 10$

D1. Triceps Pushdowns $3 \times 25$
D2. Bicep Curls $3 \times 15$

## Wednesday (DE Lower):

A. Box Jumps
B. Block pull mid shin (conventional)
*Work up to moderately heavy set of 5
C. Front Squat $3 \times 8$

D1. Hyperextension $3 \times 10$
D2. Abs w/ Spud Strap $3 \times 10$

## Thursday (DE Upper):

A. Med Ball Throws
B. Standing OHP w/ Swiss Bar
*Work up to moderately heavy set of 5
C. Incline Bench Press 3×8
D. Chins 4 sets max reps (BW or Wtd)
E. Cable Rows $3 \times 10$

## Saturday (ME Lower):

A. Squat
*Work up to Moderately Heavy Triple
B. Leg Press $3 \times 8$
C. Glute Ham Raise $3 \times 8$
D. Weighted Abs $4 \times 10$

## Week 6

## Monday (ME Upper):

A. Bench Press w/ Pause
*Work up to ME Single
B. 2 Board Bench $3 \times 8$
C. Meadows Rows $4 \times 10$

D1. Triceps Pushdowns $3 \times 25$
D2. Bicep Curls $3 \times 15$
Wednesday (DE Lower):
A. Box Jumps
B. Conventional Deadlift
*Work up to ME Triple/Single
C. Front Squat $3 \times 8$

D1. Hyperextension $3 \times 10$
D2. Abs w/ Spud Strap $3 \times 10$

Thursday (DE Upper):
A. Med Ball Throw
B. Standing OHP w/ Fat Gripz
*Work up to moderately heavy set of 5
C. Incline Bench Press 3x8
D. Chins 4 sets max reps (BW or Wtd)
E. Cable Rows $3 \times 10$

Saturday (ME Lower):
A. Squat
*Work up to ME Single, then 1-2 w/ RB
B. Leg Press $3 \times 8$
C. Glute Ham Raise $3 \times 8$
D. Weighted Abs $4 \times 10$

## Week 7

## Monday (ME Upper):

A. Bench Press w/ Chains
*Work up to ME Triple
B. 2 Board Bench $3 \times 8$
C. Meadows Rows $4 \times 10$

D1. Triceps Pushdowns $3 \times 25$
D2. Bicep Curls $3 \times 15$
Wednesday (DE Lower):
A. Box Jumps
B. Block pull mid shin (conventional)
*Work up to moderately heavy set of 5
C. Front Squat $3 \times 8$

D1. Hyperextension $3 \times 10$
D2. Abs w/ Spud Strap $3 \times 10$

## Thursday (DE Upper):

A. Med Ball Throws
B. Standing OHP
*Work up to moderately heavy set of 5
C. Incline Bench Press 3x8
D. Chins 4 sets max reps (BW or Wtd)
E. Cable Rows $3 \times 10$

Saturday (ME Lower):
A. Squat $w /$ SSB
*Work up to ME Triple
B. Leg Press $3 \times 8$
C. Glute Ham Raise $3 \times 8$
D. Weighted Abs $4 \times 10$

## Week 8

## Monday (ME Upper):

Thursday (DE Upper):
A. Bench Press
A. Med Ball Throws
*Work up to ME Single w/ RB
B. Standing OHP
B. 2 Board Bench $3 \times 8$
C. Meadows Rows $4 \times 10$
*Work up to moderately heavy set of 3
C. Incline Bench Press $3 \times 8$

D1. Triceps Pushdowns $3 \times 25$
D. Chins 4 sets max reps (BW or Wtd)

D2. Bicep Curls $3 \times 15$
E. Cable Rows $3 \times 10$

Wednesday (DE Lower):
Saturday (ME Lower):
A. Squat
*Work up to ME Triple
B. Leg Press $3 \times 8$
C. Glute Ham Raise $3 \times 8$
C. Front Squat $3 \times 8$

D1. Hyperextension $3 \times 10$
D. Weighted Abs $4 \times 10$

D2. Abs w/ Spud Strap $3 \times 10$

## Week 9 - Start of Block 3

Monday (ME Upper):
A. Bench Press w/ 2 Board
*Work up to ME Single
B. Swiss Bar Close Grip Bench 3x8
C. Cable Rows $4 \times 10$

D1. Triceps Pushdowns $3 \times 25$
D2. Bicep Curls $3 \times 15$
Wednesday (DE Lower):
A. Box Jumps
B. Deficit Deadlift (conventional)
*Work up to moderately heavy set of 5
C. Good Morning 3x8

D1. Cable Pull through $3 \times 10$
D2. Hanging Leg Raises

## Thursday (DE Upper):

A. Med Ball Throws
B. Standing OHP w/ Swiss Bar
*Work up to moderately heavy set of 5
C. Close Grip Floor Press $3 \times 8$
D. Chins 4 sets max reps (BW or Wtd)
E. Cable Rows $3 \times 10$

Saturday (ME Lower):
A. Squat w/ Chains
*Work up to ME Single
B. Bulgarian Split Squats $3 \times 8$
C. Glute Ham Raise $3 \times 8$
D. Weighted Abs $4 \times 10$

## Week 10

Monday (ME Upper):
A. Bench Press w/ Pause
*Work up to ME Triple
B. Swiss Bar Close Grip Bench 3x8
C. Cable Rows $4 \times 10$

D1. Triceps Pushdowns $3 \times 25$
D2. Bicep Curls $3 \times 15$

## Wednesday (DE Lower):

A. Box Jumps
B. Conventional Deadlift
*Work up to moderately heavy set of 3
C. Good Morning $3 \times 8$

D1. Cable Pull through $3 \times 10$
D2. Hanging Leg Raises

## Thursday (DE Upper):

A. Med Ball Throws
B. Standing OHP w/ Fat Gripz
*Work up to moderately heavy set of 5
C. Close Grip Floor Press $3 \times 8$
D. Chins 4 sets max reps (BW or Wtd)
E. Cable Rows $3 \times 10$

## Saturday (ME Lower):

A. Squat
*Work up to ME Triple
B. Bulgarian Split Squats $3 \times 8$
C. Glute Ham Raise $3 \times 8$
D. Weighted Abs $4 \times 10$

## Week 11

## Monday (ME Upper):

A. Bench Press w/ Chains
*Work up to ME Double
B. Swiss Bar Close Grip Bench $3 \times 8$
C. Cable Rows $4 \times 10$

D1. Triceps Pushdowns $3 \times 25$
D2. Bicep Curls $3 \times 15$

Wednesday (DE Lower):
A. Box Jumps
B. Deficit Deadlift (conventional)
*Work up to moderately heavy set of 3
C. Good Morning $3 \times 8$

D1. Cable Pull through $3 \times 10$
D2. Hanging Leg Raises

## Thursday (DE Upper):

A. Med Ball Throw
B. Standing OHP
*Work up to moderately heavy set of 5
C. Close Grip Floor Press $3 \times 8$
D. Chins 4 sets max reps (BW or Wtd)
E. Cable Rows $3 \times 10$

## Saturday (ME Lower):

A. Squat
*Work up to ME Single
B. Bulgarian Split Squats $3 \times 8$
C. Glute Ham Raise $3 \times 8$
D. Weighted Abs $4 \times 10$

## Week 12

Monday (ME Upper):
A. Bench Press
*Work up to ME Single
B. Swiss Bar Close Grip Bench $3 \times 8$
C. Cable Rows $4 \times 10$

D1. Triceps Pushdowns $3 \times 25$
D2. Bicep Curls $3 \times 15$

Wednesday (DE Lower):
A. Box Jumps
B. Conventional Deadlift
*Work up to ME Triple
C. Good Morning $3 \times 8$

D1. Cable Pull through $3 \times 10$
D2. Hanging Leg Raises

## Thursday (DE Upper):

A. Med Ball Throws
B. Standing OHP
*Work up to moderately ME Triple
C. Close Grip Floor Press $3 \times 8$
D. Chins 4 sets max reps (BW or Wtd)
E. Cable Rows $3 \times 10$

## Saturday (ME Lower):

A. Squat
*Work up to heavy single, then add RB
for ME singles
B. Bulgarian Split Squats $3 \times 8$
C. Glute Ham Raise $3 \times 8$
D. Weighted Abs $4 \times 10$


## JOE SCHILLERO

Joe Schillero is a competitive powerlifter with an elite total in the 220 lb weight class. He has his Master's Degree in Exercise Physiology and is currently the Fitness \& Wellness Director at Ohio University. He chose to begin competing in powerlifting in order to give himself a training goal following recovery from a severe heart infection several years ago, and since then has finished top 3 at APF Senior Nationals, and represented the USA at WPC Worlds. Joe also speaks frequently in various venues regarding Coaching, Student Development, and Mental Health. His daily goal is to humbly educate others to the best of his ability as he continues to grow himself as a lifter and as a coach. He can be contacted at joeschillero@gmail.com.

## 16 WEEK CONJUGATE PERIODIZATION PROGRAM FOR NOVICE POWERLIFTERS

## DAVE KIRSCHEN



Few powerlifting programs have generated as much interest as conjugate periodization (AKA Westside). While the program is certainly effective for a vast population of lifters, it's not exactly the easiest to follow correctly for lifters with a limited training history.

The following is a variation that l've used successfully for some of my clients that limits some of the variables that can derail inexperienced lifters. Is it totally idiot proof? Nope, but it's a great introduction to one of the most popular strength programs in the world.

## What's in a Name?

Since conjugate periodization was popularized for powerlifting by Louie Simmons of Westside Barbell, My first instinct when writing this program was to do what everyone else seems to and call it "Westside for Novices". Why not? We already have:

Westside for Raw lifters
Westside for Natural Lifters
Westside for Skinny Guys
Westside for Fat Guys
The list goes on...

I decided against using the Westside name in the title of the program for two reasons:

Respect - It's not my club, nor do I train there. I do not like the idea of misrepresenting my program as something Louie has somehow signed off on.

Accuracy - While this template is based on Louie's, they have not, to my knowledge ever used it as written here. In fact, I'm almost positive they haven't. Only those who train at the club can really claim to know what they do day in and day out. And for that matter, the template itself is a small part of why the club is so successful.

In fact, having visited, and spoken to some of the members at length, I would say that the coaching and environment are probably more crucial to the club then the template.

Basically unless you are actually training AT Westside, you are not "training Westside".

SHOP J-CUPS $\rightarrow$

## Conjugate in a Nutshell

This article is written for those out there who want to start a conjugate program, but are unsure where to begin. If you are a regular reader of elitefts, you are probably at least casually familiar with the original conjugate template written by Louie. If not, there is a TON of information on the Conjugate System on elitefts.com, including this extremely thorough breakdown by Dave Tate.

The 8 Keys
Additionally, any exercise named below can be looked up in the elitefts exercise index:
Exercise Index

## The classic conjugate template calls for 4 training days per week:

## Monday - Max Effort Lower

On this day, you will perform an exercise similar to the squat or deadlift, up to a 1-3 rep max. Exercises can include various forms of the box squat, rack pull, deficit deadlift, and goodmorning, performed at a 1-3 rep max. This movement is usually rotated each week. The meet-style lifts are not performed until the meet.

## Wednesday - Max Effort Upper

On this day, you will perform an exercise similar to the bench press, up to a 1-3 rep max. Exercises can include various forms of the board press, floor press, close grip bench press and rack press, performed at a 1-3 rep max. This movement is usually rotated each week. The meet-style bench press is usually not performed until the meet.

## Friday - Speed Squat

Speed squats are performed as a wide stance box squat, in order to teach you to sit back in the squat and to fully recruit the hamstrings, glutes and lower back. Additionally, box squats build strength out of the hole and assure that you are squatting to depth.

The weight is kept at around 50 percent (often waved from 45 to 55 over 3 weeks), and use of bands and chains for accommodating resistance is common.

## Sunday - Speed Bench

Speed benches are performed with a closer-then-competition grip, in a touch and go style (no bounce). Like the speed squats, the weight is kept at 50 percent and can be waved over the 3 week wave.

As any experienced lifter can tell you, there is a LOT more to the program, but the above is a basic breakdown.

## Problems for Novices

Conjugate is a GREAT style of programming, but presents some challenges to the beginner, all of which are addressed in my template.

Variety - Conjugate thrives on variety in exercises, especially with regard to max effort exercises. This is why tools like special bars, bands and chains are used.

Most beginners do not have access to these toys, which limits their options. Hell, in today's Planet Fitness inspired fitness industry you are lucky if your gym has a quality barbell and rack.

On this template, the exercise selection is limited so that all you need are a barbell and rack.

Coaching - Most novices, unless they are lucky enough to train with an experienced group, do not have the benefit of coaching, making it tougher to learn technique in the competition lifts.

In this template, there is a skills day, where you will be practicing the meet lifts in place of a special exercise each month.

Exercise selection - Experienced lifters know how each special exercise carries over to their meet lifts, and what the general correlation should be between lifts. On this template, exercise selection is limited, with each special exercise repeating every month. With fewer exercises in the mix, it will be easier to note the carryover from the special exercises to the meet lifts.

Note, this program is written as a MEET CYCLE, and is designed to be completed with a competition. I've always been of the belief that beginning powerlifters should compete earl and often, in order to gain meet experience as quickly as possible.

## Special Exercises

This template calls for only 3 special exercises per 16 weeks. You will be working up in each exercises once per cycle/month. In month one, you will go to a 3 rep max. In months two and three and four, you will go up to a 1 rep max. I like keeping the first week to a 3 rm in order to reinforce technique.

For the squat/deadlift, pick a version of the goodmorning, deadlift and low box squat.

For the bench, use a close grip full-range bench, rack press and floor press. Board presses also work if you are able to get multiple training partners to help you. If you are just going at it alone in a commercial gym, you know how tough it can be to find a good spotter so stay away from exercises requiring more than one.

## Assistance

Following your max effort or speed work, you should be doing at least two assistance movements.

## Speed Work

Speed work will be just about the same as on the traditional WSB template.

For squat/deadlift perform 8 sets of 2 on the wide stance box squat. Wave the weight from 45 to $55 \%$ of your 1 rm free squat over 3 weeks, then start over at 45 .

Following the squat, hit 6 singles on the deadlift waving the weight from 65-75\% of your 1 rm

Rest intervals between lifts should be kept to about a minute.

For the bench, use 9 sets of 3 . Changing your grip every 3 sets, I tend to go from pointer-finger at the smooth, to between the line and the smooth, to pinky on the line. Wave the percentages from $45-55 \%$ of your 1 rm .

Before you even ask, I do NOT recommend using bands and chains for your first conjugate cycle. Not only are they unnecessary for beginners, but they are one more variable that can muddy the waters while you are trying to learn a new training protocol.

For your squat/DL days, you should be hitting at least one posterior chain (hamstrings glutes, lower back), and one abdominal exercise.

## Posterior chain lower body assistance movements include:

- Glute ham raises
- Reverse hypers
- Straight leg deadlifts
- Cable pullthroughs
- Back extensions
- Band goodmornings


## Abdominal exercises include,

Sit-ups over the glute-ham/back extension machine

- Cable pulldown abs
- Band pulldown abs
- Hanging leg raises
- Planks
- Spread eagle sit-ups
- Incline bench sit-ups
- Dumbbell side bends

For the bench days, at least one upper back movement and one triceps exercise.

## Upper back exercises include:

- Bentover barbell rows
- T-bar rows
- Dumbbell rows
- Shrugs
- Pulldowns
- Pullups (not kipping... sorry crossfitters)
- Rear dumbbell raises


## Triceps exercises include:

- Lying dumbbell extensions
- Lying barbell extensions
- JM presses
- Cable triceps extensions
- Bend triceps extensions


## The Template

As mentioned earlier, this template consists of 4 cycles, each lasting 4 weeks, for a total of 16 weeks (17 if you include the deload for the meet).

## IMPORTANT NOTE!!!

The exercise selection is really up to you, based on what you think you need. You do not need to use the exercises as written. I actually encourage you to experiment so that you will find what works for yourself.

For the sake of the demonstration, The Squat/DL Max Effort exercises l've selected are the Low Box Squat, rack pull (lowest setting on your rack) and the low box squat ( 2 inches below parallel).

For the bench, we're using the close grip bench (pointer finger on the smooth), floor press (your choice of grip, but stick with the same grip for the entire program), and rack press (close grip, same height thought the whole program)

## Cycle 1

## Week 1

Monday - Max Effort Squat/DL
Low box squat - work up to a 3 rm
Straight leg deadlifts $4 \times 8$
Incline bench sit-ups $4 \times 15$

## Wednesday - Max Effort Bench

Close grip bench - work up to a 3 rm
T-bar rows $4 \times 8$
Lying DB extensions $4 \times 12$

## Friday - Speed Squat

Box squats $45 \% 8 \times 2$
Speed deadlift 65\% $6 \times 1$
Straight leg deadlifts $4 \times 8$
Incline bench sit-ups $4 \times 15$
Sunday - Speed Bench
Speed bench $45 \% 9 \times 3$
T-bar rows $4 \times 8$
Lying DB extensions $4 \times 12$

## Week 2

Monday - Max Effort Squat/DL
Rack Pull - work up to a 3rm
Straight leg deadlifts $4 \times 8$
Incline bench sit-ups $4 \times 15$

## Wednesday - Max Effort Bench

Floor Press - work up to a 3 rm
T-bar rows $4 \times 8$
Lying DB extensions $4 \times 12$

## Friday - Speed Squat

Box squats $50 \% 8 \times 2$
Speed deadlift 70\% $6 \times 1$
Straight leg deadlifts $4 \times 8$
Incline bench sit-ups $4 \times 15$

## Sunday - Speed Bench

Speed bench $50 \% 9 \times 3$
T-bar rows $4 \times 8$
Lying DB extensions $4 \times 12$

## Week 3

## Monday - Max Effort Squat/DL

Goodmorning- work up to a 3 rm
Straight leg deadlifts $4 \times 8$
Incline bench sit-ups $4 \times 15$

## Wednesday - Max Effort Bench

Rack Press - work up to a 3rm
T-bar rows $4 \times 8$
Lying DB extensions $4 \times 12$

## Friday - Speed Squat

Box squats 55\% $8 \times 2$
Speed deadlift 75\% $6 \times 1$
Straight leg deadlifts $4 \times 8$
Incline bench sit-ups $4 \times 15$

## Sunday - Speed Bench

Speed bench 55\% $9 \times 3$
T-bar rows $4 \times 8$
Lying DB extensions $4 \times 12$

## Week 4

Monday - Squat/DL skill day
Free Squat - work up to $85 \%$ of 1 rm
Deadlift - work up to $85 \%$ of 1 rm
Straight leg deadlifts $4 \times 8$
Incline bench sit-ups $4 \times 15$

## Wednesday - Bench skill day

Bench Press - work up to $85 \%$ of 1 rm
T-bar rows $4 \times 8$
Lying DB extensions $4 \times 12$

## Friday - Speed Squat

Box squats $45 \% 8 \times 2$
Speed deadlift 65\% $6 \times 1$
Straight leg deadlifts $4 \times 8$
Incline bench sit-ups $4 \times 15$

## Sunday - Speed Bench

Speed bench $45 \% 9 \times 3$
T-bar rows $4 \times 8$
Lying DB extensions $4 \times 12$

## Cycle 2

## Week 1

Monday - Max Effort Squat/DL
Low box squat - work up to a 1 rm
Back Extension $4 \times 8$
Cable pulldown abs $4 \times 15$

## Wednesday - Max Effort Bench

Close grip bench - work up to a 1 rm
Bentover barbell rows $4 \times 8$
Lying BB extensions $4 \times 12$
Friday - Speed Squat
Box squats 50\% $8 \times 2$
Speed deadlift 70\% $6 \times 1$
Back Extension $4 \times 8$
Cable pulldown abs $4 \times 15$

## Sunday - Speed Bench

Speed bench $50 \% 9 \times 3$
Bentover barbell rows $4 \times 8$
Lying BB extensions $4 \times 12$

## Week 2

## Monday - Max Effort Squat/DL

Rack Pull - work up to a 1 rm
Back Extension $4 \times 8$
Cable pulldown abs $4 \times 15$

## Wednesday - Max Effort Bench

Floor Press - work up to a 3rm
Bentover barbell rows $4 \times 8$
Lying BB extensions $4 \times 12$

## Friday - Speed Squat

Box squats 55\% $8 \times 2$
Speed deadlift 75\% $6 \times 1$
Back Extension $4 \times 8$
Cable pulldown abs $4 \times 15$

## Sunday - Speed Bench

Speed bench 55\% $9 \times 3$
Bentover barbell rows $4 \times 8$
Lying BB extensions $4 \times 12$

## Week 3

## Monday - Max Effort Squat/DL

Goodmorning- work up to a 1 rm
Back Extension $4 \times 8$
Cable pulldown abs $4 \times 15$

## Wednesday - Max Effort Bench

Rack Press - work up to a 1 rm
Bentover barbell rows $4 \times 8$
Lying BB extensions $4 \times 12$

## Friday - Speed Squat

Box squats $45 \% 8 \times 2$
Speed deadlift 65\% $6 \times 1$
Back Extension $4 \times 8$
Cable pulldown abs $4 \times 15$

## Sunday - Speed Bench

Speed bench $45 \% 9 \times 3$
Bentover barbell rows $4 \times 8$
Lying BB extensions $4 \times 12$

## Week 4

Monday - Squat/DL skill day
Free Squat - work up to $90 \%$ of 1 rm
Deadlift - work up to $90 \%$ of 1 rm
Back Extension $4 \times 8$
Cable pulldown abs $4 \times 15$

## Wednesday - Bench skill day

Bench Press - work up to $90 \%$ of 1 rm
Bentover barbell rows $4 \times 8$
Lying BB extensions $4 \times 12$

## Friday - Speed Squat

Box squats 50\% $8 \times 2$
Speed deadlift 70\% $6 \times 1$
Back Extension $4 \times 8$
Cable pulldown abs $4 \times 15$

## Sunday - Speed Bench

Speed bench 50\% $9 \times 3$
Bentover barbell rows $4 \times 8$
Lying BB extensions $4 \times 12$

## Cycle 3

## Week 1

## Monday - Max Effort Squat/DL

Low box squat - work up to a 1 rm - Try to beat previous cycle's pr

Cable pullthroughs $10 \times 8$
Spread eagle situps $4 \times 15$

## Wednesday - Max Effort Bench

Close grip bench - work up to a 1 rm- Try to beat previous cycle's pr

Dumbbell Rows $4 \times 8$
Cable Pushdowns $4 \times 12$

## Friday - Speed Squat

Box squats 50\% $8 \times 2$
Speed deadlift 70\% $6 \times 1$
Cable pullthroughs $10 \times 8$
Spread eagle situps $4 \times 15$

## Sunday - Speed Bench

Speed bench $50 \% 9 \times 3$
Dumbbell Rows $4 \times 8$
Cable Pushdowns $4 \times 12$

## Week 2

## Monday - Max Effort Squat/DL

Rack Pull - work up to a 1 rm - Try to beat previous cycle's pr

Cable pullthroughs $10 \times 8$
Spread eagle situps $4 \times 15$

## Wednesday - Max Effort Bench

Floor Press - work up to a 1 rm - Try to beat previous cycle's pr

Dumbbell Rows $4 \times 8$
Cable Pushdowns $4 \times 12$

## Friday - Speed Squat

Box squats 55\% $8 \times 2$
Speed deadlift 75\% $6 \times 1$
Cable pullthroughs $10 \times 8$
Spread eagle situps $4 \times 15$

## Sunday - Speed Bench

Speed bench 55\% $9 \times 3$
Dumbbell Rows $4 \times 8$
Cable Pushdowns $4 \times 12$

## Week 3

Monday - Max Effort Squat/DL
Goodmorning- work up to a 1 rm - Try to beat previous cycle's pr

Cable pullthroughs $10 \times 8$
Spread eagle situps $4 \times 15$

## Wednesday - Max Effort Bench

Rack Press - work up to a 1 rm - Try to beat previous cycle's pr

Dumbbell Rows $4 \times 8$
Cable Pushdowns $4 \times 12$

## Friday - Speed Squat

Box squats $45 \% 8 \times 2$
Speed deadlift 70\% $6 \times 1$
Cable pullthroughs $10 \times 8$
Spread eagle situps $4 \times 15$

## Sunday - Speed Bench

Speed bench $45 \% 9 \times 3$
Dumbbell Rows $4 \times 8$
Cable Pushdowns $4 \times 12$

## Week 4

## Monday - Squat/DL skill day

Free Squat - work up to $95 \%$ of 1 rm
Deadlift - work up to $95 \%$ of 1 rm
Cable pullthroughs $10 \times 8$
Spread eagle situps $4 \times 15$

## Wednesday - Bench skill day

Bench Press - work up to $95 \%$ of 1 rm
Dumbbell Rows $4 \times 8$
Cable Pushdowns $4 \times 1$

## Friday - Speed Squat

Box squats 50\% $8 \times 2$
Speed deadlift 70\% $6 \times 1$
Cable pullthroughs $10 \times 8$
Spread eagle situps $4 \times 15$

## Sunday - Speed Bench

Speed bench 50\% $9 \times 3$
Dumbbell Rows $4 \times 8$
Cable Pushdowns $4 \times 1$

## Cycle 4

## Week 1

Monday - Max Effort Squat/DL
Low box squat - 1 rm - Try to beat previous cycle's pr

Glute ham raises $4 \times 8$
Hanging leg raises $4 \times 15$

## Wednesday - Max Effort Bench

Close grip bench - 1rm - Try to beat previous cycle's pr

Machine rows $4 \times 8$
JM presses $4 \times 12$

## Friday - Speed Squat

Box squats 55\% $8 \times 2$
Speed deadlift 75\% $6 \times 1$
Glute ham raises $4 \times 8$
Hanging leg raises $4 \times 15$

## Sunday - Speed Bench

Speed bench 55\% $9 \times 3$
Machine rows $4 \times 8$
JM presses $4 \times 12$

## Week 2

## Monday - Max Effort Squat/DL

Rack Pull - work up to a 1 rm - Try to beat previous cycle's pr

Glute ham raises $4 \times 8$
Hanging leg raises $4 \times 15$

## Wednesday - Max Effort Bench

Floor Press - work up to a 1 rm - Try to beat previous cycle's pr

Machine rows $4 \times 8$
JM presses $4 \times 12$

## Friday - Speed Squat

Box squats $45 \% 8 \times 2$
Speed deadlift 70\% $6 \times 1$
Glute ham raises $4 \times 8$
Hanging leg raises $4 \times 15$

## Sunday - Speed Bench

Speed bench $45 \% 9 \times 3$
Machine rows $4 \times 8$
JM presses $4 \times 12$

## Week 3

## Week 4

## Monday - Max Effort Squat/DL

Goodmorning- work up to a 1 rm - Try to beat previous cycle's pr

Glute ham raises $4 \times 8$
Hanging leg raises $4 \times 15$

## Wednesday - Max Effort Bench

Rack Press - work up to a 1 rm - Try to beat previous cycle's pr

Machine rows $4 \times 8$
JM presses $4 \times 12$

## Friday - Speed Squat

Box squats 50\% $8 \times 2$
Speed deadlift 70\% $6 \times 1$
Glute ham raises $4 \times 8$
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## Sunday - Speed Bench

Speed bench 50\% $9 \times 3$
Machine rows $4 \times 8$
JM presses $4 \times 12$

## Monday - Squat/DL skill day

Free Squat - work up to $85 \%$ of 1 rm
Deadlift - work up to $85 \%$ of 1 rm
Glute ham raises $4 \times 8$
Hanging leg raises $4 \times 15$

## Wednesday - Bench skill day

Bench Press - work up to $85 \%$ of 1 rm
Machine rows $4 \times 8$
JM presses $4 \times 12$

## Friday - Speed Squat

Box squats 55\% $8 \times 2$
Speed deadlift 75\% $6 \times 1$
Glute ham raises $4 \times 8$
Hanging leg raises $4 \times 15$

## Sunday - Speed Bench

Speed bench 55\% $9 \times 3$
Machine rows $4 \times 8$
JM presses $4 \times 12$

## Week of the meet

Light assistance work only Monday - Wednesday
Rest from Thursday until meet.

## Notes

On days where you break a pr, don't get too aggressive and keep going until a miss. If you break a pr, it's an indication you are on track, so don't beat yourself up more than you need to.

On day where you miss a pr, consider doing some extra assistance work for the muscle group you believe is your weakness.

Extra workouts are fine, even encouraged. Keep the weights light and the movements small. This is a great time to add in some extra ab, upper back and hamstring work.

The speed work weights might feel too light. DO NOT RAISE THEM. The point of speed work is to produce lots of force on a sub-maximal load.

Feel free to make exercise substitutions if needed, but make sure the new exercise is similar enough to accomplish a similar purpose. For example, a board press is a great substitute for a floor press. A lying triceps extension is not.

Take great notes. Conjugate requires you to listen to your body and to look for indicators. Learn which exercise carry over to the meet lifts and which do not. Adjust accordingly next time you run the program. Different lifters will notice different lifts work better for them than others.

Enjoy the ride. Powerlifting is a marathon, not a sprint. If you do not enjoy the process, you might not be cut out for it.

Dave's Bio. Training Log and Articles
If you have any questions for Dave you can ask him on the... elitefts ${ }^{T M}$ Q\&A
Dave's Book Powerlifting Year One


Dave Kirschen began powerlifting competitively in 1998, and has since reached pro totals of 1901 in the 181-pound class, and 2075 in the 198 -pound class. He has also bench pressed over triple bodyweight in three weight classes at full meets. He trains at Apollon Gym in Edison, New Jersey, and coaches a powerlifting team out of EVF Performance in New York City. A 20 year veteran of the fitness industry, Dave holds a degree in Physical Education from SUNY Cortland. Kirschen lives in New Jersey with his wife Liz and son James.

## 9 WEEK CONJUGATE STRENGTH TRAINING PROGRAM PROVEN TO BREAK RECORDS

## DAVE TATE



## Week 1

## Day 1 (max effort squat day)

Good Mornings: warm up doing sets of three reps until you feel that you can no longer perform three reps. At this point drop the reps to one and continuing working up to a one rep max.

Glute Ham Raises: 3 sets of 10 reps. Stress the eccentric, try to get a four count on they way down.

Reverse Hypers: 3 sets of 8 reps using the small strap

Pull Down Abs: 5 sets of 10 to 15 reps
Straight Leg Raises: 5 sets of 15 reps

## Day 2 (max effort bench day)

Board Press: warm up doing sets of three reps until you feel that you can no longer perform three reps. At this point drop the reps to one and continuing working up to a one rep max.

Lying Barbell tricep extensions: 6 sets of 10 reps

Push Downs: 3 sets of 10
One Arm Press: 3 sets of 15

## Day 3 (dynamic effort squat day)

Box Squats: 10 sets of 2 reps with $50 \%$ of 1RM (45 to 60 sec rest between sets)

Reverse Hypers: 3 sets of 8 reps using the small strap

One Leg Squats: 4 sets of 10 with each leg
Dumbbell Rows: 4 sets of 6 reps

## Day 4 (dynamic effort bench day)

Bench Press: 10 sets of 3 reps with 60\% of 1RM; use three different grips; ( 45 to 60 sec rest between sets)

Lying Dumbbell Tricep Extensions: 4 sets of 8 reps

Dumbbell Side Raises: 3 sets of 10 reps
Bent Over Dumbbell Side Raises: 3 sets of 10 rep

Barbell Shrugs: 3 sets of 15 reps

## Week 2

## Day 1 (max effort squat day)

Good Mornings: warm up doing sets of three reps until you feel that you can no longer perform three reps. At this point drop the reps to one and continuing working up to a one rep max.

Glute Ham Raises: 3 sets of 8 reps. Stress the eccentric, try to get a four count on they way down.

Reverse Hypers : 3 sets of 8 reps using the small strap

Pull Down Abs: 5 sets of 10 to 15 reps
Straight Leg Raises: 3 sets of 20 reps

## Day 2 (max effort bench day)

Board Press: warm up doing sets of three reps until you feel that you can no longer perform three reps. At this point drop the reps to one and continuing working up to a one rep max

Lying Barbell Tricep Extensions: 6 sets of 10 reps

Push Downs: 3 sets of 10
One Arm Press: 3 sets of 15

## Day 3 (dynamic effort squat day)

Box Squats: 10 sets of 2 reps with $54 \%$ of 1RM; (45 to 60 sec rest between sets)

Reverse Hypers: 3 sets of 8 reps using the small strap

One Leg Squats: 4 sets of 10 with each leg
Dumbbell Rows: 4 sets of 6 reps
Barbell Shrugs: 3 sets of 15 reps

## Day 4 (dynamic effort bench day)

Bench Press: 10 sets of 3 reps with 60\% of 1RM; use three different grips ; (45 to 60 sec rest between sets)

Lying Dumbbell Tricep Extensions: 4 sets of 8 reps

Dumbbell Side Raises: 3 sets of 10 reps
Bent Over Dumbbell Side Raises: 3 sets of 10 reps

## Week 3

## Day 1 (max effort squat day)

Good Mornings: warm up doing sets of three reps until you feel that you can no longer perform three reps. At this point drop the reps to one and continuing working up to a one rep max

Glute Ham Raises: 3 sets of 8 reps using the small strap

Reverse Hypers : 3 sets of 8 reps using the small strap

Pull Down Abs: 5 sets of 10 to 15 reps
Straight Leg Raises: 3 sets of 20 reps

## Day 2 (max effort bench day)

Board Press: warm up doing sets of three reps until you feel that you can no longer perform three reps. At this point drop the reps to one and continuing working up to a one rep max

Lying Barbell Tricep Extensions: 6 sets of 10 reps

Push Downs: 3 sets of 10
One Arm Press: 3 sets of 15

## Day 3 (dynamic effort squat day)

Box Squats: 10 sets of 2 reps with 56 \% of 1RM ; (45 to 60 sec rest between sets)

Reverse Hypers: 3 sets of 8 reps using the small strap

One Leg Squats: 4 sets of 10 with each leg
Dumbbell Rows: 4 sets of 6 reps
Barbell Shrugs: 3 sets of 15 reps

## Day 4 (dynamic effort bench day)

Bench Press: 10 sets of 3 reps with 60\% of 1RM; use three different grips ; (45 to 60 sec rest between sets)

Lying Dumbbell Tricep Extensions: 4 sets of 8 reps

Dumbbell Side Raises: 3 sets of 10 reps
Bent Over Dumbbell Side Raises: 3 sets of 10 reps

## Week 4

## Day 1 (max effort squat day)

Low Box Squat: warm up doing sets of three reps until you feel that you can no longer perform three reps. At this point drop the reps to one and continuing working up to a one rep max

Glute Ham Raise: 5 sets of 5 reps
Partial Deadlifts: 3 sets of 20 reps
Reverse Hypers: 3 sets of 8 reps using the small strap

Pull Down Abs: 5 sets of 10 to 15 reps

## Day 2 (max effort bench day)

Floor Press: warm up doing sets of three reps until you feel that you can no longer perform three reps. At this point drop the reps to one and continuing working up to a one rep max

JM Press: work up to 2 sets of 3 reps
Incline Dumbbell Press: 2 sets of 10
Seated dumbbell Cleans: 4 sets of 8
Straight Leg Raises: 5 sets of 15

## Day3 (dynamic effort squat day)

Box Squats: 10 sets of 2 reps with $60 \%$ of $1 R M$; (45 to 60 sec rest between sets)

* after your sets of box squats work up to a heavy double. This is not a maximum attempt so do not miss the attempts.

Reverse Hypers: 5 sets of 8 reps
Chest supported Rows: 4 sets of 8 reps
Glute Ham Raise: 3 sets of 6 reps
Pull Down Abs: 5 sets of 10 reps

## Day 4 (dynamic effort bench day)

Bench Press: 10 sets of 3 reps with 60\% of 1RM; use three different grips ; (45 to 60 sec rest between sets)

Close Grip Bench Press: work up to 2 sets of 3
One Arm Dumbbell Extensions: 3 sets of 10
Front Plate Raises: 3 sets of 10 reps

## Week 5

## Day 1 (max effort squat day)

Low Box Squat: warm up doing sets of three reps until you feel that you can no longer perform three reps. At this point drop the reps to one and continuing working up to a one rep max

Glute Ham Raise: 5 sets of 5 reps
Partial Deadlifts: 3 sets of 20 reps
Reverse Hypers: 3 sets of 8 reps using the small strap

Pull Down Abs: 5 sets of 10 to 15 reps

## Day 2 (max effort bench day)

Floor Press: warm up doing sets of three reps until you feel that you can no longer perform three reps. At this point drop the reps to one and continuing working up to a one rep max

JM Press: work up to 2 sets of 3 reps
Incline Dumbbell Press: 2 sets of 10
Seated Dumbbell Cleans: 4 sets of 8
Straight Leg Raises: 5 sets of 15

## Day 3 (dynamic effort squat day)

Box Squats: 10 sets of 2 reps with $50 \%$ of 1RM ; (45 to 60 sec rest between sets)

Reverse Hypers: 5 sets of 8 reps
Chest supported Rows: 4 sets of 8 reps
Glute Ham Raise: 3 sets of 6 reps
Pull Down Abs: 5 sets of 10 reps

## Day 4 (dynamic effort bench day)

Bench Press: 10 sets of 3 reps with $60 \%$ of 1RM; use three different grips ; (45 to 60 sec rest between sets)

* after your sets of box squats work up to a heavy single. This is not a maximum attempt so do not miss the attempts.

Close Grip Bench Press: work up to 2 sets of 3
One Arm Dumbbell Extensions: 3 sets of 10
Front Plate Raises: 3 sets of 10 reps

## Week 6

## Day 1 (max effort squat day)

Low Box Squat: warm up doing sets of three reps until you feel that you can no longer perform three reps. At this point drop the reps to one and continuing working up to a one rep max

Glute Ham Raise: 5 sets of 5 reps
Partial Deadlifts: 3 sets of 20 reps
Reverse Hypers: 3 sets of 8 reps using the small strap

Pull Down Abs: 5 sets of 10 to 15 reps

## Day 2 (max effort bench day)

Floor Press: warm up doing sets of three reps until you feel that you can no longer perform three reps. At this point drop the reps to one and continuing working up to a one rep max

JM Press: work up to 2 sets of 3 reps
Incline Dumbbell Press: 2 sets of 10
Seated dumbbell Cleans: 4 sets of 8
Straight Leg Raises: 5 sets of 15

## Day 3 (dynamic effort squat day)

Box Squats: 10 sets of 2 reps with 52 \% of 1RM ; (45 to 60 sec rest between sets)

Reverse Hypers: 5 sets of 8 reps
Chest supported Rows: 4 sets of 8 reps
Glute Ham Raise: 3 sets of 6 reps
Pull Down Abs: 5 sets of 10 reps

## Day 4 (dynamic effort bench day)

Bench Press: 10 sets of 3 reps with 60\% of 1RM; use three different grips ; (45 to 60 sec rest between sets)

Close Grip Bench Press: work up to 2 sets of 3
One Arm Dumbbell Extensions: 3 sets of 10
Front Plate Raises: 3 sets of 10 reps

## Week 7

## Day 1 (max effort squat day)

Good Morning Squats: warm up doing sets of three reps until you feel that you can no longer perform three reps. At this point drop the reps to one and continuing working up to a one rep max

Glute Ham Raise: 5 sets of 5 reps
Lunges: 4 sets of 10 reps (each leg)
Reverse Hypers: 3 sets of 8 reps using the small strap

Pull Down Abs: 5 sets of 10 to 15 reps

## Day 2 (max effort bench day)

Ball Press: 3 sets of 20 reps (avg. rest period $=$ $5 \mathrm{~min})$

Seated dumbbell Shoulder Press: 5 sets 10 reps

Incline Barbell Tricep Extensions: 5 sets 6 reps
Face Pulls: 5 sets 15 reps

## Day 3 (dynamic effort squat day)

Box Squats: 10 sets of 2 reps with 54 \% of 1RM ; (45 to 60 sec rest between sets)

* after your sets of box squats work up to a heavy double. This is not a maximum attempt so do not miss the attempts.

Reverse Hypers: 4 sets 8 reps
Pull Downs: 3 sets 8 reps
Glute Ham Raise: 4 sets 15 reps

## Day 4 (dynamic effort bench day)

Bench Press: 10 sets of 3 reps with 60\% of 1RM; use three different grips ; (45 to 60 sec rest between sets)

* after your sets of box squats work up to a heavy single. This is not a maximum attempt so do not miss the attempts.

Dumbbell Tricep Extensions: 4 sets of 6 reps
Reverse Grip Push Downs: 3 sets of 15 reps
Front - Side - Rear Delt Combo Raise: 2 sets of 60 reps (20 each raise)

Pull Down Abs: 5 sets 10 reps


## Week 8

## Day 1 (max effort squat day)

Good Morning Squats: warm up doing sets of three reps until you feel that you can no longer perform three reps. At this point drop the reps to one and continuing working up to a one rep max

Glute Ham Raise: 5 sets of 5 reps
Lunges: 4 sets of 10 reps (each leg)
Reverse Hypers: 3 sets of 8 reps using the small strap

Pull Down Abs: 5 sets of 10 to 15 reps

## Day 2 (max effort bench day)

Ball Press: 3 sets of 20 reps (avg. rest period $=$ $5 \mathrm{~min})$

Seated dumbbell Shoulder Press: 5 sets 10 reps

Incline Barbell Tricep Extensions: 5 sets 6 reps face Pulls: 5 sets 15 reps

## Day 3 (dynamic effort squat day)

Box Squats: 10 sets of 2 reps with 62 \% of 1RM ; (45 to 60 sec rest between sets)

Reverse Hypers: 4 sets 8 reps
Pull Downs: 3 sets 8 reps
Glute Ham Raise: 4 sets 15 reps

## Day 4 (dynamic effort bench day)

Bench Press: 10 sets of 3 reps with 60\% of 1RM; use three different grips ; (45 to 60 sec rest between sets)

Dumbbell Tricep Extensions: 4 sets of 6 reps
Reverse Grip Push Downs: 3 sets of 15 reps
Front - Side - Rear Delt Combo Raise: 2 sets of 60 reps (20 each raise)

Pull Down Abs: 5 sets 10 reps

## Week 9

## Day 1 (max day) near end of week

Box Squat: work up to a 1 rep max
Bench Press: work up to a 1 rep max

* These maxes will be used as the 1RM for the next eight week cycle



## DAVE TATE

Dave Tate 'Under The Bar' is the founder and CEO of elitefts. com Inc.. Dave has been involved with powerlifting for over three decades, coach, consultant and business owner. He has logged more than 20,000 hours of strength consulting with professional, elite and novice athletes, as well as with professional strength coaches, authored 20 books and written more than 500 articles for magazines and prominent websites. Dave works as a business adviser, speaker, coach, and author, he shows how athletic disciplines teach valuable lessons for overall achievement. He lives with his family in London, Ohio.

## A PRACTICAL GUIDE FOR IMPLEMENTING BLOCK PERIODIZATION FOR POWERLIFTING

## GABRIEL NASPINSKI



## Introduction

Powerlifting is a sport that is tailor-made for Block Periodization. This is due to the small number of physical traits that must be trained for: maximal strength, absolute strength and technique. This article is directed toward the average lifter and not the physical preparation coach. The intent is not to discuss the hard science behind the system. The purpose is to outline the principles of the system and how to implement these principles in a practical sense.

## How I learned of Block Periodization

I first became aware of Block Periodization while interning under Buddy Morris and James Smith at the University of Pittsburgh. James presented some information on the Block system to me, and while I found it interesting, I was skeptical as it seemed to be different from what I was doing. I also didn't have a full understanding on the terminology and how to implement it. During this time, I was still using a Westside Barbellstyle system of programming. I was reluctant to change, as this system had given me gains in the past. I continued to use a lot of the principles of Westside, but had a lot of injuries. I also was very inconsistent because I was rarely performing the competition lifts. After a string of injuries and bomb outs, I took some time away from powerlifting. After moving to the Washington, DC area, I met Carlos Osegueda that runs Central Virginia Athletic and Barbell Club. He had been training with the Block Periodization system and making progress. At this time, I decided to research by reading Issurin's Block Periodization: A Breakthrough in Sports Training and Principles and Basics of Advanced Athletic Training.These books gave me a better understanding and for the next year, I used trial and error along with the knowledge I gained to fine tune the programming to fit my needs. Using this system, I set a 190 pound total PR and gained my first Elite at 242.


## What is Block Periodization?

The technical definition as Issurin states, "The general approach to the compilation of Block Periodized training assumes the sequencing of three different-type mesocycle-blocks that form a single training stage ending in some competition." In practical terms, it's a system of focusing on general abilities further out from a meet and becoming more directed as the competition draws near. That being said, it's necessary to know how to classify movements as general, general specific, or specific. From here, a lifter can lay out the blocks based on movements that fit into each category and target the weaknesses of each lifter. Because of this, two lifters using a Block system may have training sessions that look completely different. The only absolute is that the programming fits within the guidelines of the three blocks: accumulation, transmutation and realization.

## Accumulation:

To give an example of the accumulation block, it would be like building a foundation for a house. The intensity is reduced, but there are higher volumes of work. The work during this block will also have a greater amount of general and general specific. It will have less specific movements. In the sport of powerlifting, the purpose of a block like this would be to promote hypertrophy and increase work capacity. The percentages for this block depends on the lifter, but generally range from 50-70 percent. When I calculated volume for this block, I used Prilepin's chart as a guideline, but it's not set in stone. The duration of this block can range from two to six weeks. Again, a lot of this depends on the lifter and their level of preparation. The less qualified, the longer the block can be. The length can vary depending on where this block falls in the annual plan. A restoration/deload isn't necessary after this block, but may be included depending on the individual.

## Transmutation:

The basis of the transmutation block is to take the general abilities and transfer them to specific abilities. During this phase, the intensity increases and the volume is reduced, but still is considered moderate. The movements in this block start to include the specific/competition lifts, but also has a large volume dedicated towards general specific lifts that build the competition movements. General exercises won't be prioritized, but may be included at a reduced volume. The goal of this block is to develop the abilities that are specific for the competition lifts. Percentages used during this block generally fall between the 75-90 percent range. Again, I based this off of Prilepin's chart, but sometimes the workload can be higher or lower. The duration of this block is somewhere in the two to four week range. The length is determined on the qualification of the lifter and where the block falls in the annual plan. The further out, the longer this block can be used. Another aspect of this block is that it's designed to induce fatigue. There won't be full recoveries between training sessions. In layman's terms, it's normal to feel like shit during this block, but you should still be able to hit all of the numbers you planned to hit. This is by far the most difficult block of all. Pay attention to volume and intensity because it's very easy to become overtrained. This block needs to be followed by a restoration/ deload.

## Realization:

The realization block is the final stage of training before a meet. The volume is low and the intensity is high. Because of this, it's often referred to as a taper. During this block, the training is directed to the competition lifts. The general specific lifts are phased out and if any general exercises are included, they're for the purpose of injury prevention or light flushing/pumping work. The percentages used are 90 percent or greater. Lifts should be performed to the standards that are needed in competition. There should be full recoveries between sessions. The frequency of training is also decreased during this block. The duration is shorter, and usually is around two weeks. This should be followed by a restoration/deload that can last one to two weeks depending on personal preference.


## Putting it all Together

Ok, so if you made it this far, you've read all of my inane rambling and are still with me. You might be thinking, "All I give a shit about is getting a big total. How do I set this up so I can do that?" I have some bad news - I can't give an exact answer. I don't know your particular weaknesses, technical errors, levels of preparation, how many days a week you can train, etc. What I can do is give you examples of a few different ways to set this up, and then you can tailor the principles to fit your needs. l'll use some examples of what l've done and what has worked for me. l'll also offer some alternatives. Again, this is to provide an example. Don't think this should be taken literally. I also didn't include warm-ups, restoration work, prehab/rehab, and so on, because this differs for everyone.

## Accumulation

Keeping with the definition of the block, I provided an example to aid in planning. The reason I used total reps on both the general specific movements and the general movements is because some people like certain rep schemes better, or have different needs.

Maybe Lifter A needs more hypertrophy, so he may elect to do his Close Grip or Box Squat at the upper limits of Prilepin's chart, or even decide to exceed it and attempt to get all of his reps in as few sets as possible. Lifter B might have a hard time accelerating a load and decide to use a traditional "DE" style approach and go with 10 sets of two on his box squats. Same goes for the general work such as DB Presses, Rows, Glute Hams, etc.

These exercises are just examples and all can be substituted as long as they fit the classifications. I've used bands and chains during this block, but the extra tension or weight may need to be accounted for.

As far as percentages go, you can go in a linear progression over the duration of the block. It can also be flat-loaded, meaning maybe you stay at 12-15 total reps at 70 percent for the whole block, but week one is $3 \times 5$, week two is $5 \times 3$, and week three is $7 \times 2$.

As far as equipment, it can be used during this block. In the past, l've done this raw for the fact that as far away from a meet as it is; I don't feel the need to use gear. I also think if you're trying to promote hypertrophy and work capacity, the less gear the better.

## Day 1: Bench

Close Grip Floor Press

- 55-70\%
- 12 - 30 reps

DB Incline Press

- 30-50 total reps

Seated Rows

- 36-60 total reps

Face Pulls

- 36-60 total reps

Triceps Pushdowns

- 3 sets for as many reps as possible


## Day 2: Deadlift

Deficit Deadlift (Conventional)

- 55-65\%
- 18 - 30 reps

Good Morning (Barbell)

- 4-5 sets
- 6-10 reps

GHR

- 50-75 total

Shrugs

- 2-3 sets
- 10 - 20 reps

Abs

## Transmutation

This block can cause a lot confusion as far as planning is concerned. Due to this, I included numerous templates that can be used.

In reference to the percents, they're a guideline to use, but may need to be adjusted. A variable that skewers the numbers can be the addition of gear. It's very important to base the numbers off of a realistic training max. During the specific movements, technique should be observed to determine the optimal number of reps/set. Also, make sure you're basing the percents off of the actual exercise you're performing. Don't be the moron who attempts to base a special exercise off of a competition squat and then wonders why they got stapled.

Now, you might be thing, "Alright, smart ass. You made your point, but there's a problem. I don't know my actual maxes on special exercises. Now what?" This is where RPE comes into play. The abbreviation RPE stands for Rate of Perceived Exertion. This is nothing more than a fancy way of saying "training by feel." On these sets, you should be working, but you should be able to finish the sets. During a transmutation block, most of the sets in the specific and general specific exercises should fall somewhere between the scale of 7-10 on the chart. Again, this is a guideline and the police will not issue a warrant if you venture out of this range.


First Example: Transmutation (4-day)

## Day 1: Bench

Shirted Bench

- 75-90\%
- 4-12 total

Board Press (shirted or raw)

- 75-85\% or by RPE
- 6-15 total

Seated Rows

- 30-40 total

Band Pull Apart

- 30-40 total


## Day 2: Deadlift

Competition Stance Deadlift

- 75-90\%
- 4-12 total

SSB Low Box Squat

- 75\%-85\% or by RPE
- 6-15 total

Snatch Grip RDL

- 3-4 sets
- 6 - 10 reps *determined by RPE

Abs, Upper Back, Hamstrings

- 2-3 sets each
- 12 - 20 reps


## Day 3: Bench

Shirted Bench

- 75-90\%
- 4-12 total

Close Grip Incline

- 3-5 sets
- $6-10$ reps * determined by RPE

Lat Pulldowns

- 30-40 total

Front Raises

- 30-40 total


## Day 4: Squat

Free Squat in briefs, suit bottoms, or briefs and suit bottoms

- 75-90\%
- 4-12 total

Rack Pulls

- 75-85\% or by RPE
- 6-15 total

Close Stance Olympic Squat

- 3-4 sets
- 6 - 10 reps *determined by RPE

Abs, Upper Back, Lower Back

- 2- 3 sets each
- 12 - 20 reps

This is a basic four day split for a transmutation block. The information is for a lifter that is competing geared. If competing raw, disregard the gear suggestions, butstill use the percentages and rep schemes.

The work becomes more directed as the movements are the competition lifts or their variants. On the bench days, rowing and pulling is kept in, but the volume is reduced from the accumulation block. On squat days, the main movement is the competition squat followed by a general specific movement for the deadlift, followed by another general specific movement for the squat with reduced intensities. The deadlift day follows the same template, except with as DL-SQ-DL setup. Both days have general work done in a circuit at the end to maintain GPP. This may or may not need to be cut depending on feel. The intensity of this work should be low.

There are pros and cons to this set up. The pros are the amount of specific and general specific work will have a higher transference to the competition lifts. These lifts also stress training economy as they give a lot of bang for your buck. The cons of a set up like this are that it's very time consuming. Using big, compound lifts requires more attention to technique. Because of this, more rest is needed between sets. Also, the four day split may not work for everyone because of the time it may take. For some lifters, this split may be too much to recover from. For others, they may need more general work for a particular area due to injury history, particular weakness, etc.

Here's a variation of the four day split above. The bench days are the same, but the squat and deadlift days have been altered.

Second Example: Transmutation (4-day)


## Day 1: Bench

Shirted Bench

- 75-90\%
- 4-12 total

Board Press (shirted or raw)

- 75-85\% or by RPE
- 6-15 total

Seated Rows

- 30-40 total

Band Pull Apart

- 30-40 total


## Day 2: Deadlift

Competition Stance Deadlift

- 75-90\%
- 4-12 total

SSB Low Box Squat

- 75-85\% or by RPE
- 6-15 total

Glute Ham Raise (weighted or with bands)

- 32-50 total

Optional Upper Back
Abs

## Day 3: Bench

Shirted Bench

- 75-90\%
- 4-12 total

Close Grip Incline

- 3-5 sets
- 6 - 10 reps *determined by RPE

Lat Pulldowns

- 30-40 total

Front Raises

- 30-40 total


## Day 4: Squat

Free Squat in briefs, suit bottoms, or briefs and suit bottoms

- 75-90\%
- 4-12 total

Rack Pulls

- 75-85\% or by RPE
- 6-15 total

Reverse Hyper

- 3-5 sets
- 8-12 reps

Abs

As you can see, there is less general specific work in this template. It's less time consuming for those who let that nagging problem called "real life" get in the way and is easier to recover from for some who have a propensity for overtraining or injuries. You can also plug in more general work for particular weak areas.

Some of you may have even more obligations that mean you can only train three days a week. Since quitting your job and leaving your family might not be an option, you may want to use a set up like this. This would work if the powers that be (work, family, etc.) allow you three days to train and time isn't an issue on those three days. This would also be good if you feel you recover well and want to use specific and general specific work. An added bonus is that it will prepare you for a meet due to the three lifts being trained either specifically or with a general specific variant.

Third Example: Transmutation (3-day)

## Day 1: Bench - Deadlift - Squat Day

Shirted Bench

- 75-90\%
- 4-12 total

Rack Pulls

- 75-85\% or by RPE
- 6-15 total

Close Stance Olympic Squat

- 3-4 sets
- 6 - 10 reps *determined by RPE

Few sets of lats, abs, or whatever you may have time for.

## Day 2: Deadlift - Squat - Bench Day

Competition Stance Deadlift

- 75-90\%
- 4-12 total

SSB Low Box Squat

- 75-85\% or by RPE
- 6-15 total

Close Grip Incline

- 3-5 sets
- 6 - 10 reps *determined by RPE

Few sets of hamstrings, abs, or whatever you may have time for.

## Day 3: Squat - Bench - Deadlift Day

Free Squat in briefs, suit bottoms, or briefs and suit bottoms

- 75-90\%
- 4-12 total

Board Press (shirted or raw)

- 75-85\% or by RPE
- 6-15 total

Snatch Grip RDL

- 3-4 sets
- 6 - 10 reps *determined by RPE

Few sets of lower back, abs, or whatever you may have time for.

If you only have three days and have limited time, the following setup may be best. This won't have all of the general specific work, but will follow a similar set up as is outlined above.

Fourth Example: Transmutation (3-day)

## Day 1: Bench - Deadlift Day

Shirted Bench

- 75-90\%
- 4-12 total

Rack Pulls

- 75-85\% or by RPE
- 6-15 total

Seated Row

- 3 sets
- 10-15 reps

Reverse Hyper

- 3 sets
- 10-15 reps


## Day 2: Deadlift - Squat Day

Competition Stance Deadlift

- 75-90\%
- 4-12 total

SSB Low Box Squat

- 75-85\% or by RPE
- 6-15 total

GHR

- 30-50 total

Abs

## Day 3: Squat - Bench Day

Free Squat in briefs, suit bottoms, or briefs and suit bottoms

- 75-90\%
- 4-12 total

Board Press

- 75-85\% or by RPE
- 6-15 total


## Band Goodmorning

- 40-60 total

DB Press

- 30-50 total

Now, one last template you may want to use. I know accommodating resistance is popular among a lot of powerlifters. This is especially true in multi-ply federations. I suggest you don't use bands on the specific exercises. The point of doing these lifts is to refine technique and the bands will alter the motor patterns. Chains are a gray area. They can be used on specific exercises, but in most cases it's better to use them on the general specific lifts. To give an example, this could work as a variation of a four-day variation using chains and bands on the general specific lifts. The reasons I used RPE is because it's hard to give a percentage because of fatigue from the main movement. When you add in the extra tension from bands or weight from chains, it can become even harder to pinpoint.

Fifth Example: Transmutation (4-day with accommodating resistance)

## Day 1: Bench

Shirted Bench

- 75-90\%
- 4-12 total

Board Press with band tension

- By RPE
- 6-15 total

Seated Rows

- 30-40 total

Band Pull Apart

- 30-40 total


## Day 2: Deadlift

Competition Stance Deadlift

- 75-90\%
- 4-12 total

Box Squat with Blue Band and 120 Pounds of Chains

- By RPE
- 6-15 total

Glute Ham Raise (weighted or with bands)

- 32-50 total

Optional Upper Back
Abs

## Day 3: Bench

Shirted Bench

- 75-90\%
- 4-12 total

Close Grip Incline

- 3-5 sets
- 6 - 10 reps *determined by RPE

Lat Pulldowns

- 30-40 total

Front Raises

- 30-40 total


## Day 4: Squat

Free Squat in briefs, suit bottoms, or briefs and suit bottoms

- 75-90\%
- 4-12 total

Rack Pulls with bands

- By RPE
- 6-15 total

Reverse Hyper

- 3-5 sets
- 8 - 12 reps

Abs


## Realization

Realization is the final piece of the puzzle. This block will have low volume, high intensity and full recoveries between workouts. It generally runs two weeks. During this block, some lifters may choose to dedicate a separate day for each lift. Some may decide to only have two main days, with one for the bench and one for the squat/deadlift. After the specific movement, some light general accessory work can be performed. The volume and intensity of this work should be low. l'll demonstrate a basic realization block using each setup.

With this set up, each lift has a dedicated day with some light accessory work after. The purpose of the accessory work is to flush some blood and act as light GPP. It should not be heavy or taxing.

First Example: Realization (3-day)

## Day 1: Deadlift

Competition stance, same gear as used in a meet

- $90 \%$ or more
- 1 - 4 reps

Reverse Hyper

- 2 sets
- 10 - 20 reps

Shrug variation

- 2 sets
- 15-20 reps

Abs

- 2 sets
- 15-25reps


## Day 2: Bench

Bench Press, competition gear

- $90 \%$ or more
- 1-4 reps

Band Pushdowns

- $2-3$ sets
- 15 - 20 reps

Rows (light)

- 2 sets
- 10 - 20 reps

Band Front/Side/Rear Delt Raise

- 2 sets
- 10 - 20 reps


## Day 3: Squat

Free Squat, same gear as used in a meet

- $90 \%$ or more
- 1 - 4 reps

Band Pull Through (light)

- 2 sets
- 10 - 20 reps

Band Leg Curls

- 2 sets
- 10 - 20 reps

Abs

- 2 sets
- 15-25reps

Some lifters may opt for only having two main training days during this block. If this is the case, they'll have one bench day and a day for the squat and deadlift. Here's one way to set this up:

Second Example: Realization (2-day)

## Day 1: Bench

Bench Press, competition gear

- $90 \%$ or more
- 1 - 4 reps

Band Pushdowns

- 2-3 sets
- 15 - 20 reps

Rows (light)

- 2 sets
- 10 - 20 reps

Band Front/Side/Rear Delt Raise

- 2 sets
- 10 - 20 reps


## Day 2: Squat and DL

Free Squat, same gear as used in a meet

- 9o\% or more
- 1 - 4 reps

Deadlift, competition stance, same gear as used in a meet

- $90 \%$ or more
- 1 - 4 reps

Reverse Hyper

- 2 sets
- 10 - 20 reps

Band Pull Through (light)

- 2 sets
- 10 - 20 reps

Abs

- 2 sets
- 15-25 reps


Another way that may be used to set this up would be doing the general accessory work on a separate day. Remember, the extra workouts are light and used to enhance recovery.

Third Example: Realization (2-day)

## Day 1: Bench

Bench Press, competition gear

- $90 \%$ or more
- 1-4 reps

Rows (light)

- 2-3 sets
- 10 - 20 reps


## Day 2: Bench extra workout

Band Flies

- 2-4 sets
- 10 - 20 reps

Band Pushdowns

- 2-4 sets
- 10 - 20 reps

Band Front/Side/Rear Delt Raise

- 2-4 sets
- 10 - 20 reps

Band Pull Apart

- 2-4 sets
- 10 - 20 reps


## Day 3: Squat and Deadlift

Free Squat, same gear as used in a meet

- $90 \%$ or more
- 1-4 reps

Deadlift, competition stance, same gear as used in a meet

- $90 \%$ or more
- 1 - 4 reps


## Day 4: Squat and Deadlift extra workout

Reverse Hyper

- 2-4 sets
- 10 - 20 reps

Band Pull Thrus (light)

- 2-4 sets
- 10 - 20 reps

Band Leg Curls

- 2-4 sets
- 10 - 20 reps

Abs

- 2-4 sets
- 15 - 25 reps



## Setting up a training cycle:

When using Block Periodization leading up to a contest, it's important for a lifter to know how many weeks total they have. It may be best to work backwards from the meet. This will allow the lifter to have a guideline of how long each block should run, when equipment should be added, when to take restoration/deload weeks, and how to adjust if changes need to be made. Below is an 18 week training cycle. The blocks are designated, as well as when certain gear will be used. These are merely suggestions and will depend on the lifter's skill in the gear as well as training needs. It 's written working backwards from the meet.

Week 1: Meet week
Week 2: Restoration/Deload
Week 3: Realization (full gear)
Week 4: Realization (full gear)
Week 5: Restoration/Deload
Week 6: Transmutation (bench shirt, briefs, suit, or both at lifter discretion)

Week 7: Transmutation (bench shirt, briefs, suit, or both at lifter discretion)

Week 8: Restoration

Week 9: Accumulation (Raw)
Week 10: Accumulation (Raw)
Week 11: Accumulation (Raw)
Week 12: Restoration/Deload
Week 13: Transmutation
(Raw or limited/loose gear)
Week 14: Transmutation
(Raw or limited/loose gear)
Week 15: Restoration/Deload
Week 16: Accumulation (Raw)
Week 17: Accumulation (Raw)
Week 18: Accumulation (Raw)

## Conclusion:

Block Periodization is not a one-size-fitsall training system. It is not a matter of sets $x$ reps, exact exercises and personal beliefs. It"s an organizational outline that classifies means of preparation from general to specific. To successfully implement this system, a lifter must be able to thoughtfully place particular exercises into blocks that correspond with the principles of general preparation, general specific preparation, and specific preparation. By having an understanding of this style of programming, a lifter will be able to take advantage of the general qualities gained from the early stages of training by promoting transference to the competition squat, bench and deadlift. I hope this article has stimulated some thought and cleared up the misconceptions on Block Periodization.

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## BLOCK PERIODIZATION FOR POWERLIFTING: REVISITED AND REVISED

## GABRIEL NASPINSKI



## An Issue of Transfer of Training and Frequency

It has been around two years since I first wrote A Practical Guide for Implementing Block Periodization for Powerlifting, which was recently posted again as an EFS Classic. In those two years, some things have changed. My total has kept improving (although not as much as I would like, but that is mostly due to meet day miscues more than anything), I was called a "Westside-bashing, American-hating, watered-down Russian" on an infamous powerlifting forum, and my thoughts on certain things I touched on in my first article have changed. The purpose of this article is to revisit that first article and revise some of the original thoughts I had of how to apply this system. The main point is to address the issue of transference of training and making the most of one's time, as well as to take a look at frequency.

## Clearing the air

First off, I do not hate America, Westside, or lifters that use systems that are similar to the methodology used at that gym. I understand that the particular system has worked for many (myself included for a short amount of time), and I have never discredited what the lifters there have accomplished. Their results have been nothing short of amazing, and they have brought many innovations to the sport. However, this article will probably have some ideas that are in sharp contrast to that system. That does not mean that anything about that system or any other system is wrong.

## Dynamic correspondence| transfer of training/stop wasting your time

Much has been said about dynamic correspondence. I could easily go into one of the articles The Thinker wrote and put the definition in here or pull out one of Verkhoshansky's books and type it verbatim. But, rather than do that, I will give a simplified definition for everyone that is opposed to people speaking scientifically (since apparently it is a crime to do so). So, for everyone that is offended by technical vocabulary, dynamic correspondence basically means using movements that will help to improve your competition events. They should be similar in structure to the main movements. So let's just do a quick quiz here and see if you know which has more carryover to the competition lifts.

## Select the movement that will have the most carryover to a bench press:

A) Close-Grip Bench Press
B) DB Incline
C) Rolling Triceps Extension

## Select the movement that will have the most carryover to a squat:

A) Close Stance Pause Squat
B) Chain Suspended Good Morning
C) Reverse Hyper

## Select the movement that will have the most carryover to a deadlift:

A) Chain Suspended Good Morning
B) Deficit Deadlift
C) Zercher Squat to an 11-inch box with band tension and chains

In case it isn't obvious or you didn't know, the answers are 1) A, 2) A, and 3) B. Basically, these movements share a higher level of similarity to the competition movements. So, this brings me to my next point of not wasting your time. For a powerlifter who is concerned with increasing his total in three specific events and not much else, do not waste time on minor bullshit like triceps extensions, reverse hypers, etc. at such a great volume that it takes away from your main lifts and supplemental work that has a transference. And yes, I understand the point that some lagging muscle groups can hold back progress. However, you can correct this through a few sets in your warm up or a few sets after your main work. Also, if you are so inclined, you can correct this in extra workouts either later in the day (if you train in the a.m.) or the next day (if you train in the p.m.) through low intensity accessory work. This will not impede your recovery if the volume and intensity are kept in check.

## Frequency

When it comes to the subject of training frequency, this is probably where I have had the most significant change of thought. The first article I wrote featured a lot of upper/lower splits that are fairly typical of American lifters - with the bench being performed twice and the squat and deadlift being performed one to two times a week, with the appropriate special exercises after. While this method has produced results, and can continue to produce results, lately I have become more favorable to training the lifts more often in a week. This holds true in both the accumulation and transmutation blocks.

My reasoning behind this is the fact that the sport really boils down to how well you do in the squat, bench, and deadlift. A large part of any competitive event is based on how technically sound you are in the competitive events. By performing the competition lifts and closely related variants of them, you will become more technically sound. It also works on a principle known as synaptic facilitation. This basically means that the more times a movement is performed (with enough stimulation from proper intensity), the better you will become due to neural factors. This is the premise behind the high intensity, high frequency programs of the Bulgarians or the high frequency (albeit lower intensity) programs of the Russians and other Eastern Bloc countries.



Now, before I lead anyone on and have them thinking that they now need to find whatever the internet has led people to believe is the "Bulgarian" method, or that they should plug their numbers into some cookie cutter "Sheiko" spreadsheet, understand that those programs may or may not be appropriate. Understand that some of the programs that have made their way to the internet were designed for a specific lifter who may have a much higher level of qualification than yourself. Also, consider that some of these were designed for Elite athletes whose days were solely comprised of training, eating, and sleeping, so outside stressors were virtually eliminated. They also had access to a plethora of restorative measures that may not be available to you. If you are currently training once a day for three days a week, do not think you can jump straight to six or seven days of high intensity workouts for multiple sessions a day (and for most practical purposes this really won't work for anyone with a job or responsibilities outside of training). This is something that must be gradually accumulated over time. Start slow and, as frequency is the key variable, increase it gradually.

## Putting it together

## Accumulation

Let's now take a look at a couple programs side by side. The first example I show will be identical to the one in my original article for an accumulation block. Notice the upper/lower splits and the high amount of general work (Incline DB, GHR, Reverse Hyper, Triceps Pushdowns, and so on).

## Day 1: Bench

- Close-Grip Floor Press: 55-70\% for 12 - 30 reps
- DB Incline Press: 30-50 total reps
- Seated Rows: 36-60 total reps
- Face Pulls: 36-60 total reps
- Triceps Pushdowns: 3 sets for as many reps as possible


## Day 2: Deadlift

- Deficit Deadlift (Conventional): 55-65\% for 18-30 reps
- Good Morning (Barbell): 4-5 sets for 6-10 reps
- GHR: 50-75 total
- Shrugs: 2-3 sets for 10-20 reps
- Abs


## Day 3: Bench

- Ultra Wide Bench Press: 55-70\% for 12-30 reps
- DB Triceps Extensions: 30-60 total reps
- Lat Pulldowns: 36-60 total
- L-Lateral DB Raise: 30-45 total


## Day 4: Squat

- Box Squat: $55-70 \%$ for 12-30 total
- DB Split Squat: 24-40 total each leg
- Reverse Hyper: 24-40 total
- Optional Upper Back (usually a shrug variation): 2-3 sets for 1020 reps
- Abs


Now, let's take a look at how this can be changed to have a higher frequency and a greater amount of dynamic correspondence. On paper, the volume will look lower, but it is lower in the general exercises. While these exercises may be of use to the novice lifter or to those who have a glaring issue they are trying to correct, these exercises become less important as a lifter's qualification rises. Some general exercises are still included, but they are at the end of the workout after the two main movements of the day are finished. Also, note the frequency of the movements. The following template will be four days a week with squatting variations twice, deadlifting variations twice, and benching on all four days. However, note how the volume and frequency are altered to account for the increased frequency.

## Day 1: Bench

- Close-Grip Bench Press: 60-70\% for 12-30 reps
- Front Squat: 3-6 sets of 4-6 reps at RPE 6-7
- DB Incline: 3-4 sets for 6-12 reps
- Row variation: 30-50 total
- Upper back or delts: 3 sets for 10-20 reps


## Day 2: Deadlift

- Deficit Deadlift (Conventional): 60 - 70\% for 18-30 reps
- Floor Press: 3-6 sets of 4-6 reps at RPE 6-7
- Weighted 45 degree hyper: 3-5 sets for 8-12 reps
- Lat Pulldowns: 3-4 sets of 10-15 reps
- Abs


## Day 3: Bench

- Close-Grip Bench Press (legless): 60-70\% for 12-30 reps
- Romanian Deadlift: 3-6 sets of 4-6 reps at RPE 6-7
- Weighted Pushups or dips: 3660 total
- Row variation: 30-50 total
- Upper back or delts: 3 sets of 10-20 reps


## Day 4: Squat

- Box Squat: 60-70\% for 12-30 total
- Decline Bench: 3-6 sets of $4-6$ reps at RPE 6-7
- DB Split Squat: 3-5 x 6-12/leg
- Pull-Ups: 30-60 total reps
- Abs

This template gives an example of using more general specific exercises closer to the competition movements and eliminating the excessive volume of general accessory work. In addition, the RPEs are listed as six to seven. While six may seem light, I included it because when you are utilizing special exercises, it sometimes takes a few sets to get an accurate weight. So, maybe the first set or two is six, but then slight increases are made to make it RPE of seven. Also, while there is benching four days a week, the volume and intensity is tracked and a lifter should listen to his body on this. All of the sets, reps, and percentages/RPEs are just a guideline. Nothing is written in stone and all will need to be adjusted.

## Transmutation

With this now covered, we will take a look at a transmutation block being revised. While I included a four-day split with upper and lower days separated, I have not favored this approach as of late. It is still a viable option, but for the transmutation block I am more partial to a three- or even four- day schedule that has more than one competition variant trained per session. There are a few different ways this can be set up. The first is a three-day split similar to what I had outlined in my first article. It would appear as the following:


These are the main training days which would be spaced out over the week. It could be Mon-WedFri or Sun-Tue-Thur, or any variation of that. As far as the terms and exercise selection: Comp stands for competition movements (done with competition gear, grip, stance, etc.), Sup is for supplemental (special exercise closely related to the movement-such as competition stance or grip, but less gear and possibly adding bands, chains, or tempo changes), and Dev for developmental (special exercise still related to movement but done with different grip, stance, and tempo). RPE is listed, and for the competition movements, percentages are also a viable option. To give an example of this, let's say Lifter A is a geared, wide stance squatter that pulls sumo. His three-day transmutation may look like this:


If a lifter wanted to have a four day/week transmutation block, I would suggest the following:


So, to give an example of our above lifter, let's plug in these movements:


As far as general accessory work, it can be included on these days as a brief circuit at the end, or it can be done in extra workouts on off days. This would be light, easy flushing work and could be used to work some neglected areas (lats, upper back, injury prevention for knees and shoulders, mobility work, abs, etc.) Do not turn these into a bodybuilding workout on your off days.

## Realization

In reference to the realization block, I would keep the same approach outlined in the original article. This is meant to be a taper and the decrease in frequency and volume will serve appropriately.

## Conclusion

When it comes to a question of getting the most out of your training, a time comes when some of the general exercises are no longer a priority. It becomes important to decide when a shift needs to be made in favor of a means of training that will focus on the actual competitive events. To continue to reach new levels of performance, a lifter will need to prioritize the correct movements. Additionally, when volume and intensity can only be raised so much, frequency is another variable that can be manipulated. The key is for a lifter to make a gradual transition and know when the appropriate time has come to increase this. This is something that is individual to each lifter and will have to be monitored closely.


## Note from Elitefts.com Inc Founder

I wanted to add a notation to this article so please excuse any typo's, grammar or spelling errors I may use. This is unedited. I have followed Gabe for many years now and he is the "real deal" I have always used 4 measures of how good somebody is; What is their education, Who have the trained under, What have they personally done, and Who have they trained.

Gabe is one of the FEW I can say has excelled at all four - thus the real deal.

The reason for my posting this is Gabe like so many others with his qualifications do not have the time and can't stand the over promotion that happens in this industry. My intent is to pass on that Gabe does do online programing and is very affordable. Personally I do not think he charges enough for what he's worth. If you are looking for someone to handle your programing Gabe is someone I highly suggest.

For more information you can reach him at Gabriel Naspinski:
physicalpreparationgn@gmail.com.
FYI-elitefts.com, myself nor anyone associated with the site is receiving any affiliate fee or benefits from this. I feel posting this is in the best interest of the readers because they may not otherwise know that Gabe offers this service.

- Dave Tate

Here is a link to Gabe's Blog


## GABRIEL NASPINSKI

Gabriel Naspinski is currently employed by the School District of Hillsborough County at Hillsborough High School in Tampa, Florida. In addition to his duties as testing coordinator, he is responsible for the physical preparation of the Hillsborough High School football team. Prior to this, he was a collegiate strength and conditioning coach at both George Mason University and American University and interned at the University of Pittsburgh and Robert Morris University. He also worked in the private sector at a Parisi Speed School in New Jersey. Naspinski has reached elite status in the sport of powerlifting in the 242-lb weight class.
www.trainingwithpurposegn.com

## HOW I DEADLIFTED 800 POUNDS RAW

## MATT MILLS



I wish I could sit here and tell you that I simply used some magic program that shot my deadlift through the roof and that it was extremely easy to do, but it's quite the opposite.

My last powerlifting meet was a little over three years ago and it was only a push/pull. I benched 445 and I pulled 700 for the first time, which was a 25 -pound PR for me. In my recent meet, I was able to pull 800 pounds raw and this was also my first full meet.

Performing all three lifts is definitely a big difference than a push/pull and it makes for a much longer day than I expected.

I was lucky enough to have started squatting and deadlifting at a young age in high school. Of course, I wasn't squatting all the way down, and no one showed me how to properly lift. However, I trained hard and made a lot of progress at a fairly young age. From day one, deadlifting was always my favorite lift, mainly because I was good at it and we all like to train what we're good at.

In college, I was fortunate to be taken in by some powerlifters and shown how to properly lift. Most importantly, I was shown how to squat to parallel, so I stopped doing half squats like the rest of the guys at the college gym. Up until this point, I had only pulled conventional, not knowing any other way to deadlift. Disa Hatfield addressed my form and had me pull sumo for the first time, thinking that it would better suit my body type. From my very first time pulling sumo, it just felt right. I'm not sure if I hit a PR that day, but I knew that I was going to be much stronger on the deadlift. I finally signed up for my first meet and got over my fear of competing like most of you out there. You should do the same! I read a great article here on elitefts ${ }^{\top}$ about how everyone should compete and how you'll never feel ready. I wanted a reason to train harder in the gym, and even as a gym owner, I needed the motivation to push to the next level. In my first meet in the 242 -pound class, I pulled 600 extremely easy on my first attempt. I had plenty more in me, but, unfortunately, when lowering the bar, I pulled my hamstring pretty bad and had to call it a day.


Since my first meet, my training remained very simple. I kept a strict training log and wrote everything down that I did. Every week, I would refer back and make it a goal to either increase my weight by as little as 5 pounds (yes, I used 2.5 -pound plates) or do one more rep at the same weight. l'm still shocked that some serious lifters don't keep a training log.

## Another way that I was able to hit a PR nearly every time I trained is that I wouldn't always

 increase my weight. A PR in my book doesn't necessarily mean that you have to increase the weight or do another rep. Sometimes a better quality set is more important. Many lifters make the mistake of increasing the weight too soon with ugly form. Eventually, they hit a point where they can't grind out another rep. This is how most people hit the dreaded plateau. It has nothing to do with constantly changing your program and, honestly, "muscle confusion" is a bunch of crap. Save that shit for people who want to do P90X.In my next three meets, my goal was to make a meet PR every time. I was successful in doing so. In my second meet, I pulled 645, and in my third meet, I pulled 675 . In my fourth meet, I reached a huge goal of mine and pulled 700 pounds.


I was able to increase my pull every meet by simply sticking to sumo deadlifts the entire time. My weak point was off the floor, so deficit deadlifts were my 'go to' for accessory work. Sumo Romanian deadlifts were also a big help for my pull. I had never performed these in a sumo stance, but it made a big difference in my training, as I was able to get more comfortable in my setup. I was having issues pulling my hamstring when going for a heavier pull and this seemed to fix it for me. One addition to my training that I feel helped me move from a 600-pound pull to a 700-pound pull was the addition of the glute ham raise. I know this has been said many times here, but do yourself a favor and get an elitefts ${ }^{\top M}$ model because l've come to realize that there is a huge difference compared to other brands.

As my sumo deadlift continued to rise, my conventional pull was really suffering. I was much more comfortable pulling sumo and didn't even want to train conventional at all. Looking back at my training, this was a big mistake. I decided to give strongman a try because I was looking for something new to compete in. In strongman, it is illegal to pull sumo in any deadlift event, so I was forced to work on my weak point. The main reason for this is that most deadlift events in strongman are raised up slightly, so it isn't uncommon to be pulling from 15 to 18 inches off the ground. Regardless, I went back to pulling conventional since I was taking a break from powerlifting for a while. I decided to work up to a heavy double for the day, and I'm embarrassed to say that 605 pounds for two reps is all that I could do. It was also a total grinder to get two reps, and I bounced the second rep off the floor! My form was a little off, having not pulled conventional in a long time, but I was still weak. As a 700-pound deadlifter, 605 pounds for two is a huge difference. I decided to take sumo completely out of my programming and only deadlifted with a conventional stance.


#### Abstract

Another big change in my programming was the addition of strongman training. Farmers' walks became a huge part of my program, and as my farmers' walk improved, so did my deadlift. If you aren't a strongman, I highly recommend that you add them into your program as a powerlifter. Another added benefit of farmers' walks is the added grip strength. I can honestly say that I have never missed a deadlift because of my grip in a powerlifting meet. With the addition of the Super Yoke and Atlas stones to my training, the amount of muscle mass that I added to my body was profound. Even though I was focusing on strongman, I always kept the big three in my training. I've torn my pec three times now, so l've had to make some changes to my bench press, but those staples were always there. A great way to train is to do your compound lifts like a powerlifter, your accessory work like a bodybuilder, and your conditioning like a strongman.


My conventional deadlift continued to rise, and one day I decided to test out my sumo deadlift because it had been such a long time. I was able to pull 705 for a double. This wasn't only a PR for me by five pounds, but I was also able to do two reps at that weight. Increasing my conventional deadlift with the addition of strongman training had helped me tremendously. I will say one thing-l'm lucky enough to have all the equipment I need at my disposal at my facility. I literally have every single elitefts ${ }^{\top \mathrm{M}}$ specialty bar, bands, chains, and you name it. I'm not saying that you need every fancy piece of equipment to get strong, but it does help. If anything, make sure that you have a SS Yoke bar. I regularly do paused squats and good mornings and even flip it around to do front squats because of my tight shoulders.

I've always pulled raw, but in strongman, a deadlift suit is sometimes allowed. I honestly don't like using suits because l've always competed raw in powerlifting, but I also compete to win. I don't want to be at a disadvantage at all, so I picked up a Metal Jack deadlift suit. I began training for ASC Lightweight Strongman Nationals 2013, which included a car deadlift. I rotated my program each week, practicing the car deadlift, and then pulling conventional from the floor. I hadn't tested my 1RM in a very long time, so I was curious to see where I was at in the suit. While using straps, I was able to pull a fairly easy 750 for a single. With the suit or not, this was a huge PR for me considering where my conventional pull had started from just a year before.


After the ASC, I decided to hire a coach to help me improve further. This was a tough decision because I had always done my own training. As a strength coach, Itend to overlook my own training in favor of my clients. After talking with Vincent Dizenzo, the clear choice for me was elitefts ${ }^{\text {TM }}$ coach Josh Bryant. Josh has worked with some of the best in bodybuilding, powerlifting, and strongman. I was told that his programming is borderline insane and that he was also big on high volume training. I've always had a lot of volume in my training, similar to a bodybuilder, because that is what my body responds to best. With Josh's programming, my sights were now set on the 2014 Arnold Classic for Strongman. The deadlifting event was a mystery, so I wanted
to keep my programming the same and continue working on my conventional deadlift. Josh had me periodically go back to pulling sumo, and just like before, when I did, I was able to hit a rep PR every time. Leading up to the Arnold, I was able to hit 685 conventional pull for two without the aid of the suit or straps. Again, nothing overly impressive compared to my sumo pull, but as it increased, so did my sumo pull big time.

One thing I'll say about my training is that I hardly maxed out. All my compound lifts were done for doubles or triples. A big mistake I see with competitors is that they max out too often. Maxing out is only a test, and you aren't going to build much strength from it. When I was younger, I tried training this way for years and it only stalled my progress immensely. A lesson I've finally learned is that reps will build strength, so keep the testing to a minimum or, in my case, save it for the platform.

Again, my weak point has always been off the floor with the deadlift. l'll either lock it out or it will be glued to the floor. Deficit deadlifts were a big part of my training as well as lightning deadlifts. Lightning deadlifts were very interesting to me because I had never done them before. I had done speed pulls against bands and chains many times. In case you don't know, lightning deadlifts are speed deadlifts done against chains for the first rep. The chains are quickly taken off for the second rep. The goal is to increase the speed even further on the second rep. You will, of course, need two partners to strip the chains off right away.


After the Arnold, I had only four weeks until my first powerlifting meet in three years. Luckily, I came back from Ohio feeling good without any injuries. I immediately went back to training hard, knowing that I would only have two and a half weeks to really push it before I needed to deload. Going back to sumo deadlifting, Josh gave me the goal of 715 pounds for two reps, which wasn't much of a problem. My form was just a little off on my setup, which I was able to pick apart from my video. Another helpful tip that l've picked up is to video your lifts. Every time I go for a new PR, I always video it to see if I made any mistakes that I need to improve on. It's always great to have other experienced lifters watch you as well, but there have been countless times when I had a sloppy set and was able to fix it by critiquing myself.

The following deadlift session was my real test to see if I could pull 800 pounds. The goal was 740 pounds for two reps, a pretty big jump from the previous week, but I was feeling pretty good this day despite not taking a break from the Arnold. The 740 pounds went up fast for both reps without a break in my form. After hitting a heavy double, Josh had me drop the weight and hit a couple speed reps for time followed by sumo Romanian deadlifts.


At this point, I still wasn't sure whether or not I was going to go for 800 pounds, but my second attempt would dictate that. I chose a very easy opener at 700 pounds. I've only competed five times in my powerlifting career, but I see so many competitors make the mistake of choosing an opener that is too close to their max. Make sure you get your confidence up on your first attempt and smoke it. I like to choose a weight that I can hit for three reps. This way, even if you're having a bad day or feel like shit, you know that you can get this weight up to put a number on the board. I also decided not to cut weight for this meet.

For the Arnold, I was in the heavyweight division competing against athletes who were near 400 pounds, so I was sitting at 255 pounds. It would have been an easy cut to 242 pounds, but I wanted to be at full strength, so I went in the 275-pound weight class. I recommend this for most competitors in powerlifting. Unless you're going for some kind of record, cutting weight is honestly pointless. If your goal is to lose body fat, that's a different story, as this will be great motivation. Otherwise, keep working to get bigger and strong(er) because that's what this is all about.

My second attempt was 750, and this was the deciding factor for what I was going to do next. Again, I knew I could hit 750, so I still kept my second attempt heavy, but it still wasn't something that I wasn't sure I would get. With the help of the crowd and an ammonia cap, the 750 went up faster than the 700 did, so I knew I had to go for it. I gave the judge my next attempt of 800 pounds and patiently waited backstage until I was on deck.


For about 15 minutes, all I did was visualize 800 pounds going up and then I downed some more caffeine. I blocked all negative thoughts from my mind. It's crazy sometimes how we can mentally defeat ourselves so quickly when all we need to do is think positively. I was the last lifter of the day and got to close the show. I couldn't see much of the crowd from the burning in my eyes from the ammonia, but I was told that everyone was on their feet cheering. There was no way that I could miss this lift.

Lightning Strikes Twice!



## MATT MILLS

Matt Mills is a graduate of the University of Connecticut, earning both his Bachelor and Master in Strength and Conditioning. He is also certified through the National Strength and Conditioning Association as a Strength and Conditioning Specialist. As a strength athlete, he is an accomplished powerlifter with a best deadlift of 800 pounds. He is a middleweight pro strongman with best competition lifts of a 360-pound log press, 900-pound pound Hummer tire deadlift, and a 410-pound Farmers Walk. Matt is the owner of Lightning Fitness, located in South Windsor, Connecticut. He has worked with over a thousand athletes, helping them reach their fitness and nutrition goals.
www.lightning-fitness.net

## OVERVIEW OF PERIODIZATION METHODS FOR RESISTANCE TRAINING

## mLaden Jovanovic



## Introduction

The purpose of this article is to put my current knowledge regarding periodization into some sort of systemized form. This will allow for deeper discussion and will put more knowledge into your coaching toolbox and mine. My purpose is not to attach "good" or "bad" attributes to the different forms of periodization, but rather to critically analyze them. I will discuss their pros and cons, allowing strength and conditioning coaches to make easier choices/decisions on how to implement and combine them in specific situations for specific athletes.

This article will not discuss what periodization or strength is or similar topics but will rather be general in nature. Although I will try to make this article readable and fun, it was written for coaches who possess an advanced knowledge of resistance training and periodization.

## Before We Start

There are four goals that resistance training should cover:

- Structural and strength endurance (15-20 RM)
- Hypertrophy goals (5-15 RM)
- Max strength (1-5 RM)
- Power/explosiveness or dynamic effort (50-70 percent 1RM and Olys)

This classification is highly debatable and is used only so that I can more easily explain the different periodization methods. Please do not bother me or yourself with it, but just accept how it is and direct your attention to the periodization methods described. Thanks.

## Many Coaches, Many Methods

I'm going to discuss "pure" forms of periodization methods, situations that don't happen very often in real life. Real life periodization is a combination of periodization methods. You train your athletes for skill, endurance, strength, flexibility, or (you name it). You can combine different periodization methods for different components of your system, thus using one periodization method for strength work and another for speed work. When you examine the whole, it is hard to distinguish what method of periodization is used. The system as a whole is always bigger than the sum of its components, and one component will affect another and vice versa. Everything is interconnected so plan your training accordingly!

## Sequential Method of Periodization

## Three Groups of Periodization Methods

There are three main groups of periodization methods for resistance training:

- sequential method
- concurrent method
- conjugate sequence system (or emphasis method)

You can combine the above mentioned methods and easily create millions of combinations. Don't forget that the purpose of periodization is to achieve planned goals more easily, not to be too creative. Remember the KISS principle (Keep It Simple Simon) every time you feel the need to create something way too complex from variations of the presented methods.

The sequential method uses specific time intervals to develop only one training goal at a time. There are numerous variations of the sequential method, mostly classified according to the duration of specific time intervals and the sequencing of training goals (methods, means, and loads).

What follows are descriptions of common variations of the sequential method. Note that I didn't say all variations, but only those used the most. This should give you an understanding of the sequential method.

## Long linear method.

One of the most popular methods in resistance training is the long linear method. Note that most popular is NOT synonymous with the best. There is no perfect method, only optimal ones for reaching predefined goals for a particular athlete at a particular stage of his or her career.

The long linear method uses longer time intervals (3-4 weeks or microcycles) to develop only one training goal. It proceeds from high volume-low intensity to low volume-high intensity training, hence the term linear .

Basically, the long linear method uses one block (3-4 weeks) to develop strength endurance, one block for hypertrophy, one block for max strength, and one block for power.

If we depict the average intensity (weight used) and the volume (tonnage lifted), we will get the following picture:

Note that we can develop "smooth" or "sharp step-like" switching between blocks using greater or smaller increases in weight. But what happens when the athlete finishes the proposed plan for four months? Does he start from the beginning again? By default, YES!

Advantages: The long linear method is great for beginners or those who are lifting for the first time. It allows for easy loads and time for technique learning and develops the ligaments and joints using lower intensity and greater volume. Its progression allows for slow and stable adaptation and result progression.

Shortcomings: The main shortcoming of the long linear method is that when developing one block, the others will decrease. For example, when developing structure or hypertrophy, max strength and power will decrease and vice versa. This is not so important for beginners, but as soon as minimal GPP and SPP levels are developed, its "round and round" sequencing will
lead only to stagnation. I know this from my own experience. Also, if no variety and progressions are used, the athlete will soon be bored using the same methods, loads, and exercises. Note that there are some powerlifters who developed great strength using this method, so don't say NO instantly.

Variety and progression: As Poliquin stated, an athlete adapts to a particular exercise in as short as six workouts. Cosgrove stated that athletes adapt faster to rep brackets than to exercises. So, when using this method, exercises should be changed once in a while. The exception to this is when the athlete is in season and maintaining a current strength level. In this situation, it is better not to experiment because this may cause DOMS and affect the athlete's performance on the field. It is better to keep the program how it is, but you can refresh your athletes after two months to extend sport form state if needed. Exercises can be changed every month (when switching to another goals block). Athletes can progress from week to week by trying to lift more for defined rep bracket, increasing the number of sets, decreasing the rest between sets, or playing with tempo and buffer. The last week in each block can be unloading week. Unloading can be done by reducing the number of sets, the weight lifted, or both. This should prevent boredom and overtraining.

Variations to presented method: Use your imagination. From the power block, you can go backward instead of jumping to the structural block. Just remember that the block should follow a "linear approach," either ascending or descending. If you screw this up, then you don't have a long linear method, but rather a long undulating method. Another variation is the reversed long linear method, meaning that you start with low-volume, high-intensity training and progress to high-volume, low-intensity training.


## Short linear method.

he only difference between the short and long linear methods is the duration of specific time intervals. While the long linear method uses longer time intervals ( $3-4$ weeks or even more), the short linear method uses shorter time intervals (1-2 weeks) to develop a particular ability. Note that there is the same sequence as there is in the long linear method but it is done in less time.

Similar to the long linear method, the short linear method progresses from high-volume, lowintensity to low-volume, high-intensity training (in a linear fashion) but in a shorter period of time. Again, there can be "smoothed" and "step like" variations of the short linear method.

Advantages: The short linear method has more advantages than its bigger brother, the long linear method, and it is more appropriate for mediocre (non-beginner) lifters. Shorter cycles should prevent de-training abilities that are not currently developed, and it should prevent boredom and over-training (because stimulus is short; one week). Also, waves of loading are a natural progression of this method so you don't need to bother planning them.

Shortcomings: it is not appropriate for beginners because it builds intensity too quickly. On the other hand, one week of concentrated development of a particular ability may not be optimal progress for advanced lifters (stimuli is too short in duration). Advanced lifter may need more prolonged concentrated development of a particular ability. As also true for the longer version, the short linear method may fatigue an athlete with its linear progression to highintensity training. So when the athlete reaches the final block (max strength or power), he is too tired from previous blocks and cannot give it his best. This is highly dependent on the "build up" time (how many blocks precede the high intensity ones). This can be solved by using undulating periodization (which is described later in the text).

Variety and progression: The simplest variety method (which also prevents staleness) is to change exercises every cycle. There is no need for planning "waves" or unloading in this method because its short cycles will do it by themselves. Just change the exercises or use some variations of them (i.e. new positions, grip) to refresh your CNS and stimulate your muscles from various positions. This should prevent form boredom and stimulate your progression. You can play with the number of sets, tempo, and rest periods in every following cycle.

Variations to presented method: Again, use your imagination. You can try the reverse method, and you can try to go "upward" for a month and then "backward" (reversed) during another. A similar method is presented by Chris Thibaudeau in his Pendulum Method. Just don't forget that the progression should be in a linear fashion. Otherwise you are implementing the undulating method.

## Long undulating method.

Undulating, as contrary to linear methods, uses more of a "waving" approach in progression. In undulating periodizations, there is no linear increase (or decrease) from high-volume, lowintensity to low-volume, high intensity training. Rather, there are "waves". The long undulating method uses longer specific time intervals (3-4 microcycles/weeks) to develop a particular ability.

The only difference between this method and the linear method is that it "breaks" the linear approach and uses the "waving" approach.

Advantages:I don't see any advantages in the long undulating method compared to the long linear method. It is actually worse. At first sight, the advantage could be the "non-linear" fashion of progression, which allows for greater rest when it comes to max strength and power development. But this is not the case because specific time intervals are too long, and there is unloading at the end of each cycle.

Shortcomings: This is the WORST method of all those described! Why? Because it has all the shortcomings of the long linear method plus some new ones. Basically, when you develop one particular ability, the others will fall. As a bonus, a beginner lifter will jump too fast to more intense training unprepared so this may cause injuries. I don't see any particular situation where this method can be used unless you want to cause problems for a beginner or spin some mediocre level lifter round and round without progression.

Variety and progression: I don't want to spend my time and energy writing possible solutions for this "crappy" method. If you are interested, then use same methods outlined in the long linear method.

Variations to presented method: Use all possible sequencing that you can figure out! But keep in mind that they should not be done in a "linear" fashion because it will become the long linear method.

## Short undulating method.

This is the same sequencing as with the long undulating method but in a shorter period of time. The short undulating method is similar to the short linear method. However, instead of linear progression, undulating uses "non-linear" or waving progression.

Advantages: The short undulating method has all of the advantages of the short linear method. Its shorter, specific time intervals prevent detraining and boredom as well as overtraining. Plus, the short undulating method may be better than the short linear method because of its "non-linear" progression, thus allowing for the greater refreshment of an athlete when he reaches max strength and power week. Nonlinear progression may be also more enjoyable to some athletes. The short linear method linearly increases intensity, which can fatigue athletes. But the short undulating method uses weeks of "accumulation" followed by weeks of "intensification." This provides greater frequency of unloading, which is great. It is also great for mediocre lifters (non-beginners). This is my favorite sequence method.

Shortcomings: This is the same as the short linear method. It is not for beginners and is not for elite lifters. Its periods of concentrated development may be too short to induce progression in high level lifters. This also depends on the number of different weeks in one cycle.

Variety and progression: This is the same as in the short linear method. Use new exercises every cycle, or play with the number of sets, tempo, and rest intervals.

Variations to presented method: Use all possible sequencing that you can figure out! Keep in mind that they should not be in a "linear" fashion because it will become the short linear method. Also, if you shorten the specific time intervals too much so that all the components are done in one microcycle (daily undulating periodization), we are no longer talking about the sequence method but rather the concurrent method.

Hybrids between long and short variations. As I stated in the beginning of this article, in real life there are often no "pure" methods of periodization. You can combine the long and short variations. For example, use one month to develop structure and then switch to the short linear method (or undulating) to develop hypertrophy, max strength, and power. Then repeat.

Note that with this approach you can reach some set goals for particular athletes. Don't forget that although you can use all the advantages from combined methods, you can also use their shortcomings.

Combine all the methods to reach set goals, but don't forget that the whole is always bigger then the sum of its components. This is true for advantages and also shortcomings.

Hybrids between linear and undulating variations. Similar to the above example, you can combine the linear and undulating approaches.

What is said for the above hybrids is also true for this one. The possibilities are unlimited if you are creative. But don't be creative for creativity sake. Be creative to reach predefined goals in a particular situation with particular criteria. You can play with the period durations for a particular ability, the sequencing, and combinations of both.

The important thing that should be remembered is that the stagnation or improvement in sequence methods is determined by the duration of a particular block, its cycle (mainly determined by the number of other cycles and their durations), and the interdependence between abilities.

If the number of abilities that should be developed is way too large, then even the shorter variant will not be enough to allow progression. If the number of abilities is $2-3$, then longer variants may also be good. This is because the time between developing a particular ability is too small to induce stagnation or de-adaptation.

## Concurrent Method of Periodization

The concurrent method develops all abilities in a given time period, mostly one microcycle (week). This doesn't necessarily mean that all the abilities are developed in one training session. The synonyms for concurrent are "conjugated" and "complex."

The concurrent methods of periodization can be further classified according to the emphasis on a particular ability. All abilities have the same emphasis (volume, training time), and one or more abilities are emphasized more than the others.

## Ordinary concurrent method

The ordinary concurrent method of periodization uses the same emphasis to develop all targeted motor abilities in a given time period (one microcycle or one week). The problem is that some abilities need to develop more volume than others (i.e. structural and hypertrophy work) so the problem is how to define "emphasis." It could be defined as the time spent on developing a particular ability in one microcycle rather than volume. The volume of hypertrophy and structural work will always be bigger than power and max strength work, but when expressed as time, they will be similar.

Advantages: The main advantage of the ordinary concurrent method is that all abilities are developed at the same time, without any drop in any one of them. This is a great method for mediocre and advanced lifters. Also, it provides variety in the used methods, loads, and exercises and prevents boredom.

Shortcomings: It is harder to plan workouts. Advanced lifters are unable to adapt to the larger number of stimuli, and they need some concentrated blocks of particular abilities to progress (while maintaining others). This depends highly on the number of developed abilities and their inter-relations. This sometimes may be confused with the "shotgun principle," or using everything in a hope of achieving everything. But don't be fooled because the ordinary conjugated method need advanced planning to avoid this situation. It can also be time and energy consuming, thus there is a need for advanced planning of workouts and recovery procedures. This can only be done by advanced lifters or coaches.

Variety and progression: There are an enormous number of methods for providing variety and progression in the ordinary concurrent method. One of them is to pick different exercises every 1-3 weeks (depending on the level of the lifter). Unloading should also be provided by reducing volume, intensity, or both every couple of weeks. You can play with the reps (within the boundaries of the rep bracket for the particular ability) or with the load (implementing buffer and waving of intensity), tempo, rest between sets, and the number of sets. Another possibility is to change the order of the exercises (or abilities) in a week or in one training session (but this is also a form of emphasis).

Variations to presented method: You can change the order of performing the particular exercises (and abilities) in a particular session or in one microcycle. But note that the emphasis should be the same for all developed abilities. You can choose not to develop all abilities in one week. This option is explained in more detail later (in the hybrid and combination section).

One thing that bothers me the most is whether all rep brackets are done within a particular exercise (similar to the pyramid method) or just one per exercise. I believe that using more than one rep bracket for one particular exercise can be detrimental. The body cannot adapt to different stimuli in one exercise so it is better to spread the stimuli over a greater number of exercises. It is better to use only one rep bracket for one exercise (or even better, one movement pattern). I believe that you can finally see how bloody hard it is to define and distinguish different periodization methods in real life! Should all the work presented here (structure, hypertrophy, max strength, power) be done on all movement patterns (or muscles if you use this BS classification) in one microcycle to be considered concurrent?

## Emphasized concurrent method

The only difference between the emphasized concurrent method and the ordinary concurrent method is that the emphasized variation emphasizes one (or more) particular ability within the others that are developed concurrently.

Advantages: It is the same as with the ordinary concurrent method, although the emphasized concurrent method also concentrates on a particular ability while developing (or maintaining) others. It's a great method for advanced lifters who know their weakness and would love to improve it.

Shortcomings: Again, it's the same as in the ordinary variation. Sometimes advanced athletes are unable to adapt to a larger number of stimuli so the emphasized ability should be developed and others should be put on maintenance rather than developed (which may cause overtraining and de-adaptation). The problem with this
approach is that the athlete should switch the emphasis on other qualities to develop them. This is called the conjugate sequence system, and it represents another periodization method (most advanced).

Variety and progression: This is pretty much the same as in the ordinary variation. For emphasized work, you may choose new exercises every 1-3 weeks, and for others, you can keep the same exercises for a longer period of time.

Variations to presented method: Change the order of the exercises or training sessions in a week.

## Hybrids of concurrent method.

Variations and hybrids are unlimited. You can actually use daily undulating periodization, or switch the work on every training session in a non-linear manner. You can concurrently develop a couple of abilities (not all of them) and switch them in a circuit fashion. The choice is yours. I am just throwing out some basic ideas and principles.

I hope that you have realized by now that there is no "pure" form of periodization in real life (read: training). There are too many factors, criteria, situations, exercises, movement patterns, loads, abilities and their sub-groups to just classify things in one of the presented models here. Remember that those are only tools in your toolbox. They are to be used in particular instances to reach set goals. Nothing else! So please read this article only as a rough guide and not as information "written in stone."

## Conjugate Sequence System (CSS)

The conjugate sequence system (CSS) is the most advanced method of periodization. It is based on the pros and cons of sequential and concurrent methods and tries to apply all the advantages and avoid all the shortcomings. It is based on the premise that the elite lifter is unable to optimally adapt (and recover) from large numbers of stimuli (abilities) at the same time. Elite athletes need to concentrate on loading a particular ability. But, this method will lead to decreases in other undeveloped, necessary abilities.

The solution is to develop (emphasize) one ability while maintaining all others with minimal volume. With this approach, the athlete is optimally adapting to one stimuli while maintaining others and avoiding stagnation, overtraining, and fatigue. After some time, the emphasis is switched to another ability. The "switch" can be "sharp" or "smooth." Thus, we can differentiate between sharp or block and smoothed versions of the conjugate sequence system.

There are numerous variations of CSS, mostly classified according to the duration of the emphasis block and the sequencing of the emphasis.

Although similar to the sequential method, we can differentiate between the long and short emphasis period and the linear or undulating switching of emphasis. The long and short versions will be described here. You'll need to use you critical thinking for the linear and undulation variations.

## Short conjugate sequence system.

The short CSS is depicted in picture 11. Everything is done while the emphasis/volume varies during one microcycle. This basically means that only one ability is developed while the others are maintained (or slightly improved). The sequencing is done on a micro level, thus every microcycle (week), there is a switch of emphasis on a particular ability.

Advantages: It develops one skill while maintaining others. There is a lower level of fatigue than in concurrent methods. It's appropriate for higher level lifters. It prevents stagnation, overtraining, and boredom.

Shortcomings: One week of emphasis may be too short to develop a particular ability for most advanced lifters. There is a need for advanced planning, thus the athlete and coach must be experienced with the planning and programming of training. There is also a need for recovery procedures.

Variety and progression: Basically, the sequencing of emphasis provides enough variety and waving. New exercises can be chosen following every cycle. You can choose some varieties presented in concurrent methods.

Variations to presented method: You can choose another sequence of emphasized blocks (i.e. undulating) and their durations. You can use "smooth" or "sharp" changes between the sequences.

## Long conjugate sequence system

The only difference between the short CSS and the long CSS is in the duration of the particular emphasized blocks. Long CSS uses longer time periods to develop a particular ability.

Advantages: This is the same as the short CSS. However, it also allows for the better development of particular abilities in advanced lifters because they may need a longer duration of an emphasized block.

Shortcomings: Longer durations of emphasis may need better planning and recovery procedures to avoid overtraining. There is a need for variety to avoid stagnation and boredom.

Variety and progression: Pick another exercise every block or even every microcycle (most advanced lifters) for emphasized ability. For maintaining ones you don't need, pick new exercises often. There is a need for unloading periods following a couple weeks of emphasized work. You can choose to progress with a load (using buffer or lifting the same weight for a greater number of times), sets, tempo, or rest periods. I am just throwing some ideas out here.

Variations to presented method: You can choose another sequence of emphasized blocks (i.e. undulating) and their durations. You can use a "smooth" or "sharp" change between the sequences.

## Hybrids of conjugate sequence system.

There are unlimited possibilities. For example, you can emphasize one or two abilities while rotating a couple of them for maintenance. Try to combine the sequential and conjugated methods with CSS.

## Conclusion

The three groups of periodization are just that, GROUPS. In real life everything is possible! You can combine these groups to achieve your selected goals for a particular situation, athlete, or criteria. When using training systems in real life, it is very hard to differentiate which method is used (mostly more of them).

This article didn't provide any information on exercise selection and classification, progression, or weekly training structure. As stated before, the goal of this article was to provide basic information on periodization methods. How you distribute the various works (structural, hypertrophy, max strength, power) over various exercises and movement patterns (or muscles if you prefer this BS classification) in a particular time frame is your problem. Things are not as clear in real life as they are on paper.

I hope this article provided some elementary knowledge of periodization methods in resistance training and a starting point for further discussion and implementation in real life training situations.

Mladen Jovanovic is a student and a strength coach in Serbia. He has a deep understanding of the training methods that were pioneered in (his home) Eastern Europe. Although he has an excellent grasp of English, keep in mind that Mladen's native language is not Latin-based.


## MLADEN JOVANOVI

Mladen Jovanović is a physical preparation coach from Belgrade, Serbia, grew up in Pula, Croatia (which I consider my home town). I was involved in physical preparation of professional, amateur and recreational athletes of various ages in sports, such as basketball, soccer, volleyball, martial arts and tennis.

In the free time I train Boxing/MMA and lift (sometimes heavy), along with reading about statistics and learning R programming language. Some consider me Excel wizard. Interested in predictive analytics/machine learning.

## BUILDING THE RAW SQUAT

## BRANDON SMITLEY



If you've been an avid reader of elitefts.com for any length of time, you can likely find an incredible amount of resources and tips to helping improve your squat. Whether it be technical, mental, or physical, Dave has taken the time to ensure that no stone is left unturned.

So why am I writing this article, and sharing my thoughts and viewpoints?
Everyone has different approaches, ideas, methods, and ways of communicating. Not one way of delivery is right or wrong, but it also means that not everything will sink in. This article is designed for me to share with you some of the things that I have learned over the years on what has worked best for myself and clients in building the squat.

What this article will not do is dissect technique. Why? There are dozens of ways you can get technical help, via the Q\&A, our seminars, the coaching provided by athletes and coaches, Twitter chats, articles and videos, and even the training logs. I just feel like I would be repeating what the greats before me have for decades.

## First Things First

I want to get this out of the way as soon as possible. Squatting in gear vs squatting raw really isn't all that different. Yes, there ARE differences, but the major take home points remain the same.

- Big air into the belly
- Tight lats/back
- Hips break first
- Spread the floor/hip external rotation
- Drive the head/back/traps up into the bar first out of the hole

The major differences are going to be how far one sits back and the feedback loops from the gear. Yes, an equipped squatter is likely to have a wider stance, but you can still see those in gear squatting rather narrow and those that are raw squatting rather wide. So this is a personal factor, not a "must" like the points above.

WATCH: Spotting 101 - The Squat
Raw lifters are going to see a bit more forward knee travel, and rely on the stretch reflex a bit more. Otherwise, the squats are utilizing the same principles and can be approached similarly. The differences l'll discuss below.


## Needs Analysis

One thing we need to do before ever addressing the squat is to look at the needs of the raw squatter. We know that they do not have the support from gear in the hole, and that there will be more forward knee travel than their equipped counterparts. This can help us decide what we need to focus on to improve the lift.


## The Hole

Without the support of the equipment, we need to build the bottom end strength of the lift. This can be done via a variety of training approaches, but this will likely be where most lifters fail (very rarely do you see a lifter miss a squat at the top unless they stumble or lose balance).

Even if they are missing about 3-4 inches out of the bottom, this can be attributed to not having enough speed from the bottom.

## The Quads

Without a doubt, this is probably the biggest change one will need to make to their training from the equipped lifters. With the forward knee travel, the range of motion and stress placed on the knee and quads increases. Building this strength is going to be vital to getting out of the hole, but also continuing the acceleration of the lift through the sticking point. The quads are huge muscles, and I challenge you to find a raw lifter with big quads that isn't squatting some impressive numbers.

## But What About the Hamstrings?

The hamstrings are still very important for the raw squatter. After all, the descent of the lift is loading them eccentrically, and they are going to provide a good stretch reflex from coming out of the bottom. However, they are not nearly as important to the equipped lifter who will be sitting back more into the gear and have a drastically more posterior chain dominant squat.

Now, before you have my head on a stake, hear me out. If your hamstrings are incredibly weak, then yes, you do need to do hamstring work! There is no such thing has having hamstrings that are too strong. But, relying on your hamstrings to be the dominant mover of your squat is incorrect.

## WATCH:

Best Secondary Movement for the Squat

The stronger your hamstrings, the stronger your quads can get. Your hamstrings are going to help stabilize the tibia while it transfers the force from the floor, into the legs, up through the torso, and into the bar. So the better you can stabilize the tibia, the more the quads can do their job and the healthier your knees will be.

So your take home point here: Train your hamstrings to be strong enough to handle the strength your quads want to display. For some, this might mean you need a ton of hamstring work (beginners). For others, it might just be whatever you need to keep the balance between your quads and hamstrings.

## Programming Considerations

Now for the juicy stuff you've probably been waiting for: something you can actually use.

I'm going to cover a plethora of methods, ideas, and exercise approaches so just understand that based upon how you train, how long you've been training, and where you classify as a lifter (beginner, elite, etc.) can all dictate how you implement these.


## Specificity

To be good at squatting, you have to actually practice the lift. Even as someone that is in favor of a concurrent training methodology with conjugating lifts, I still believe specificity to be at the forefront. You've got to do the movement to train the muscles the way they are planning to be used on the platform. So my first recommendation is to get good technically at the lift. Once you do this, then you can really begin to have some fun with bands, chains, specialty bars, and other variations of the movement to help address specific weak areas of your squat.

## Needs Analysis Weak Point Index

Assuming you've got your technique dialed in, it's time to see what happens when your technique breaks down under maximal loads. This can give you an idea of where you need to focus your supplemental and accessory work (and even your max effort or main movement).

Below are some tables giving you some ideas of certain movements, accessory work, and set/rep ranges that can help you:

| Weak Point | Exercise Type | Exercise | Sets | Reps |
| :---: | :---: | :---: | :---: | :---: |
| Hole | Main Movement | Pause Squat (1-3 sec ct) | 1-5 | 1-5 |
|  |  | Low Box Squat |  |  |
|  |  | Pause Squat vs Accommodating Resistance |  |  |
|  |  | Anderson Squat |  |  |
|  | Supplemental | Pause Squat (1-3 sec ct) | 3-5 | 5-10 |
|  |  | Low Box Squat |  |  |
|  |  | Pause Squat vs Accommodating Resistance |  |  |
|  |  | Anderson Squat |  |  |
|  | Accessory | Belt Squat | 3-5 | 10-20 |
|  |  | Hack Squat |  |  |
|  |  | FFE Reverse Lunges |  |  |
|  |  | Bulgarian Split Squats |  |  |


| Weak Point | Exercise Type | Exercise | Sets | Reps |
| :---: | :---: | :---: | :---: | :---: |
| Knee Valgus/Caving | Main Movement | Wide Stance Squat | 1-5 | 1-5 |
|  |  | Wide Stance Box Squat |  |  |
|  |  | Wide Stance Pause Squat ( $1-3$ sec ct) |  |  |
|  | Supplemental | Wide Stance Squat | 3-5 | 5-10 |
|  |  | Wide Stance Box Squat |  |  |
|  |  | Wide Stance Pause Squat (1-3 sec ct) |  |  |
|  | Accessory | Goblet Squat - Bands Around Knees | 2-5 | 10-20+ |
|  |  | Belt Squat Marching |  |  |
|  |  | Seated Hip Abduction (or use band) |  |  |
|  |  | Wide Stance Hack Squat |  |  |
|  |  | Wide Stance Leg Press |  |  |
|  |  | Banded Hip Series |  |  |


| Weak Point | Exercise Type | Exercise | Sets | Reps |
| :---: | :---: | :---: | :---: | :---: |
| Hips Rising First | Main Movement | Close Stance Squat | 1-5 | 1-5 |
|  |  | Close Stance Low Box Squat |  |  |
|  |  | Front Squat |  |  |
|  |  | Close Stance SSB Squat |  |  |
|  |  | High Bar/Manta Ray Squat |  |  |
|  |  | Close Stance Pause Squat |  |  |
|  | Supplemental | Close Stance Squat | 3-5 | 5-10 |
|  |  | Close Stance Low Box Squat |  |  |
|  |  | Front Squat |  |  |
|  |  | Close Stance SSB Squat |  |  |
|  |  | High Bar/Manta Ray Squat |  |  |
|  |  | Close Stance Pause Squat |  |  |
|  | Accessory | Close Stance Leg Press | 3-5 | 10-20 |
|  |  | Leg Extensions |  |  |
|  |  | Reverse Sled Drags |  |  |
|  |  | TKE's |  |  |
|  |  | Lunges |  |  |
|  |  | Close Stance Hack Squat |  |  |
|  |  | Single-leg Leg Press |  |  |
|  |  | Serrano Split Squats |  |  |


| Weak Point | Exercise Type | Exercise | Sets | Reps |
| :---: | :---: | :---: | :---: | :---: |
| Instability | Main Movement | Cambered Bar Squat | $1-5$ | $1-5$ |
|  |  | Spider Bar Squat |  |  |
|  |  | Tempo Squat (3-1-3) |  |  |
|  |  | Pause Squat (1-3 sec ct) |  |  |
|  | Supplemental | Cambered Bar Squat | 3-5 | 5-10 |
|  |  | Spider Bar Squat |  |  |
|  |  | Tempo Squat (3-1-3) |  |  |
|  |  | Pause Squat ( $1-3 \mathrm{sec} \mathrm{ct}$ ) |  |  |
|  | Accessory | Bamboo Bar/Chaos Squat | 3-5 | 10-20 |
|  |  | Hanging Leg Raises |  |  |
|  |  | Standing Crunches |  |  |
|  |  | Fall Outs/Ab Wheel |  |  |
|  |  | McGill Big 3 |  | 15-60 sec |
|  |  | Plank Variations |  |  |
|  |  | Wall Press Abs |  |  |


| Weak Point | Exercise Type | Exercise | Sets | Reps |
| :---: | :---: | :---: | :---: | :---: |
| Upper Back Rounding | Main Movement | Front Squat | 1-5 | 1-5 |
|  |  | SSB Squat |  |  |
|  |  | Spider Bar Squat |  |  |
|  |  | SSB Box Squat |  |  |
|  | Supplemental | Front Squat | 3-5 | 5-10 |
|  |  | SSB Squat |  |  |
|  |  | Spider Bar Squat |  |  |
|  |  | SSB Box Squat |  |  |
|  |  | SSB Good Morning |  |  |
|  |  | Cambered Bar Good Morning |  |  |
|  | Accessory | SSB Upper Back Good Mornings | 3-5 | 10-20 |
|  |  | Goblet Squats |  |  |
|  |  | Goblet Bulgarian Split Squats |  |  |
|  |  | Goblet Reverse Lunges |  |  |
|  |  | Tsunami Bar Lat Pulldowns |  |  |
|  |  | Zercher Squats |  |  |

While these tables are not all-inclusive, these are things that I program and see results with on a regular basis. You might have access to some other options and special equipment, but for most people these are things that can be done on a regular basis.

Regardless of what your programming philosophy is, these can be implemented into any program and with some major success. The most important part is to make sure that you are addressing the proper areas for you. If you need help with some video critique, the Q\&A is a great place to post a video and get some help for free!

## Frequency

While this part can be highly individualized, I think that it's best that the majority of people are squatting about twice per week on average. You might be able to handle more or less, but generally speaking two squatting sessions per week is a good place to start. One will likely be a heavier or emphasized squat day, and the other will be lighter or more of a supplemental day. One could use a specialty bar, while the other is the competition movement, or you could have none that use the competition movement for an entire block of training, and the next could be nothing but the competition movement. The possibilities are endless in how you truly set this up with all the programming options available, but finding a structure and template that works best for you and your lifestyle is what is most important.

## Understanding Carryover

Now, if you're one that is opting to use specialty bars, bands, chains, and various movement variations, you really need to keep track of PR's for each one. This might seem like common sense, but having this tracked is going to let you see if you have direct carryover.

Having different variations is great, but if it's not going to have carryover (or serve an underlying purpose of just keeping you healthy), you need to know so you can ditch it and find something else that works. For many, this might be using a specialty bar or variation after a meet for an offseason block of training.

You need to have some kind of assessment protocol in your training that lets you know whether your efforts are paying off. I personally like to throw in competition style squats every couple weeks and test some rep PR's (10, 8, or 6 -rep is the norm for me). If these are improving and looking better, then I know I can proceed. If things looks off or worse, I can reevaluate my approach and change things up.

I'm not saying my way is the best, it's just what l've found that lets me track progress without having to actually take a max single in training.

## Bodybuilding

I saved this part for last, as I know it will be something that can be highly debated, but that I think is well worth the investment for the long haul.

As a raw lifter, one of your most valuable assets to increasing your squat is just building more muscle mass. Muscle moves weight, improves leverages, and helps keep joints healthier. It seems like a no-brainer, but with powerlifting being all about being the strongest, some seem to get too specific for too long. Getting some time away from the barbell, and taking the needed down time to put on some quality muscle mass and utilize different loading schemes, intensity techniques, and extended time under tension will help build your foundation for when you do get back to a strength block of training.

You need to have some type of hypertrophy training year round, but know that the amount and focus of where will vary based upon the competitive season. After a meet you might hit nothing but hypertrophy training with various machines and movements you never do, while leading into a meet, your hypertrophy work will only be designated towards your specific weak points to help your squat continue to climb leading into a meet.

Anything else is just going to be a waste of recovery capacity when intensities are at their highest. So don't be afraid to really push your volume in the off-season and really try to build some muscle. Your strength will take a minor hit in the beginning, but when you come back to building that strength, you're going to be able to display it better via more muscle mass contracting from the increased motor unit recruitment.

## Bridging the Gap

While the squat is still the most technical lift we see in powerlifting, the gear whores and raw zealots have much more in common than we think. I grew up reading and learning all my powerlifting knowledge from the likes of Dave Tate, Louie Simmons, Matt Wenning, JL Holdsworth, and other various equipped lifters, but still learned how to take my squat from shit to good. After some tweaks and speaking with other great minds over the course of my training, I've arrived at my own philosophies in building what I feel is the best approach to the raw squat. Whether that is truly the case or not does not concern me; what does concern me is that my squat keeps climbing, and so does yours.

## BUILDING THE RAW BENCH PRESS

## BRANDON SMITLEY



Just like my previous article, Building the Raw Squat, I'm going to go into great depths about what it takes to build the raw bench press. Also just like with the squat, there is a plethora of information on this site to help you with the technical side of things, so this will not be discussed in great lengths. If you need some direction, So You Think You Can Bench Press is a good place to start.

To cover the basics, though, whether you bench press raw or in gear, there are a few quality things you will notice that must happen to be a successful, strong bencher:

- Utilization of leg drive
- Bar is squeezed, weight is settled on the lats
- On the descent, the bar is pulled apart and lowered controllably with the lats
- Elbows remain tucked to some degree
- Belly should be full or pushed up
- Scapulas will be pulled back and down, wedged into position
- There will be some sort of arch (big or small)

There will, of course, be variance between lifters, but you should be able to see these in all successful bench pressers.

## Needs Analysis

Now let's cover some of the differences you're going to see in the raw bencher versus equipped. Just like in the squat article I wrote, we need to look at the needs analysis of a raw bencher. Without a bench shirt, things begin to change a bit in terms of muscle loading and the strength curve.


## Chest/Pecs

In most powerlifting realms you're going to hear how unimportant the chest is. "Benching happens with the triceps, bro." I'm not knocking the triceps, they're very important (we'll get to them in a minute), but go ask a person that's blown their pec how benching is now. It sucks. They likely can't get over 225 without it bothering them. The pecs are indeed important for the raw bencher.

However, how they are trained needs to be different than our bodybuilding counterparts. We're not really so concerned about building fluffy, ripped pecs, but rather pecs that can contract hard and explosively while maintain a good, solid isometric contraction on the chest (for the pause). If you aren't training your chest with some isolation work, you should probably start. Not only will you less likely blow a pec, but your strength off the chest is going to get better.

## Triceps

This is the bread winner you were probably looking for, and without a doubt the most important part to a successful bench press. With the elbow position being tucked at about a 35-55 degree angle, the triceps are going to take a much larger grunt of work than the style of your typical bench bro, elbows-out bench press. Specifically the medial and long heads are the parts of the triceps you are going to want to work. The lateral head is going to have minimal contribution to your bench press. I can't remember where I heard the saying, "lateral head, lazy head", when speaking about the bench press, but it definitely holds true.

Once the barbell has been lowered and is on the chest, and a "press' command comes, the pecs will help get the bar started to move due to the stretch reflex and deficit of the humerus. As the pecs horizontally adduct the humerus, the triceps will be forced to engage to maintain that great elbow positioning you had on the way down.


## Lats

In addition to the triceps, we often hear a lot about how the lats help you bench press. This is only partially true. Yes, you need your lats to bench massive weights, and yes, it can be argued that the lats help somewhat off the chest, but I think most look at the way the lats are used in the bench press incorrectly. One of their most important roles in benching is to help stabilize the humerus. If the lats are strong enough to do this, the elbow position we desire will hold, weight can be transferred better via the triceps, and more than likely you're going to finish the lift. Your lats will also help with the eccentric aspect of the movement, and it's highly suggested that you do let the lats take this grunt work, so that your pecs can do their role on the press more efficiently. So, "using your lats" is generally meant more in terms as an isometric, not a concentric action.

## Shoulders

The shoulders are the last aspect that l'm going to cover, mainly because they aren't really doing anything of true significance. You'll need some strong anterior delts to help move the weight off the chest, but too strong and you'll get that nasty "flaring" motion (or too tweak of lats and triceps, depending on your point of view). So for your shoulders, if you're flaring you know you need more lat and tricep work, and if you're not flaring, you can stand to do some more shoulder work if you're missing around chest level. The rear delts are going to be important to help give you that big shelf to press through. The bigger the foundation, the bigger the building. Build a big upper back and rear delts, and you'll be able to display more of the strength you've got on the front side - not to mention, it will help keep your shoulders healthier long-term. But the lateral head of the shoulders? Not all that important, really. You'll need to train them a bit for some balance and general health, but otherwise, don't think lateral raises are going to increase your bench press any time soon.


## Programming Considerations

The bench press has some interesting considerations to take into account compared its powerlifting brethren, the squat and deadlift. Due to the bench press having much less overall muscle mass involved, and typically less overall weight used during the execution, it's going to be less stressful to the nervous system and recovery.

## Specificity

Just like I mentioned in the previous article about the squat, to be good at the lifts, you are going to need specificity to get better at the movement itself, but once you become technically proficient you can begin to use different movements, bands, chains, and bars to help build up the weak points you might have. l'll cover this more below.

## SFEGAITY BARS

 Your next PR could be just one baraway.
## Frequency

With overall less stress from the bench press compared to the squat and deadlift, this allows for the bench press to receive more frequency during a microcycle. For female and smaller male lifters, increasing strength in the upper body can take a bit more work than compared to some of the bigger lifters. This is in part due to the fact that making five pound jumps end up being a larger percentage of the training/competition max and we're not getting as much CNS stimulus from the lack of total weight.

So increasing overall volume and stimulus during a microcycle can help keep the lifting moving in the long run, and also help build some quality muscle tissue. From my experience, benching seems to work well with two to three times per week for most lifters. Some might be able to stretch this into four days per week based upon how the training is managed, but this should probably be saved for highly competitive benchonly competitors, as the shoulder havoc and complications could affect lower body squat training days. The most important part to take note in with the increased frequency is overuse and tracking overall volume of work. You will need to have days where you have RPE or weight caps to help prevent overtraining, that way on your heavy days you can be fresh.

## Bodybuilding

I mentioned in the squat article how the bodybuilding work would help with long term development and overall extend your career in powerlifting. While this is true, for this segment I want to focus on the overall sheer muscle mass that it takes to be an excellent raw bencher. Take a look at people like Casey Williams, Maliek Derstine, and Meana Franco. They have considerably more upper body mass in general
than their competitors (and some impressive raw benches to their credit). The more muscle mass around a joint, the more stable it will be. Also, the more muscle mass one has, the greater surface area they have to apply force from the bench pad up into the bar. So overall, besides just staying healthy long term, having the size of a bodybuilder is going to help move some impressive weights (directly and indirectly).

## Needs Analysis Weak Point Index

Below are some tables to give you some ideas of certain movements, accessory work, and set and rep schemes that can help you:

| Weak Point | Exercise Type | Exercise | Sets | Reps |
| :---: | :---: | :---: | :---: | :---: |
| Chest (Elbows Flare) | Main Movement | 1 Board Press | 1-5 | 1-5 |
|  |  | Foam Board Press |  |  |
|  |  | Reverse Band (Micro/Mini) Bench Press |  |  |
|  |  | Close Grip Bench Press |  |  |
|  |  | Close Grip 1 Board Press |  |  |
|  |  | Close Grip Foam Board Press |  |  |
|  |  | Close Grip Reverse Band (Micro/Mini) Bench Press |  |  |
|  | Supplemental | Tempo Bench Press | 3-5 | 5-10 |
|  |  | JM Press |  |  |
|  |  | Close Grip 2 Board Press |  |  |
|  |  | Close Grip Floor Press |  |  |
|  |  | Spoto Press |  |  |
|  | Accessory | Rolling Triceps Extensions | 3-5 | 10-20 |
|  |  | Tate Press (various angles) |  |  |
|  |  | Skull Crushers |  |  |
|  |  | DB Skull Crushers |  |  |
|  |  | Lat Pulldowns |  |  |
|  |  | Chest Supported Rows |  |  |
|  |  | DB Rows |  |  |
|  |  | Inverted Bench Press Rows (vs band) |  |  |


| Weak Point | Exercise Type | Exercise | Sets | Reps |
| :---: | :---: | :---: | :---: | :---: |
| Chest (TRUE miss) | Main Movement | Bench Press w/Extended Pause ( $2-3 \mathrm{ct}$ ) | 1-5 | 1-5 |
|  |  | Foam Board Press |  |  |
|  |  | Bench Press vs Bands/Chains |  |  |
|  |  | Floor Press |  |  |
|  |  | Incline Bench Press |  |  |
|  |  | Spoto Press vs Bands/Chains |  |  |
|  |  | Close Grip 1 Board Press |  |  |
|  | Supplemental | Wide Grip Bench Press | 3-5 | 5-10 |
|  |  | Cambered Bar Bench Press |  |  |
|  |  | Overhead Press |  |  |
|  |  | Incline Bench Press |  |  |
|  |  | Spoto Press |  |  |
|  | Accessory | DB Bench Press (various angles) | 3-5 | 10-20 |
|  |  | Deficit Push ups |  |  |
|  |  | DB/Band/Chain/Cable Flys (various angles) |  |  |
|  |  | Dips |  |  |
|  |  | DB Overhead Press |  |  |
|  |  | Arnold Press |  |  |
|  |  | Front Raises |  |  |


| Weak Point | Exercise Type | Exercise | Sets | Reps |
| :---: | :---: | :---: | :---: | :---: |
| Mid/Lock Out | Main Movement | 2/3/4 Board Press | 1-5 | 1-5 |
|  |  | Bench Press vs Bands/Chains |  |  |
|  |  | Reverse Band (Monster/Light) Bench Press |  |  |
|  |  | Floor Press vs Chains |  |  |
|  |  | Close Grip Floor Press vs Chains |  |  |
|  |  | Pin Press (set slightly below weak point) |  |  |
|  |  | Close Grip Incline Bench Press |  |  |
|  | Supplemental | Close Grip Bench Press vs Bands/Chains | 3-5 | 5-10 |
|  |  | JM Press |  |  |
|  |  | Close Grip Bench Press w/ Shoulder Saver |  |  |
|  |  | Close Grip Reverse Band (Monster/Light) Bench Press |  |  |
|  |  | Floor Pres vs Chains |  |  |
|  | Accessory | Skull Crushers | 3-5 | 10-20 |
|  |  | DB Skull Crushers |  |  |
|  |  | DB Rolling Triceps Extensions |  |  |
|  |  | Pressdowns |  |  |
|  |  | Tate Press (various angles) |  |  |
|  |  | Dips |  |  |

These lists aren't inclusive of everything you could do to help with specific weak points, but it's important for you to understand why you are missing max attempts. While I do believe that most lifters seem to miss around chest level, some miss for specific reasons, which is why I've lumped these into different categories. You'll notice that upper back work is not really brought up in these specific tables. Generally, the upper back work is going to help keep the shoulders healthy, and should be included regardless of training needs. It might fluctuate between training cycles or issues you might be having, but for longevity I recommend having things like face pulls, rear delt raises, band pull-aparts, reverse pec dec, and Blast Strap shoulder circuits common place on your bench training days.

## Understanding Carryover

You will see many similar movements in multiple categories above, and that's for multiple reasons. First off, using bands and chains on some movements does make it more tricep dominant. However, it also teaches one to accelerate the bar faster (off the chest), so therefore this is an
excellent movement for both muscular issues (chest/shoulders or triceps). A good blend of variation across the training session and microcycle should help you address multiple areas. So for example, if your triceps need work, you don't need to have do purely tricepsdominated accessory work, nor should you. Having some variety will help build your bench press all around as a whole.

Keep track of your PR's and get a good honest assessment of your bench press. This is the lift that is probably assessed incorrectly the most of the three competitive movements, and I believe it's because people only look at where you miss the lift, and not why you missed the lift.

## Putting It All Together

For the second part of this installment, we can see that the bench press has many components and pieces to yield a high success. Being technically proficient can take you a long way, but attacking specific areas with a methodical approach can help you put up some freaky bench press numbers to improve your total. After all, "What do you bench, bro?"

# HOTHIN' SISSV ABOUT IT NEW ELITEFTS DELUXE SISSY SQUAT 

## BUILDING THE RAW DEADLIFT

## BRANDON SMITLEY



It's been a long time coming, but here's the installment on building the raw deadlift. In this article, we're going to cover everything that it's going to take to build the raw deadlift. I'm not the greatest deadlifter, and arguably it's the lift that has seen the least improvement in my training career. But to that note, I also feel like that has helped me in the long run by having to be creative to just add a few pounds to this lift. Some are built to pull (the infamous Lamar Gant comes to mind), while others need to slave away at it. Like the other installments in this series, this will not cover a lot of technical issues regarding the deadlift, as elitefts has ample articles and resources on this matter. I highly suggest you look to Deconstructing the Deadlift if you're looking for technical help.

The basics that I would like to keep in mind throughout the article though are the following:

- Pull the slack out of the bar.
- Keep tension on the hamstrings and glutes.
- Weight should be on your heels.
- External rotation is still key on the setup.
- Big air and a diaphragmatic breath into the belly.
- Keep mid-back tight.
- Place shoulders approximately directly over the bar.
- Pull up and back.

You'll see some variations and different cueing and options based upon how you pull (sumo or conventional), but these are the basics you certainly need to master to be able to move on to some of the work listed below.

## Needs Analysis

When it comes to the needs analysis for raw lifters and the deadlift, there isn't much difference between the raw and equipped counterparts. When it comes to equipment, the deadlift suit (or squat suit) provides the least amount of support and aid in the lift. I've heard of some lifters being able to only get about 25-35 pounds out of equipment, which for some may only be very small percentages compared to the squat and bench press. The primary difference is going to be getting into position (it will be easier raw), and getting a little extra pop from the equipment off the floor. So with that stated, let's take a look at what needs addressed to build the lift.


## Glutes and Hamstrings

In general, most powerlifting coaches and athletes are going to stress how important the posterior chain is to the deadlift, specifically the glutes and hamstrings, and this still holds true. The leg drive, lockout, and transition from passing the knee are all dependent upon how strong your glutes and hamstrings are. When we speak about the hamstrings, we're also talking about the strength as a hip extensor, not a knee flexor. That will come in handy when it comes to supplemental and accessory work to help build your pull. I'm not going to say that leg curls won't help, as it will aid in overall knee health and leg balance, but at no point during the pull are you actively going through knee flexion. So with that said, we can lump these two body parts together. Having strong glutes and hamstrings is going to help you in the setup and prevent the hips from rising first and having that cat-back rounding that we see in so many social media posts. This tends to happen from either poor technique (just not knowing better), or from a true weakness in this area, causing the low back to become the primary mover because it happens to be stronger. Bringing up your glutes and hamstrings can definitely help with this. They are also responsible for a strong and smooth lockout as the hips get closer to the bar towards completion of the lift.

## Lower Back

The lower back is a very important aspect of being a strong deadlifter. However, the lower back should not be a prime mover when it comes to the execution of the deadlift. As mentioned above, if the lower back is being an actual prime mover, you're going to see a lot of missed pulls at lockout, as you'll be unable to activate the glutes because the pelvis will be in an excessive posterior tilt. This can also lead to long-term problems and injuries if not addressed. The lower back is important because of its ability to maintain the proper position we need to activate those glutes and hamstrings. The low back needs to be strong in an isometric contraction and to help brace the spine with the abdominal and trunk musculature. Training this can be difficult, but there are some ways we can address this, which will be listed below. Just know you do indeed need a strong lower back, but that it's not doing the actual "moving" of the weight, so to speak.

## Adductors

The adductors seem to only really be thought about when it comes to the sumo deadlift, but what many people don't realize (or forget if you've taken some basic anatomy classes) is that the adductor magnus actually performs hip extension as well. So even in your conventional pull, your adductors are helping aid your pull. Perhaps this is why conventional deadlifters see some good carryover from training the opposite stance in which they tend to compete in. Regardless, the adductors are important, and you'll probably notice if you're having issues with them if your adductors get sore when you squat or sumo deadlift (more than baseline soreness from general training DOMS). This would explain why we see torn groins with the deadlift, even with conventional deadlifters.

## Middle and Upper Back

Just like the lower back, the middle and upper back also play a crucial role in deadlifting, but more so in an isometric fashion. It could be argued that having a weak middle and upper back will lead to lower back rounding, presenting itself as having weak glutes and hamstrings (since a lot of misses will occur towards lockout). However, if the middle and upper back can maintain the proper position at the knee or as the bar passed the knees, it will be easier for the lower back to hold it's position and then we can activate our glutes and hamstrings for an efficient lockout. The mid erectors will help hold the spine in a strong position, and the rhomboids and other scapular retractors can help keep the scapulae in place, making it easier to keep our lats tight and the bar close. If the bar begins to get forward on you, this could be a sign that the mid and upper back are weak and need some work. Strong deadifters usually have a massive back to go along with their pull.

## Quads

I know you're thinking, "Whoa, why are quads in a deadlift article?"

Quite simply, this is covering both stances, and l'd be a fool to not talk about the quads for the sumo deadlift. With the sumo deadlift, the knee goes into more flexion, meaning we will have more knee extension to get to a full locked-out position. The demands aren't nearly as high as a squat, but you do see some people have issues with soft knees, or have issues such as their knees locking out drastically before the glutes do. Just know that your quads are somewhat important if you pull with a sumo stance, and if you have any of the issues l've mentioned above, look to your quads. The lower the lifter sets the hips, the more important the quads become. This is why it's important to keep the hips as high as possible during the setup. You'll more than likely have the quads doing their role naturally without even having to think or address them specifically (for the deadlift anyways).


## Grip

There are ample resources on elitefts talking about grip training, but this is an often-neglected aspect of deadlift training. Some people are blessed with huge hands and can use hook grip or just never really have much of an issue in this department. Then there are people like myself with tiny, fat hands that struggle to hold onto nearly anything. Grip training for the deadlift is rather specific, and is not the same as someone who competes in grip, namely the Captain Crushers. When it comes to grip for your deadlift, make sure you're training it for isometric holds, ideally with bars and implements that are of similar diameter. A fat bar is going to train the fingers in an open position - a place where we don't want our fingers to ever get. Working specifically the thumb and pinky fingers is where you're going to see the most carryover for your pull. With that in mind, the holds and training should be for strength, not endurance. A max deadlift will last probably at most five to six seconds, and therefore we need our hands to be strong. So when working with implements and bars, keep the timed holds for similar durations and implement work to lower, max effort based reps (one to three rep maxes, for example).

## Which stance should you choose? Sumo or conventional?

This might be one of the most debated aspects when it comes to the deadlift. Generally speaking, if we're looking at trends and what is the "norm", the lighter a lifter is (in terms of bodyweight) the more likely they are to pull sumo, and vice versa.

The real tricky area seems to be in the 180210 pound area, where it can really go either way. I'm not saying that a lightweight can't pull conventional (again, look at someone like Lamar Gant), or that a heavy weight can't pull sumo, but rather, when it comes to body types, these are what tend to work best.

I would say that if you're got longer arms, and a shorter torso (i.e. Lamar Gant) you'll probably favor conventional. And if you've got longer legs or torso (proportionally speaking) and shorter arms, sumo would probably be a better choice.

At the end of the day, though, you'll need to experiment with each stance to see what works best for you, but this should be enough to help you make an informed guess at what would work best.


## Programming Considerations

The deadlift has some unique ways to set up programming, and I believe that it should be trained differently than the other two competitive lifts (squat and bench press). The deadlift is a rather taxing lift. Think about it: you have to pick up a weight that isn't moving, and get it to move to a final end point (lockout). The demands placed on the CNS are much higher because we actually have to break some inertia to the get bar moving fast enough to finish the lift. So for example, if you need to deadlift 500 pounds, you have to be much stronger than 500 pounds to actually deadlift it. But with the squat and bench press, there is an eccentric motion, letting us benefit from the stretch-shortening cycle. For this reason, I think the deadlift needs to be trained a tad bit differently.

## Specificity

Asl've mentioned in the other installments, you've got to train the lift to actually become better at it. But with the deadlift, I firmly believe that there is a point of diminishing returns. With the higher demands of the CNS required for the deadlift, actually deadlifting for higher volume or heavier sets week in and week out might accumulate a lot more fatigue than the squat and bench press. There might be a point in your career where you only deadlift truly heavy (the competitive movement) every two to four weeks. If you get to this point in your powerlifting career, you might find that supplemental and accessory work and lighter technique work (or dynamic effort work) helps your deadlift just as much when you have to weigh your overall recovery vs. time invested. l'll expand on this a bit further as we go.

## Frequency

With the programming consideration mentioned above, this is going to tend to have us training the deadlift less frequently than the squat and bench press counterparts of powerlifting. Most powerlifters are going to be seen deadifting anywhere from once to twice a week, and that's about it. Very rarely will you see someone actually deadlifting three or more times per week. Based upon how you opt to set up your programming and manage your loading, you'll either see once a week training heavy or twice a week training with one moderate to heavy day and then one assistance-based day. I've personally trained with both and have seen results with both, so you'll need to experiment with this yourself. More than likely, the less experience you have or the lighter you are, the more likely it is you will tend to lean towards twice a week, and vice versa with heavier and stronger lifters drifting towards once a week.

MORE: Bodybuilding Exercises for Powerlifters - Widen Your Grip to Beef Up Your Back and Deadlift

Something you might want to keep in mind, though, is how you can get more from less. I know this has been beaten into the ground when it comes to training in general, but with the deadlift being more CNS taxing, you might be better off with training it specifically once a week so that you can put that extra (recovery) time and effort to the other two lifts. In my personal experience, l've found that deadlifting heavier less frequently lets me bench and squat heavier more frequently.

## Bodybuilding

This has been a growing area for powerlifting in general, but I think this holds specifically true for the deadlift. One beneficial thing is that similar muscles are used to squat and deadlift, so we can somewhat hit two birds with one stone. Yet, they are different movement patterns and require the muscles to operate under different demands. When it comes to having a strong deadlift, your hypertrophy work should be emphasized towards the glutes, hamstrings, upper back, and lower back. Strong glutes and hamstrings don't really exist, as they can't really be too strong for the deadlift. So if you're seeing a lack in progress of your deadlift, increasing your posterior chain work is a good recommendation (Matt Ladewski has touched on this quite a bit).

## Needs Analysis Weak Point Index

Here are some tables that might assist you with ideas on how to train and build your deadlift:

| Weak Point | Exercise Type | Exercise | Sets | Reps |
| :---: | :---: | :---: | :---: | :---: |
| Floor Low Back Rounding | Main Movement | Deficit Deadlift (1-3") | 1-5 | 1-5 |
|  |  | 1-2" Block/Rack Pulls |  |  |
|  |  | Suspended SSB Good Mornings |  |  |
|  |  | Deadlift vs Chains/Bands |  |  |
|  |  | Isometrics into Pins ( $\sim 3-4^{n \prime}$ off floor) for $\sim 4-6$ seconds |  |  |
|  | Supplemental | Good Mornings (all bars) | 3-5 | 5-10 |
|  |  | RDL's |  |  |
|  |  | Snatch Grip Deadlifts |  |  |
|  |  | Chair Deadlifts |  |  |
|  | Accessory | GHR | 3-5 | 10-20 |
|  |  | Reverse Hyper |  |  |
|  |  | Back Extensions/GHH |  |  |
|  |  | Bent Over Rows |  |  |


| Weak Point | Exercise Type | Exercise | Sets | Reps |
| :---: | :---: | :---: | :---: | :---: |
|  | Main Movement | Deficit Deadlift (1-3") | 1-5 | 1-5 |
|  |  | Good Mornings (all bars) |  |  |
|  |  | Opposite Stance Deadlift |  |  |
|  |  | Low Box Squat (with similar stance) |  |  |
|  | Supplemental | Stiff Leg Deadlifts | 3-5 | 5-10 |
|  |  | Good Mornings (all bars) |  |  |
| Floor |  | RDL's |  |  |
| Pure Miss |  | Single Leg RDL's |  |  |
|  |  | Glute Bridges |  |  |
|  | Accessory | GHR | 3-5 | 10-20 |
|  |  | Reverse Hyper |  |  |
|  |  | Back Extensions/GHH |  |  |
|  |  | Pull Throughs |  |  |


| Weak Point | Exercise Type | Exercise | Sets | Reps |
| :---: | :---: | :---: | :---: | :---: |
| Lock Out Pure Miss | Main Movement | Deficit Deadlift (1-3") vs Chains/Bands | 1-5 | 1-5 |
|  |  | Block Pulls, Slightly Below Knee |  |  |
|  |  | Opposite Stance Deadlift vs Bands/Chains |  |  |
|  |  | Reverse Band Deadlifts |  |  |
|  | Supplemental | Good Mornings vs Bands/Chains | 3-5 | 5-10 |
|  |  | Glute Bridges |  |  |
|  |  | RDL's |  |  |
|  |  | Single Leg Work (Lunges, etc.) |  |  |
|  |  | High Box Squats, Wide Stance |  |  |
|  | Accessory | GHR | 3-5 | 10-20 |
|  |  | Reverse Hyper |  |  |
|  |  | Back Extensions/GHH |  |  |
|  |  | Pull Throughs |  |  |



Now, I know some of you might be thinking, "What do I do if I miss at the knee?"

There can be a few factors at play here:

1. You're more than likely missing this due to not being in the correct positioning when you start the pull. So look at the first table for back weaknesses and see if that helps.
2. This is technically the hardest part of the lift if you pull conventional, so understand that missing here is pretty normal. Just keep doing what you're doing and look at your position when you miss. Then see the appropriate table.

## Carryover

As you'll see in the tables above, a lot of the movements and exercises listed have a lot of carryover. You really need to be aware that training the deadlift is going to hit a lot of the same stuff as you need it to. There will be specific areas you need to hit, based upon what is going on with your deadlift, but positioning and technique can fix a lot of the issues seen. Don't be afraid to load up on the accessory work to bring up your backside and let your actual deadlift training take a bit of a back seat with less frequent heavy pulling. The options are limitless for how you can address your deadlift, but if l've learned anything it's that pulling heavy frequently doesn't usually pan out for the best, and this can be seen from the best deadlifts around the world. So look at why you missed the lift and go from there.
3. Increase your back work. I didn't give much in terms of back accessory work, but you should be doing is in general with your training. An overall stronger back from lat pulldowns, rows, straightarm lat pulldowns, trap work, etc., will help you maintain the proper position.
4. If you pull sumo, there could be some quad weakness at play if you're in the right position, but again, more than likely if you're squatting regularly this isn't your problem. Just keep hammering your hip extensors.

## Pulling Your Weight

The deadlift is often seen as the manliest lift on the platform, and for good reason. It takes a ton of balls to chalk up and hoist more than 500, 600, or 700 pounds. But nothing looks more badass than pulling a PR deadlift to end the meet. Get technically proficient, hammer your posterior chain, and trust the process. The deadlift is either your favorite or least favorite lift, but regardless, give it the respect it deserves. The meet doesn't end until the bar hits the floor.

## BUILDING THE RAW POWERLIFTING TOTAL

## BRANDON SMITLEY



I've compiled three articles covering the three competitive lifts for the raw powerlifter: the squat, bench press, and deadlift. The keys to building these lifts and knowing how to program to optimize them are very important. However, your meet strategy and how you are going to put them together to get your best total is what really matters. It's what you do on meet day, not in training, that counts.

For this article, l'm going to go cover the following:

- Peaking and Programming Concepts
- Meet Strategy and Attempt Selection Guide
- When to Cut Weight
- Optimizing Meet Day Nutrition and Supplementation

There will, of course, be differences from other coaches and lifters, but these are methods that I've found to work well for myself and my clients.

## Peaking and Programming Concepts

When we're looking to hit the platform and put together a PR performance, the first step is just having the programming lineup, and working backward from meet day. There will be a lot of generalizations in this section, but that's merely because each person will have slightly different peaking based on their size, general physical preparation, and frequency of training they are implementing in the off-season and during contest prep.

To understand peaking for a competition, we first need to understand the concept of supercompensation. Super-compensation, in its simplest definition, is the body increasing performance potential above baseline after a brief stint of intentional overtraining (commonly called overreaching) followed by detraining (or deloading). We're focusing on increasing our performance by overreaching, or an intentional time of overtraining, to force the body to respond greater than normal. We usually would not want to hit a period of overtraining, but we know that we will program a deload period and emphasize rest after the overreaching period is over, and thus super-compensating for meet day.

PART 1: Building the Raw Squat

Now that l've got that out of the way, let's briefly talk about residuals. Residuals are the time frames that certain fitness qualities can be maintained. These should be used in programming concepts regardless of your goal, but for the sake of this article, we are going to talk about strength, hypertrophy, and speed. We could also talk about endurance, but so long as you have a moderate base of aerobic work and general physical preparedness at the beginning of a meet prep, this should take care of itself (and should be the focus of your offseason program).

Strength - Maximal strength has a residual of approximately a month. This is important to know because we need to hit our biggest and strongest lifts of a meet prep cycle within a month of the competition. This can change based on the competitive lift and the size or gender of the athlete and will be mentioned more below.

Hypertrophy - Muscle size has a residual of approximately three weeks. This isn't to say that you'll lose all your gains in three weeks, but that the muscle size you've acquired has about three weeks until that muscle tissue could begin to atrophy. So, in short, we will need to keep hitting our accessory work until the three weeks out point, especially for specific lagging muscles groups that we know can have carryover to our lifts.

Speed - This quality is probably the most important that we have, as the residual is about five to seven days or a week at the longest. We need to keep training our speed and CAT (compensatory acceleration training) up until a week out. This should really go without saying if you really think about it, but I think it's a very overlooked quality to training that can help you immensely.

Now that we've got these concepts covered, let's briefly discuss gender, size, and competitive lift specifications to help tie all this together.

Gender - Quite simply, men need more time to recover from training than their female counterpart. This is probably due to the fact that men have greater lean muscle tissue, more testosterone, and can just handle heavier loads than females.

Size - Across the board, a larger person is going to need more time to recover than a smaller one. This is similar to the gender issue: the larger person can just handle more weight in training, and thus the CNS needs more time to recover before a competition.

Competitive Lifts - If you recall from my previous installments, the most taxing lift is the deadlift, followed by the squat, and then the bench press. Knowing this, we can program when we need to take our heaviest lifts in training to allow for the most recovery from each.

## Sample Templates

Here are some sample templates for when a competitor would ideally take their heaviest lifts in training while getting ready for a competition. Each competitive lift shows how many days away from competition the competitor would be when they need to take their heaviest attempt.

| Lifter/Sine (Weight Class) | Squat | Bench Press | Deadlift |
| :--- | :--- | :--- | :--- |
| Lightweight Male (165 or less) | $14-21$ Days | $7-10$ Days | 18-25 Days |
| Middle Weight Male (181 to 220) | $18-24$ Days | $10-14$ Days | $21-28$ Days |
| Heavyweight Male (242 or more) | $21-28$ Days | $12-18$ Days | $25-30$ Days |
| Lightweight Female (123 or less) | $12-18$ Days | 5-9 Days | 15-18 Days |
| Middle Weight Female (132 to 165) | $14-21$ Days | $7-12$ Days | $18-24$ Days |
| Heavyweight Female (181 or more) | $18-24$ Days | $10-14$ Days | $21-26$ Days |

## Meet Strategy and Attempt Selection Guide

Knowing how to put your best lifts together to get a PR total can be a daunting task, and the further you get in your career the more options you have for setting PR totals. Eventually, you'll even get to a point where you don't have to hit a single PR all day but can still get a PR total. It all comes down to putting together your best day, not necessarily your best lifts (but at points in your career this will also have to likely happen).

When determining your attempts, here are the percentages I recommend for my clients. These percentages should be based off a clean lift in training that you would give three white lights. Do not use any questionable gym lifts.

- Last Warm-Up (in the warm -up room): 82\%-85\%
- Opener: 88\%-92\%
- Second Attempt: 94\%-100\%
- Third Attempt: 97\%-103\%3

We know that meets will never go your way, and you may need to make adjustments on the fly, but going into meet day, this should be a guideline that your attempts fall under. You can get more aggressive or conservative as the meet goes and your subtotal is known more throughout the day.

PART 2: Building the Raw Bench Press

Here are some general guidelines that I follow for meet days and use when l'm handling lifters:

- Open LIGHT. Pick something you can hit even on bad days.
- If you miss your opener, RETAKE IT. Get in the meet.
- Very rarely will you get a PR total with anything less than a 6/9 day. Make your lifts.
- Base your second and third attempts on the way the previous lift felt. Use auto-regulation and listen to your body. Don't chase lifts that aren't there. Chase the total.

With these guides, you should be good to go for meet day. However, ensure that your warmups are something you're used to and you can account for a crazy warm-up if needed. So, plan for the worst where you might only get four to six warm-ups. l've been there multiple times and it sucks, but if you can be prepared for that, it's a little less stressful on meet day. Plan warm-ups to use primarily 45 's, 25 's, and 10 's. Lightweight females will need to use fives here and there, but don't plan on using two-and-a-half's when figuring out your warm-ups for meet day. They are scarce and you don't want to depend on them. If they are there, great, but just have a rough game plan. And for heaven's sake, don't do a million reps in the warm-up room. Take the bar for a few sets of five if you need to, then start dropping your reps to doubles and triples, and only singles after 50\%.


## When to Cut Weight

This isn't something that I really wanted to discuss is this article, but if you're going to build your raw powerlifting total, there very well might be some point in your career where you cut weight to be more competitive. So, first things first: don't cut weight if any of the below points apply to you.

- You don't have an elite total.
- You're not chasing a top 20 all-time ranking.
- There is no money involved.
- There is no championship involved.
- You don't need to qualify for another meet (in which one of the above circumstances would happen).
- You're mentally weak.
- It's your first meet.

I'm sure I could come up with more, but that should cover most of the circumstances that tick me off. So now the real question: when should you cut weight? Pretty much when you're at the top of the game for your weight class or there is some serious money or a championship on the line. Getting in a top ranking or chasing a world record is also a viable excuse.

I'm not going to cover the details of my weight cuts and what I do in this article, but if that's something that you're interested in, contact me privately. But you should certainly talk with someone experienced and actually good at it (not just the cut, but actually performing well after it) before you do it.

Quite simply, focus on getting stronger.

## Optimizing Meet Day Nutrition and Supplementation

Probably one of the biggest issues I see when it comes to people competing is what they are eating (or aren't eating) as they prepare for their big meet day. Here are some things that will likely help you out on meet day.

## Focus On Hydration

Regardless if you cut weight or not, the first thing you need to do after weigh-ins is get some fluid in your body. 99\% of the time it should just be water. No Pedialyte or Gatorade, especially if you've cut weight. The sugar/dextrose content chugged in the quantities that most powerlifters will consume will likely give you the runs and further dehydrate you. Give your body about 50 ounces of water over the next hour. If you've cut weight, still focus on liquids for about two hours before putting down any massive amounts of solid food. The food will slow down your water absorption, and if you're dehydrated, that's priority number one.

## PART 3: Building the Raw Deadlift

After that, use an electrolyte mix of Gatorade or Pedialyte mixed 50/50 with water. This will dilute the dextrose yet still get you the electrolytes and minerals you need. You should focus on about two gallons of liquid, and perhaps more if you've cut weight or are a bigger athlete.

## Post Weigh-In Food

The day before a meet, people like to eat like total fatasses, and this baffles me. You're going to attempt to perform your best, and you're going to eat crap? Now, I'm not saying eat like a bodybuilder, but don't go eat greasy food and junk. Eat things like Chipotle, peanut butter and jelly sandwiches, toast, eggs, biscuits, rice, baked potatoes, steak, pretzels, granola bars, etc. You'll get plenty of sodium and have good energy on meet day. You can have that greasy burger postmeet after you've hit PR's.


## Meet Day Food

I suggest eating lower fat foods on meet day. Things that I depend on for meet day are cereal, granola, dried fruit, pretzels, and my electrolyte mixes. It's enough to keep me going, but not feeling like crap all day.

## Supplementation

Supplements can help tremendously in training and on meet day, and here are a few that I would highly recommend:

Multi-Vitamin - While ideally, we get all these from food, it's likely not going to happen, and if you've cut any weight, you're also likely going to have been deficient for a period of time. It doesn't really matter that you take a specific one, but I would just be sure it has the basics. I prefer to take one three times the day before the competition, and one the morning of competition.

Creatine Monohydrate - A widely studied supplement and proven to help with strength and performance. However, it's also an amazing supplement for bloat and water retention, which is incredibly helpful at a powerlifting meet. Taking about 10-15 grams the day before, and another five to 10 grams on meet day should be plenty.

Glucose Disposal Agents (GDA) - What you opt to take here is entirely up to you, and there are a multitude of formulations available. I usually take chromium polynicotinate and alpha linoleic acid. Glucose disposal agents will help maintain healthy blood sugar levels, and may help with storage of glycogen, something very important when you're ingesting a massive amount of carbohydrates and calories all day long. Just take these with each solid carbohydrate containing meal.

Highly Branched Cyclic Dextrin (HBCD) - This is probably one of the fastest growing supplement products on the market. Its carbohydrate structure is very unique and is excellent for intraworkout training. Knowing this, it makes for a great supplement to use during meet day. I prefer to have 50 grams in my large Nalgene bottle for meet day to keep my glycogen levels capped, energy high, and not have any insulin crashes.

## Rounding Things Out

While this article is by no means covering everything that can help you put together your best total, I do feel that there are very vital pieces of information that go overlooked and undervalued when it comes to doing your best on the platform. Take some time to really look at your training, nutrition, sleep, and other factors and see how that can help your overall performance. It's not always the strongest person that wins in powerlifting; it's usually the healthiest and smartest that are consistently putting up the best totals and taking home championships.

Best of luck on the platform!


## BRANDON SMITLEY

Brandon Smitley is a 2011 graduate of Purdue University where earned his Bachelor's degree in Health and Fitness, and of Indiana State University with his Master's Degree in Coaching. He currently works in the fitness field as a personal trainer. His best lifts to date are a 567 -pound squat, 330 -pound bench, 510 -pound deadlift, and 1377 -pound total in the 132 -pound weight class! He has opened Smitley Performance Systems to help athletes and others realize their full potential from proper strength training methodologies.

# THE EIGHT KEYS, A COMPLETE GUIDE TO MAXIMAL STRENGTH DEVELOPMENT 

DAVE TATE


The was first posted 06-05-03 for T-muscle.com as a 4 part series. We decided to stick them all together as one resource so get ready for a very long, but very good read.

## The Eight Keys - Part 1

Remind us not to bug Dave Tate about submitting articles to T-mag. See, here's what happened. Dave got a little busy with life in general and didn't send us any articles for a while. We kept nagging him and finally he must've snapped.

Luckily, he didn't go Hulk on us and toss TC's car through the office window (again). Instead, he sat down at his computer and composed a twelve ton nuclear warhead of an article and lobbed it on us! We're talking a book-length article here that covers every aspect of his style of strength training! Below is the first installment of this roughly 56 part article.

Okay, okay, it's just four parts, but they contain enough info to make you the strongest S.O.B. in your gym. And if you don't belong to a gym, you can simply print out this series of articles and deadlift it. Either way, you're gonna get insanely strong!
" The individual who goes the furthest is generally the one who is willing to do, dare and attempt new things. The sure thing boat never gets far from shore." Dale Carnegie


## Read Before Assembly

Have you ever tried to put together a baby crib or any other furniture item that comes in a box? I had to do this recently. First, I dumped the pieces out of the box so I could see all the parts on the floor. This took up roughly half the floor space in my house. I knew I was in trouble. There must have been 10,000 parts, most of which were the size of microorganisms. What the hell was I thinking?

Swallowing my manly pride, I decided to consult the instructions. That's when it really hit me: there's no way l'll ever do this! Who the heck wrote these directions? Was English their first language or their third? Did they really think the average person could decipher this secret code? The problem was obvious: the directions were written by a person who knew what he was doing. I, on the other hand, had no idea what I was doing.

The author of the assembly instructions had probably tried to make it as simple as possible, but he failed to realize that what was simple to him wasn't so simple to those of us without advanced technical knowledge and, say, a double major in engineering and quantum physics. (In the end, we decided the new baby could sleep in the box the crib came in.)

When I wrote the "Periodization Bible" articles for T-mag, I was much like the author above. I wrote what I thought at the time was the easiest way to explain the concepts and principles used for maximum strength development. It's taken over 10,000 e-mails, hundreds of seminars, and hundreds of hours on the phone to see that I missed the boat. Most people could care less as to the reasons why; they want the how. Not only do they want to know how, but they want it as simple as possible.

This new series of articles should be exactly what they, and perhaps you, need. I've come up with eight key factors that are required to get as strong as possible. These include:

1. Coaching
2. Teamwork
3. Conditioning
4. Strength
5. Speed
6. Recovery
7. Attitude
8. Nutrition

Each of these variables is just as important as the next and not one should be left unexamined. If one is off, the entire program will suffer because of it.

Let's examine each key factor. In Part One of this article, we'll look at coaching, teamwork, and conditioning.


## Coaching

A coach is a mentor, training partner, motivator, and leader. There are many other functions the coach will fill but the most important is this:

The coach should strive to make you better than he is.

A great strength coach will be one who's lived in the trenches and has paid his dues with blood, sweat, and iron. If you want to squat 800 pounds, why would you ever listen to someone who's never squatted 455?

Ask yourself this question and you'll see my point. How much do you bench press? The answer doesn't matter that much, but let's say it's 400 pounds. Now ask yourself, how much more did you have to learn about training to bench 400 as compared to when you pressed 200 ? Would you also agree that there's much more to learn to take your bench from 400 to 500? I think so.

Now, how much more training did you have to do to go from 200 to 400 ? Did it come overnight? Or did you have to work hard and work smart to get there? Nobody will ever be able to convince me that no knowledge was gained in the 200 pound process!

The next question would be, could this same under-the-bar-knowledge be learned from a book? In other words, is there another way to gain this same knowledge? I don't think so. I feel the best coaches are the ones who've attained both under-the-bar knowledge andbook knowledge. If you had to only choose one, it would have to be the under-the-bar coach. He knows how to get you where you're going because he's been there.

After all, how do you know what really works if you never put it to the test? I see tons of new programs on how to get strong and the first thing I ask the author is, "Have you done it? What did it do for you?"

I could go on and on about coaches as it's one of those topics that drives me nuts, but it would become a huge rant article. I'll leave you instead with this short story. Years ago I came to train with Louie Simmons at Westside Barbell. He was semi-retired at the time. We had a big group of lifters but only two or three were elite and most were below average. I believe there was only one 900 pound squat. When Louie decided to make a comeback and begin training hard again, the entire gym changed and a few years later, we were all elites and had over six 900 pound squats. The rest was history.

Tell me a coach who trains isn't a better coach! If you're a coach, get your ass in the gym and get strong again. You owe it to yourself and your team.


## Teamwork

If you train alone you're putting limits on yourself. Training partners are critical for many reasons, including group energy, subgroup coaching, and competing. Have you ever noticed when you go into a gym all the strong guys train in their own little clique? Do you think they were always strong, or could a couple of strong guys have taken another guy under their wings to bring him up? That's usually what happens with a team. In fact, they're all stronger because of the team.

The energy a team can provide is enormous. We all need relationships in our lives to take things to the next level. Think back to your football or other team sport days. Remember the locker room talk before the big game? You find yourself sitting on one knee listening to the coach. As the coach speaks and the game gets closer, your energy meter is getting jacked up. Your blood is moving fast in your body and you can feel the adrenaline flowing. You're jacked up and ready to go. You're at maximum leve!!

Now what if I was to tell you there's a way to take it one level higher, but this can't happen when you're alone? You'll need others to make this work. Go back to the game. What happens after the coach finishes his speech and you stand up? You find everyone in the room is jacked up. There's fire in everyone's eyes and you're taking in more energy from them. It's almost unreal! There are high-fives, head butts, screams, rage, and extreme motivation. This happens because everyone in the room has his own level ten, but when it's combined for one purpose and one goal the energy goes off the chart! You find yourself at a level you never thought possible. This can't be achieved alone.

I use this as an example of group energy. I'm not telling you to go nuts with your training partners each session. I'm saying there's energy there that can't be found any other way! If you want to take it to the next level, find some training partners who share the same goals. You'll be amazed.

Training partners are also a great subgroup of coaches when you're training. When you're bench pressing, are you pressing the bar on the right path? Are your elbows tucked? Are you sure? A training partner can do two things: point out the mistakes and provide the proper verbal queuing during the movement to make sure you don't screw up the next one.

You'll also notice one key thing in all lifter interviews. They always thank their training partners. Why do you think they do this? They know that without them they wouldn't be where they are today. If you train alone, stop messing around and get a partner!


## Conditioning

If you think you can excel in any sport without a base level of conditioning you're out of your mind. The days of over-fat, bloated, can't breathe, can't sleep powerlifters are over!

Let me describe what I define as a powerlifter so everyone is on the same page. A powerlifter is one who competes in the squat, bench, and deadlift to arrive at the highest total. A full meet can last up to nine hours and nine max lifts will be attempted. To be able to do this, a lifter must be in great condition or he'll pay the price come the deadlift.

Here's where one of the biggest mistakes l've seen over the past few years will come into focus. You can get conditioned by adding extra workouts and GPP (General Physical Preparation) training, but l've seen lifters go from three workouts per week to fourteen and wonder why they can't recover. There are many ways to get conditioned (increase work capacity and GPP), but what I suggest doing is taking a slow build-up process to condition the body to the extra work. To do this, add in warm-up work for a few weeks. For example, a startup warm-up session would look like this:

## Warm-Ups

- Sled Dragging: 3 sets of 20 steps
- Glute Ham Raises: 1 set of 6 reps
- Push-Ups: 1 set of 10 reps
- Lat Pulldowns or Chins: 1 set of 10 reps

Over the next few weeks, the sets, reps and movements will increase to something like this:

- Sled Dragging: 4 sets of 80 steps
- Glute Ham Raises: 4 sets of 12 reps
- Push-Ups: 4 sets of 15 reps
- Lat Pulldown or Chins: 3 sets of 15 reps
- Incline Sit-Ups: 3 sets of 20 reps
- Neck Raises: 3 sets of 10 reps
- Dynamic Band Stretching: 5 minutes

As you can see, the total volume and work has increased and the main part of your training session has remained unchanged. When your warm-up gets over seven to eight items, then you can cut it in half and move four items to an afternoon session (in an extra workout). Now you can add four more movements (over time) to the morning warm-up session and four more (again, over time) to the afternoon session.

You may find that keeping it all in the morning session is the best way for you and you won't need the afternoon sessions. You may also find you need different movements to get your body ready for the real work of the day. Whatever you choose to do, remember that extra work should be added in a slow process over time. And as long as you're making gains, don't be so quick to add extra work.

## Listed below are a few items I feel are great for extra workouts and warm-up sessions:

Light Plyometrics: Rope Skipping and Low Box Jumps (under 10")

Glute Hams Raises: Not the "natural" glute ham raises everyone seems to think are GHR's. You need a special bench to do these. The natural GHR is too intense for warm-up and extra work and is better left in the main session.

- Reverse Hypers
- Any Abdominal Training
- All Type of Sled Dragging
- Any Light Band Movements
- Free Standing Squatting
- Light Deadlifting (under 40\% of max)
- Push-Ups
- Dumbbell Shoulder Raises

The sport you lift in will determine the level of conditioning you'll need and how many extra sessions you'll need to work into. For more information, see the sport specific area of our Q and A section at elitefts.com. In the next installment, Dave will discuss the strength portion of his system, which as you can guess, is a whole article unto itself. He'll also open beer bottles with his teeth and swallow the glass. Don't bring the kiddies.


# IF II'S NOT STREICHIN' YOU'RE NOT FLEEXIN' 

## The Eight Keys, Part II

## Strength

To be strong you must have strength. Pretty simple concept, don't you think? So did I, but then I started getting a lot of e-mails telling me strength isn't important for sports. So I had to go back to the drawing board and rethink this one. After many hours of deep thought I still have to say: strength is very important! A quick football example and l'll move on to how to develop strength.

I've been told there's no need for a lineman to be able to squat over 350 pounds as he'll never have to move more than that on the field. This may be true if he had to move the 250 pound guy one time and it didn't matter how fast he moved him. We know in the game of football that the rate of force development is very important. You don't want people being moved slowly. We know from Mel Siff's writings that max force in the barbell squat can be measured at around $60 \%$. At Westside we've found close to the same percentage to be true.

The other thing we know is the average play will last under ten seconds and there'll be between three and ten plays per drive. Our lineman who squats the "recommended" 350 will now be able to create max force at 210 pounds and may or may not be conditioned to do this more than one time. Too bad the guy across from him weighs 350! Who will wear who down?

Now, if the lineman could squat 600 pounds he'd create max force at 360. Does he have to actually squat 600 pounds? No! But he better be able to create max force with 350 pounds for eight to ten sets of two to three reps (around ten seconds set length) with 45 to 60 seconds rest. If not, he's at a disadvantage.

## So how do you get strong?

We use a method called the max effort method. This is lifting heavy weight for one to three reps. There are two max effort training days per week, one for the lower body (squat) and one for the upper body (bench). One max effort movement will be completed for each day. The best movements for beginners to use are listed below:

## Max Effort Squat Movements

1. Deadlifts standing on 3 inches of mats or boards for 1 rep max.
2. Good Mornings for 3 to 5 -rep max sets. When you become used to the movement, then singles should be performed.
3. Close Stance Low Box Squats for 1 rep max. Set the box so your hip at the crease of the leg joint is three inches lower than parallel.
4. Safety Squat Bar Squats - If you have one of these bars then start using it. It's one of the best ways to build the muscles that squat and deadlift. The reason for this is the bar is trying to toss you forward and you have to fight to keep it in a good path. It also takes the weight off your shoulders as you don't have to hold the bar as you would a regular squat bar. You'll hold this bar by the front yokes. Don't hold onto the rack and pull yourself up, either. If you don't have one of these bars, then try to do anything you can to change the center
of gravity of the movement. This can be done a number of different ways. You can use what's called a Manta Ray that snaps onto the bar; you can do high bar squats; or you can wrap a thick towel around the bar so it'll sit higher on the back. Each of these will all work the body differently.
5. Pin Pulls for 1 rep max. I like to have lifters use pins below the knee at various positions for this movement. Only pick one position per day.


## Max Effort Bench Movements

1. Various Board Presses - Same as bench press except you'll bring the bar down to a select number of $2 \times 6$ boards on your chest. The two board press would be two $2 \times 6$ 's (one on top of the other). The board is usually around 12 to 16 inches in length to make it easy for a spotter to hold it in front of you. If you don't have a spotter to hold the board, you can tuck it under your shirt, use a band, or use one of those rubber waist trimmer things to go around both you and the board.
2. Floor Presses - Lay on the floor and perform a bench press with a one second pause at the bottom. This exercise is designed to strengthen the midpoint of the bench press. It's also very effective in increasing triceps strength.
3. Close-Grip Incline Presses - Use a low to steep incline with one finger on the smooth part of the bar.
4. Pin Presses - Place a bench in a power rack and a bar on the pins. Adjust the pins (safety supports) to change the range of motion. Do these from various positions, from just off the chest to two inches below lockout.
5. Reverse Band Press - This movement is the same as a bench press except you'll use two large flex bands to hang the bar from the top of the power rack.

Note: Bands and/or chains can be added to any of these movements for variety and training effect. So how many sets and reps should I do for this max effort movement?

Make sure to only do one max effort movement per session. The sets are dependent on how strong you are and how you work up. If you only bench 185 pounds, it wouldn't be wise to start with 135, then jump to 155 for a set and then finish with 185 . There's very little volume completed this way. It's better to use a set rep scheme as follows:

- 2 Board Press (Max 185)
- 45 pounds for 3 sets of 5 reps
- 70 for 3 reps
- 95 for 3 reps
- 115 for 1 rep

The last one should be an all-out effort. If not, keep working up. There's nothing wrong with missing a weight on the movement. As you can see, the volume is much higher and the work load more productive to strength gains.


## What do I do after the max effort movement?

Your choice of movements after the main max effort movement should be based on where your weaknesses are. For 90\% of the lifters and athletes I've seen, this movement would be something for the triceps on bench days and hamstrings on squat days. These would be followed with other movements designed around the individual lifter. To better illustrate, see the sample templates below:

## Max Effort Bench, Upper Body Day

Warm up

Main Session

1. Max Effort Movement - Board Presses. Pick one movement from above and work up to max.
2. Triceps Movement - Pick one or two of the following listed below:

- Dumbbell Triceps Extensions with elbows in
- Dumbbell Triceps Extensions with elbows out
- JM Presses
- Close Grip Incline Press
- Close Grip Rack Lockouts (mid to high)
- Close Grip Board Presses (mid to high)
- Barbell Extensions to nose or lower
- Close Grip Push-ups with hands on hex dumbbells

Sets and reps are dependent on what each lifter feels he needs to do. Most have found one heavy day and one lighter day per week to work best. I'd recommend the heavy day to be on the max effort day and the lighter day to be on the speed or dynamic day. For the heavy day, work up to one to three heavy sets of five reps. This can either be the same weight for all sets or it can be staggered weight for the three sets of five reps. The light day will consist of 4 to 8 sets of 8 to 12 reps.
3. Shoulder Movement - You should only do one or two light shoulder movements as the shoulders get hit in every session anyway. For example, when you squat, your shoulders are getting pounded. They also get trained each time you bench press. I believe most shoulder injuries are a result of overuse and overtraining of the deltoid area. With this in mind, l'd suggest all the shoulder movements be part of the raises or rotation categories. These would include:

- All types of rotator cuff work
- Side Raises of any kind
- Front Raises of any kind
- Rear Raises of any kind
- Chest Supported Rows - Performed on any rowing machine where your chest is supported on a pad.
- Barbell Rows
- Dumbbell Rows
- Face Pulls - Stand in front of a lat machine and pull the bar to your face.
- Chins to the front
- Pulldowns to the front with close or wide grip

The sets and reps would average around 2 to 4 sets of 10 to 12 reps.
4. Lat Movement - I used to feel all lat work should be performed on the same plane as the bench press. In other words, all lat work should be rows. While this makes sense in theory, it doesn't hold up in real life. Too many lifters don't do this and many bench a hell of a lot more than me!

Yes, I do feel rows are a better choice but there are advantages to the pulldown and chin-up movements as well. l'd suggest mixing them up and doing one to two movements per session. The best of the best in this category include:

The sets and reps on the lat work is somewhat tricky and will depend on the movement. All movements should be done strictly and with good form. This will keep the weight relatively low. For the chins, training to failure on each set seems to work best, while the rows seem to work better with lower reps (5-8) and fewer sets (23). The pulldown and face pulls all seem to feel and work better in the higher reps range (12-15) for higher sets (4-5).


# Max Effort Squat or Lower Body Day 

Warm Up

Main Session
A) Max Effort Movement - Low Box Squats with Safety Squat Bar. Pick one movement and work up to max
B) Hamstring Movement - There are tons of hamstring movements but only a few that'll make my list as the best of the best. Most hamstring movements are a complete waste of time for strength because they only work the hamstrings from either the hip or knee and not both at the same time. The best of the best list includes:

1. Glute Ham Raises with a real GHR bench! The reason I say "real bench" is that I'm in the equipment business, so I see the junk that's out there and it frustrates the hell out of me. First off, a so-called "natural" glute ham raise (where you kneel on the floor and someone holds your heals as you fall forward) is not a glute ham raise; it's a manual hamstring curl.

Second, to the beginner, a GHR should be hard to do. If you get on a bench and can knock out 10 to 15 reps the first time you do it, then the machine isn't built correctly. The toe plate should be long enough to push your toes into it. The pad should have an angle on it to keep your body in the correct position so you don't fall off at the top. I can go on and on with this, but the fact is that too many companies build equipment designed by people who've never lifted a real weight in their lives!

To do a GHR, you'll start with your body in a horizontal position on the bench with your toes pushed into the toe plate. Your knees will be set two inches behind the pad and your back will be
rounded with your chin tucked. You then push your toes into the pad and curl your body up with your hamstrings while keeping your back rounded. As you approach the top position, squeeze your glutes to finish in a vertical position.

The sets and rep scheme for the GHR depends on the strength of the lifter. I find most athletes and lifters to be very bad at these as the hamstring strength of most people is downright terrible. For those who fall into this category, l'd have them do two to three sets of GHR as part of their warmup for every workout of the week. I suggest they strive to get 3 sets of 10 reps. This will mean for most that they'll be doing three sets to failure, failing around 3 to 5 reps each set. Over time this will improve.

Once they get better, l'd have them keep the GHR as a warm-up movement and drop the sets and reps to 3 sets of 8 reps. At this time in the program, they'd now add the GHR as a main movement as part of the main session at least one time per week. Yes, they'll be doing GHR's five times per week!

For the main session there are several suggestions to follow for the highest success. While doing the GHR as the main movement, it's "bust ass" time. The reps and sets will fall into several categories and should be rotated every few weeks. Examples of these programs would include:

- Three sets to failure
- One hundred total reps (using as many sets as needed)
- Three heavy sets of 5 to 6 reps while holding weight across chest
- Three heavy sets of 5 to 6 reps while holding weight behind head
- Three heavy sets of 5 to 6 reps with the back of machine inclined up 4 to 30 inches.
- Dynamic GHR sets - Here you get to the top position and drop fast and rebound out of the bottom with as much force as you can. You can use a heavy medicine ball or weight to lower faster and drop the weight at the bottom.
- Static-Dynamic GHR - Start at the horizontal position and have a training partner place his hands on your back for a three to five-second count. While doing this, drive into your partner's hands as hard as you can. After the five seconds, your partner will pull away and you should fire up as fast as you can to finish the rep. This is best preformed with 5 to 6 sets of 3 reps.
- Yielding GHR - For this version you'll break the movement into three holding positions, each for 5 to 10 seconds. Start at the horizontal position and hold for 10 seconds, raise halfway and hold for another 10 seconds, then rise to the top and hold for 10 more.
- Timed GHR - In this version you'll give yourself a set time and do as many reps as you can. For example, you use five minutes and end up with 70 reps the first time you do it. The next time you'd use the same time and try to beat the 70 reps.
- GHR with bands - This is a movement for the more advanced lifter. Strap each of the bands around the bottom of the GHR and place the other end around your upper traps. The bands will add heavy resistance at the top.
- Forced GHR with heavy eccentric - This is a good version for those who aren't strong enough to get one rep. With this version the training partner will help the lifter get to the top and then he'd lower the rep on his own. Only enough assistance should be applied to help the lifter get one rep. Sets of 3 to 5 reps are best with this style of the GHR.

2. Reverse Hypers - Here's another one of those things that bothers me. The reverse hyper is a trademarked name, so there's only one way to do them and it's on a reverse hyper machine. Anything else is not a reverse hyper!

This machine is also very good for the development of the hamstrings, glutes, and lower back. There are many ways to perform the reverse hyper but these three are the best l've found:

- Three to four heavy sets for 6 to 10 reps - This is a looser style then many are used to. After you get on the machine you'll use a couple of reps to get the weight moving (these don't count for the total). When you get a full range of motion, you'll try to catch the weight at the bottom of the motion where the axis of the plates begins to cross the front legs of the machine (closest to your head). This way you reverse the weight before it reverses you. This style seems to hit the hamstrings and glutes very hard.
- Strict sets for 3 to 4 sets of 15 reps To do the strict reverse hyper, set yourself on the bench so your hips are 3 to 4 inches off the back of the machine, then arch your back as hard as you can while keeping your chest off the machine. This will put your body in a diagonal position.
- To perform the motion, you'll begin with the axis of the plates even with the back legs on the machine (closest to your hips). From the start position, focus on arching the weight up with the lower back. You'll only be able to get the weight so high. When you get to the top, try and hold the position for a one count. This will be impossible to do but try your hardest. The tempo of this movement is twice as slow as the first style of hyper. You'll feel this style more in the lower back than anywhere else.
- Timed Reverse Hypers - This is a classic Louie Simmons movement. Use much less weight than you would with the other two styles. Either style of the reverse hyper can be used for this. Pick a designated time (usually 3 to 5 minutes) and continue with the set nonstop for as long as you can or until you hit your time deadline. 3. Pull Through - The pull through is a special exercise designed to train the muscles of the lower back, hamstrings, and glutes. Begin by facing away from a low pulley cable with a single " $D$ " handle. Next, bend over and grab the handle between your legs while facing away from the machine. Then pull the handle through your legs until your body is in an upright position. This movement is best trained with 4 to 6 sets of 10 to 15 reps.

4. Dimel Deadlift - The Dimel deadlift is the one movement we get the most questions about. To perform it, stand in front of the barbell with around 30 to 40 percent of your max deadlift weight. Pull the bar to the top position. This is the starting position of the exercise.

From here you want to arch your back as hard as you can and push your hips back until you feel a extreme stretch in your hamstring and glutes. For the first few reps you'll lower the bar with a controlled tempo to just below knee level then
rebound back up. Once you get the bar path figured out you'll then begin to lower very fast and rebound out of the bottom in a ballistic fashion. This is a high speed, high rep exercise that's best trained with 2 to 3 sets of 20 reps.

## 5. Close Stance, Stiff Leg, No Touch Deadlifts

 Off Box - This is another great movement for the lower back, glutes, and hamstrings. Stand on a four inch box and pull deadlifts. The key here is you'll not touch the floor until the set is finished. The bar will stop short of the floor by a few inches before you complete the next rep. I've seen this trained two ways. First, for a couple of heavy sets of 3 to 5 reps; second, for a few sets of 15 to 20 reps.6. Sled Dragging - Sled dragging is a very underrated hamstring movement. There are a few ways to really hit your hamstring with the sled. The most popular is forward walking where you make sure to really kick the front leg out.

The second method is to grab the sled handle or strap behind your knees with a close stance. While in the bent over position, keep your hands behind your knees while walking forward. You'll only be able to take small steps but after a few steps you'll know right away what you're training.

There are two very good ways to drag the sled for hamstrings. First is with very heavy weight for 15 to 20 steps per set. The second is with lighter weight for 70 to 100 steps per set.
7. Inverse Leg Curls - This movement is performed on a glute ham bench or a standard hyper extension or back raise bench. To perform it, set your body on the bench as you would a back raise. You'll be in a facedown, rounded over position with your heels and toes off of the toe plate. The only thing holding you should be your heals against the pad. If you're using a GHR bench you'll want to set the toe plate forward so your knees are just off the pad.

To begin, arch your lower back as hard as you can and force your heals into the pad. Pull yourself into the horizontal position and then try to leg curl your way up another three to four inches. If done correctly, you'll only be able to pull yourself up a few inches. When you hit your highest spot, you'll hold statically for a three count then lower. This is best trained for 4 to 6 sets to failure.
C) Torso Work - These torso movements are intended to train the muscles of the lower back and abdominals. This could very well be the most important group of the entire training program.

Many great movements for the training of maximum strength are listed below. Choose one for the lower back and one for the abs. If you feel the need, two can be performed for each muscle group, but try to keep the total main session movements down to four to six movements. If you feel the need for more torso work, add it to the warm-up or an extra workout later in the day or on an off day.

1. Reverse Hypers - This movement is already described above. If you choose to do the exercise as a hamstring movement, find something else to do for the torso work or use a different method to train it.
2. Banded Good Morning - This is a great high rep movement. To perform this exercise, you'll need to use a Jump Stretch flex band. Stand on the band with one end of the loop under both feet using a medium stance. Place the other end of the band around the upper traps. From here do a standard good morning movement by bending over and standing up while keep the knees slightly bent. Make sure you're forcing back onto your hamstrings as you bend over. This movement can be trained a variety of ways for a few sets of 20 reps to a few sets of 100 reps.
3. Pulldown Abs - Begin by placing a rope or leather triceps handle on the lat pulldown machine. Face away from the machine and grab the rope behind your head with both hands. Perform the movement in the same motion as a deadlift. Start by pushing your abs out and then tighten them as hard as you can. Bend over at the waist until your torso goes below parallel to the floor. Reverse the motion in the same manner.
4. Back Extension - This exercise will help strengthen your lower back. Using a glute ham raise or back raise, lock your heels in and bend forward at the waist. Begin the movement by arching yourself to a parallel position and holding for a second. Return to the starting position slowly to avoid getting dizzy.
5. Ab Wheel - This is a great exercise for your abdominals. All you need is an ab wheel (which can be purchased at EliteFTS.com). Start on your knees and roll yourself out, keeping your abs tight. Once you're parallel to the floor, bring yourself up, back to the starting position. This isn't an exercise for everyone as it requires great core strength.
6. Hanging Leg Raise - You can hang from a chin-up bar or use special straps. This exercise can be done several ways. The first way is bringing your knees to your chest and lowering them back down. This is the easiest way to do them and recommended for beginners.

The more advanced version of this is keeping your legs straight throughout the entire movement. For those wanting a good challenge, try bringing your feet to the top of the chin-up bar. Make sure you don't swing and use momentum to perform reps. If you're not strong enough to do this, have someone place his hands on your lower back.
7. Roman Chair Sit Ups - This is a great exercise to develop your hip flexors and abdominals. Place your feet under the GHR foot pads, keep your knees relatively straight, and perform situps. To make the exercise more difficult, hold a plate behind your head.
8. Rainbows - This exercise is designed to isolate the obliques. To begin this movement, lie on your back with your hands over your head holding onto a heavy object. Pull both knees toward your chest in a tucked position. Keeping this tucked position, roll your knees to the left side until they touch the floor, rotate back to the center, then roll them to the right. You must keep your shoulder blades on the floor. To increase the difficulty, perform the movement with your legs raised in a 90 degree angle.
9. Straight Leg Raises -This exercise is intended to strengthen the abs and hip flexor muscles. Lie on your back on a flat bench or on the floor. Keep your arms out to your sides or hold onto the rack. Raise your legs to a 90 degree angle and press your lower back into the bench as hard as possible. Lower your legs until you feel your back start to arch. At this point, raise the legs back to the starting position. Not everyone will be able to go all the way down at first, just go as low as you can before your back arches. If you try to force it too soon you may injure yourself.


## How do I cycle the max effort movement?

You have to always remember that with this style of training every movement has its own life cycle associated to it. In other words, each movement cycles independent of the other. Also, each day cycles independent of the other days.

For the max effort day, the first movement (max effort movement) will rotate in a one to three week cycle. There are several ways to accomplish this. The more advanced the lifter, the faster the movement has to change. An advanced lifter will need to change this movement every week. An intermediate will change every two weeks while a beginner will change every three.

How do I know if l'm a beginner, intermediate or advanced? If you have to ask this question, then you're a beginner. Everyone new to this style of training should treat himself as a beginner. There are checks and balances (C \& B's) throughout the program so you'll know when to change. The $C$ \& B's for the max effort movement are if you're breaking records or not. If you chose two board presses and hit 315 on week one, 320 on week two, and 335 on week three, then you should use a three-week rotation.

Now, if you hit 315 on week one, 320 on week two, then can't do 315 on week three, then you should switch every two weeks. The longer you use the method, the sooner you'll be switching every week. There are a few alternative approaches worth looking into:

1) Many coaches have found it best to use a two week cycle with their athletes where week one would be an intro week to the movement. Here they may use a percentage based scheme for a week (such as $70 \%$ of their best with the same movement for 2 sets of 5 reps, or $80 \%$ for 3 sets of 3 reps).

These coaches have found the athletes do much better on week two (when they hit the one rep) when they use an intro week to the movement.
2) Another approach similar to the first one is a three week cycle based on $70 \%$ for 5 reps on week one followed by $80 \%$ for 3 on week two and then 100 plus on week three. I personally don't like this as I feel the chance of injury is too high with the higher reps when compared to the singles.
3) One approach told to me by a very successful lifter overseas was to cycle the down sets of the max effort movement. This lifter would work up to a one rep max and then hit a down set of a prescribed percentage. He'd use $70 \%$ for 2 sets of 5 reps on week one, $72 \%$ for 2 sets 5 reps on week two, $76 \%$ for one set of 5 reps on week three and $80 \%$ for 5 reps on week four. The max effort movement would change every week but the down sets percentage went up for the fourth week, then the cycle would start again.

## Do you do the max effort movement every week?

This answer depends on what you're doing on all the other days as well as the individual. If you're hitting it very hard with bands on the dynamic day, then you may find you can't hit the max effort movement every week and may have to take it easy one workout of the month. If you find you're not recovering, then you'll want to take it easy one of the workouts each month. When you "take it easy" (not a day off) you'll replace the movement with higher rep work using a movement intended to train the same muscles.

## How do you know if you went heavy enough?

If you have to ask this question, then you're totally missing the boat. This movement is about straining as hard as you can. If you make the weight and have something left then you need to add more weight and go again. When using the max effort method you must strain to gain!


## How do you cycle the other stuff?

The max effort movement isn't the only movement that has to cycle on this day. All the supplemental movements must also cycle. These movements won't cycle at the same rate as the max effort movement as they can be cycled longer. The four ways I recommend cycling these movements are weight related, rep related, set related, and movement related.

1) Weight Related Cycles - With this method you'll try to use more weight for the same reps with the same movement until you can't increase any longer. At this point you'll switch the movement.

For example, let's say you choose dumbbell extensions for your triceps movement. For week one you perform 50 pound dumbbell extensions for 3 sets of 10 reps. The next week you do 60 pound dumbbells for 3 sets of 10 reps. The third
week you use 70 pound dumbbells for two sets of 10 reps and one set of 6 reps. Now it's time to change the movement or the method of training the same movement.
2) Rep Related Cycles - With this method you'll try to get more reps on each set of a given movement. For example, let's say you choose the GHR for your hamstring work and get one set of 6 , one set of 5 and a third set of 5 . The next week you want to try to get more reps then you did the last time. After three to four weeks (or when you can no longer add more reps), you'll switch the movement or the method for training the same movement.
3) Set Related Cycles - This method is one of the best for increasing volume fast over the training cycle. All you do here is add an additional set to the movement with a desired number of reps. For example, you decide to use reverse hypers as your lower back movement. For week one you do 2 sets of 10 reps. Week two, 3 sets of 10 reps, for week three, 4 sets of 10 reps, and on week four you get 4 sets of 10 reps, but only 7 reps on the fifth set. This is when it's time to change the movement or method.
4) Movement Related Cycles - With this method you'll switch the movement every week and cycle the sets and reps from week to week. This is the best choice for the more advanced lifter as they've already figured out how to train on feel.

The actual movement doesn't need to change every three weeks but something has to change every few weeks. I feel the reverse hyper and GHR are both very important to my training and both are trained two to four times per week. This would be an example of how l'd cycle my GHR movement for the main session:

## GHR Cycle

## Weeks 1-3

Monday: GHR, rep related cycle
Friday: GHR on 6 inch incline, weight related cycle

## Weeks 4-7

Monday: Ballistic GHR, rep related
Friday: GHR on 10 inch incline, rep related cycle Note: These cycles may not last the three weeks as the change may need to happen before then because of stagnation. The two days will also cycle independent of each other.

## Closing

That wraps up the strength portion of the eight keys.

## The Eight Keys, Part III

## Speed

The speed day (dynamic effort day) is designed to make the lifter faster. If you were to do a vertical jump, would you try to jump slowly? If so, how high would you go? What would happen if you were to try and jump fast and apply more force? You'd go much higher, of course!

Training for maximal strength has to have a speed element to it or you won't be training to the fullest potential. There are some lifters who are stronger than they are fast and others who are faster than they are strong. You have to train both elements regardless of where you fall. This way you can harness your strength and bring up your weakness.

There are two days of the week devoted to training for speed. The first is for the bench press and the second is for the squat and deadlift. There are a few different movements that can be rotated for the speed work. These include:

## Speed Squats

1) Parallel Box Squats - The benefits of this exercise are numerous. It develops eccentric and concentric power by breaking the eccentricconcentric chain. Box squats are a form of overload and isolation. The box squat is the best way to teach proper form on the squat because it's easy to sit way back while pushing your knees out.

To take the barbell out of the rack, the hands must first be evenly placed on the bar. Secure the bar on the back where it feels the most
comfortable. To lift the bar out of the rack, one must push evenly with the legs, arch the back, push your abs out against the belt, and lift the chest up while driving the head back. A high chest will ensure the bar rests as far back as possible. Slide one foot back, then the other, to assume a position to squat.

Set your feet up in a wide stance position. Point your toes straight ahead or slightly outward. Also, keep your elbows pulled under the bar. When you're ready for the descent, make sure to keep the same arched back position. Pull your shoulders together and push your abs out. To begin the descent, push your hips back first. As you sit back, push your knees out to the sides to ensure maximum hip involvement. Once you reach the box, you need to sit on it and release the hip flexors. Keep the back arched and abs pushed out while driving your knees out to the side.

To begin the ascent, push out on the belt, arch the back as much as possible, and drive the head, chest, and shoulders to the rear. If you push with the legs first, your buttocks will rise first, forcing the bar over the knees (as in a good morning) which causes stress to the lower back and knees and diminishes the power of the squat.
2) Safety Bar Box Squats - This is the same as listed in the max effort section in part 2 of this series except now it'll be used for speed training. Using this bar for speed squat training can have a profound effect on your deadlift because of the added strength gained in the upper and lower back.
3) Cambered Bar Box Squats - This bar has a huge 14-inch camber to allow your hands to rest closer to your body's midline. This is a huge advantage for several reasons.

First, it takes stress off the shoulders. You have to always keep in mind how much shoulder work you really do. When you squat, your shoulders are held in an isometric contraction with max weight. Your shoulders are worked on all bench movements as well. The cambered and safety bar offer a much needed break to allow the shoulders to recover.

The second benefit of this bar is related to the one above. Because your arms are held lower, you're taking much of the stress out of the upper back and placing it on the lower back, glutes, and hamstrings.

If you choose to do a band cycle with this bar, the way you attach the bands will have to change. If the bands were to attach the traditional way where you choke at the bottom, there would never be tension at the bottom of this bar because the plates are held fourteen inches lower. You can solve this by pulling the band around the plates while still choked at the bottom.


## Speed Deads

1) Speed Pulls - Speed deadlifting can be trained with either the conventional or sumo method of pulling. The speed pulls are usually completed right after the speed or dynamic squats (yes, on the same day). Most lifters prefer to use 40-50 percent for 6 to 10 sets of one rep with 20-45 second rest periods.

- Conventional Deadlifts: This max effort exercise is designed to test overall body strength. It's normally advised to use a close grip, hands touching the smooth part of the bar. You'll be pulling the bar a shorter distance by rolling the shoulders forward as you rotate the scapulae. This works fine for smaller lifters, but large men will do better by using a wider-thanshoulder grip. This allows room for the stomach to descend between the thighs, which are naturally set wider because of their girth. Most small men should keep their feet close together to use mostly back muscles, whereas big men use a lot of leg drive to start the lift.

Pull the bar up to a standing position.The key with the conventional deadlift is to make sure you arch the lower back and round the upper back while keeping the shoulders behind the bar.

- Sumo Style Deadlift: Use a moderate stance and a close grip. To start the lift, you'll rock into the bar; the hips come up fast toward the bar. This requires a strong back because the legs lock out long before the bar is completely locked.

The most common style is with the feet very wide (out to the plates). The lifter shouldn't lower the hips any more than necessary. The back must be arched to the extreme. Most important is to push your
feet out to the sides, not down. Why? By pushing down with a sumo or wide stance, your knees will come together, which is the most common mistake in the sumo. By pushing the knees out forcefully, the hips will come toward the bar fast, making for a favorable leverage and placing most of the work on the hips, legs, and glutes. Remember, don't stay down too long; it'll destroy the stretch reflex.
2) Speed Pull Against Bands - With the use of a Jump Stretch band platform, attach bands around the platform and then the bar. This will make the tension greater at the top of the lift because of the pull of the bands. For this type of speed training, 20-30\% barbell weight will be used with a variety of different band tensions. Usually 5 to 8 sets of 1 to 3 reps would be completed with 20 to 45 second rest periods.
3) Speed Pulls Off Box - This style of speed deadlift involves standing on a box or series of rubber mats to elevate the lifter 2 to 4 inches off the floor. Use 30-40\% of max deadlift weight for 5 to 10 sets of 1 rep with 45-60 second rest periods.

## The Bench Press

1) Speed Benches - The bench press should be performed with the shoulder blades pulled together and driven into the bench, elbows tucked. The bar should hit you in the lower chest area. The bar must be pushed in a straight line, not back over the face. The total time taken for all three reps should be no longer than 3 to 3.5 seconds per set. This style of speed training is the staple method with this program and should be used most of the time.
2) Speed Catch Benches - This is the same as the bench press except you'll lower the bar quickly, catch it (stop it) one to two inches from the chest, and explode back to lockout. This style of speed work is great for starting strength and will usually only be cycled a few weeks at a time.
3) Floor Presses - This is the exact same floor press as described in the max effort section in part 2 of this series, except now it'll be used for speed training. This is great when coming back from shoulder, pec, or triceps injuries. Make sure you don't bounce your elbows off the floor but pause for a static second and then explode to lockout. This is great for bringing up the pressing muscles because the legs are (to a degree) taken out of the motion.
4) Floor Catch Presses - Same as above but you'll stop one to two inches short of the chest (because you're lying on the floor) and explode back to lockout. This is great for bringing up weak triceps.
5) Speed Low Board Presses - This is a special max effort exercise designed to help strengthen the lockout of the bench press. It's also very effective in increasing triceps strength. This exercise is performed exactly the same as the bench press except you pause the bar on a board that's placed on your chest. The board for this workout will be one or two $2 \times 6$ boards that are about 12 inches in length. Make sure to pause the bar on the boards before the ascent. This movement is also great for increasing the starting strength of the bench press.

## What type of sets and reps should be completed on speed day for the box squats, bench press, and deadlift?

There are many different cycles that should be rotated for the box squat and most depend on the level and experience of the lifter. Many of the cycles will incorporate the use of bands and chains to help take the training to another level. For more information on this, l'd suggest reading my Accommodating Resistance article.

Beginner Cycles - A beginner is someone who's never trained this way before, has a ton of muscle that needs to be built (ya can't flex bone!), or has technique problems that need to be addressed. For these lifters, l've outlined two different training cycles for the squat and two for the bench press and deadlift.

Some key notes to remember: For the bench press you'll use up to three different grips for these three sets. These grips will range from one finger on the smooth to one finger outside the lines. There will only be a total of eight sets completed with all grips. You don't do eight sets with each grip! Also, you can vary the grip however you like.

All squatting should be done on a parallel box and with good form. All dynamic work must be executed with a very fast concentric (lifting) phase. The beginner should only use the standard box squat, bench press, and deadlift for speed training. He shouldn't use any other special speed movements!


## Beginner Squat Cycles

## Squat Cycle 1

This is designed for the total beginner or lifter who has to address form and technique issues with the squat.

- Week 1: $20-30 \%$ for 15 sets of 2 reps with 60 second rest periods
- Week 2: 20-30\% for 18 sets of 2 reps with 60 second rest periods
- Week 3: 20-30\% for 20 sets of 2 reps with 60 second rest periods


## Squat Cycle 2

This cycle is designed for those who've been lifting for some time but are new to the box squat and this style of training.

- Week 1: $50 \%$ for 8 sets of 2 reps with 60 second rest periods
- Week 2: $55 \%$ for 8 sets of 2 reps with 60 second rest periods
- Week 3: $60 \%$ for 8 sets of 2 reps with 60 second rest periods


## Beginner Bench Cycles

## Bench Cycle 1

This is designed for the total beginner or lifter who needs to address form and technique issues.

- Week 1: 20-30\% for 15 sets of 3 reps with 60 second rest periods
- Week 2: 20-30\% for 18 sets of 3 reps with 60 second rest periods
- Week 3: 20-30\% for 20 sets of 3 reps with 60 second rest periods


## Bench Cycle 2

This is designed for those who have training experience but are still new to the system.

- Week 1: $55 \%$ for 8 sets of 3 reps with 60 second rest periods
- Week 2: $60 \%$ for 8 sets of 3 reps with 60 second rest periods
- Week 3: $65 \%$ for 8 sets of 3 reps with 60 second rest periods


## Beginner Deadlift Cycles

## Deadlift Cycle 1

This is designed for the total beginner who needs to address form and technique issues.

- Week 1: 20-30\% for 15 sets of 1 rep with 60 second rest periods
- Week 2: 20-30\% for 15 sets of 1 rep with 45 second rest periods
- Week 3: 20-30\% for 15 sets of 1 rep with 30 second rest periods Deadlift Cycle 2

This is designed for those who have gym experience but are still new to this system.

- Weeks one, two and three: $50 \%$ for 8 to 10 sets of 1 rep with 45 second rest periods



## Intermediate to Advanced Cycles

These training cycles are intended for those who've been training for many years and have developed a good training base. These lifters will also have some previous experience with this style of training. There are many different training cycles that can be used for a variety of reasons, ranging from basic conditioning to competition training.

## Squat Cycles for Intermediate to Advanced Lifters

## Straight Weight

This means training without the use of chains, bands, or any other devices. This phase is used by many lifters for a variety of different reasons. Some lifters like to use this phase pretty much all year around. (I did this for eight years before we even had bands and chains and made great gains.) Other lifters like this to be the first phase after a meet to get back into the flow of training.

- Week 1: $45 \%$ for 8 sets of 2 reps with 60 second rest periods
- Week 2: $50 \%$ for 8 sets of 2 reps with 60 second rest periods
- Week 3: 55\% for 8 sets of 2 reps with 60 second rest periods


## Regular Band

The regular band phase is the one band phase that's used more than any other. This is the key band phase. The band selection depends on the strength of the lifter. A lifter who squats under 450 to 500 pounds will use a light band; 501700 pounds will use an average band; 701 and up will use a strong band.

- Week 1: $47 \%$ for 8 sets of 2 reps with 60 second rest periods
- Week 2: $49 \%$ for 8 sets of 2 reps with 60 second rest periods
- Week 3: $51 \%$ for 8 sets of 2 reps with 60 second rest periods


## Heavy Band

This is a killer phase that'll usually only last one or two weeks at the most. For this phase you basically jack up the band tension as high as you can tolerate. A great place to start is 2.5 times the band you normally use. For example, if your regular band cycle is an average-rated band, you'd then use two average bands and one light for this cycle. You may also work up to a heavy single after your five sets have been completed.

- Week 1: 20-30\% for 5 sets of 2 reps


## Circa - Max One

This phase has been great for most of the lifters I know who squat over 700 pounds! It's intended for the advanced lifter, not the novice or beginner. This phase is used when trying to peak for a meet. Extra bands are added to the bar. The bands used for this cycle would be an average and light band for those who squat 500 to 800 pounds, and a blue and pink for those who squat 800 and above.

- Week 1: $47 \%$ for 5 sets of 2 reps with 60 second rest periods
- Week 2: 51\% for 5 sets of 2 reps with 60 second rest periods
- Week 3: $53 \%$ for 5 sets of 2 reps with 60 second rest periods
- Week 4: $47 \%$ for 5 sets of 2 reps with 60 second rest periods

At this point the lifter would de-load for the meet. To do this, the lighter band is removed. The recommended bands used for this phase are the same as the regular band phase detailed above.

- Week 1: $53 \%$ for 5 sets of 2 reps with 60 second rest periods
- Week 2: $47 \%$ for 5 sets of 2 reps with 60 second rest periods


## Chains

The chain cycle uses the exact same loading as the straight weight cycle as the chains are deloaded at the bottom and only add resistance to the top of the movement. The chains should be loaded with a support chain that holds the weighted chains to ensure the chain is deloaded. If the chains attached to the top of the bar are dropped straight to the ground, most of the weight of the chain would stay on the bar.

## Recommended Chain Weight

- Squat Max: 200-400 pounds $=60$ pound chain
- Squat Max: 400-500 pounds $=80$ pound chain
- Squat Max: 500-600 pounds $=100$ pound chain
- Squat Max: 600-800 pounds $=120$ pound chain
- Squat Max: 800-900 pounds $=160$ pound chain


## Conditioning Phase

This phase is a killer three week phase intended to get you into shape very fast. The rest periods are the key to this phase.

- Week 1: $40 \%$ for 10 sets of 2 reps with less than 45 second rest periods
- Week 2: $42 \%$ for 15 sets of 2 reps with less than 45 second rest periods
- Week 3: $44 \%$ for $15-20$ sets of 2 reps with less than 45 second rest periods

Bench Cycles for Intermediate to Advanced Lifters

The bench training cycles for this group are pretty basic and percentage-based with a flat wave. A flat wave is a wave where you try to get faster each week while using the same percentage.

## Cycle 1

- Week 1: $50 \%$ for 8 sets of 3 reps with 60 second rest periods
- Week 2: $50 \%$ for 8 sets of 3 reps with 60 second rest periods
- Week 3: $50 \%$ for 8 sets of 3 reps with 60 second rest periods


## Cycle 2: Bands

The best bands to use for bench speed training are the mini bands. Place one end of the band on the bar. Pull the band down and under a dumbbell and then pull the band back up to the bar again. This is called a "double mini band." By using one dumbbell you can expect 70 to 80 pounds of tension at the top and 30 to 40 at the bottom of the motion. This is plenty for all those who bench under 450 pounds.

If you bench over 450, you'll want to use two dumbbells on each side to increased the spread distance of the band at the bottom. This will increase the tension to $100-110$ pounds at the top and 50-60 in the bottom position.

- Week 1: $40 \%$ for 8 sets of 3 reps with 60 second rest periods
- Week 2: $40 \%$ for 8 sets of 3 reps with 60 second rest periods
- Week 3: $40 \%$ for 8 sets of 3 reps with 60 second rest periods Note: The bands are not figured into the percentage.


## Cycle 3: Chains

The chains should be set up so half of the chain is on the floor while the weight is in the rack. The weight of the chain will depend on how much you bench. If you bench under 300 pounds, a total of 50-60 pounds of chain should be used. If you bench between 300 and 500, 80-90 pounds of chain should be used. If you bench 500 and up, 120-130 pounds of chain should be used. Week 1: 50\% for 8 sets of 3 reps with 60 second rest periods

- Week 2: $50 \%$ for 8 sets of 3 reps with 60 second rest periods
- Week 3: $50 \%$ for 8 sets of 3 reps with 60 second rest periods

Note: The chains are not figured into the percent.

There are also several alternative cycles that many lifters have been using with great success. There are too many to mention in this text, but some of the methods include:

- Using more band tension than recommended above while lowering the barbell weight.
- Adding an extra band after the first few sets for two sets, then pulling the extra band off for the last few sets. The same can also be done with the chains.
- Staggering the weight over the 8 sets. For example: $40 \%$ for 2 sets, $45 \%$ for 2 sets, $50 \%$ for 2 sets and $55 \%$ for two sets.
- Catching the barbell. This is one that most lifters are doing incorrectly! To use this method you lower the bar with speed (but under control), then catch the bar one or two inches before touching the chest, then explode back up. This method should only be used for one or two weeks at a time. If you use it longer than that, you're looking for trouble.



## Deadlift Cycles for Intermediate to Advanced Lifters

There's really no need to go into cycles with this one. The most popular way to cycle the speed deadlift is to use a percentage around $50 \%$ and pull 5 to 8 singles. The key here is form and speed. You may also do these with the use of bands or chains to increase the work at the top end.

When can I use the other speed movements and what phases can I use them with?

You can use the safety squat bar, buffalo bar, or cambered squat bar for any of the squat cycles listed above. I know of one lifter who'll only use a squat bar the last three weeks before the meet and he squats over a grand! He spends the rest of the time using the safety squat bar. He feels this allows his shoulders to rest, thereby allowing him to put more into bench training.

For the bench press you could use the cambered bench bar or fat bar in place of the regular bar to change up the muscle firing pattern. There are many lifters who use the fat bar for all bench training and then only use the regular bar at the meet.

Are all the percentages set in stone?
No way! The percentages are only guidelines. If the weight feels way to light then use more weight; if it feels too heavy then lower it some. Percentages can only help you to find a starting point.

The problem with percentages is they're all based on one rep maxes. You may or may not be as strong as or stronger than you were when you did your 1RM. I'll say if you're having problems getting stronger then the first thing you should do is lower the percentage! Yes, I said lower. This will bring more speed back into the training. Speed is very important for many lifters and can make a big difference in their training.

For example, what would you think if I told you my best pin lockout on the bench for pin 13 is 455 pounds? Pin 13 is a four inch push for me. It pretty much says I can't lock out 500 pounds. So how did I bench 600? The speed from the bottom carried the bar through to the top! I'm a speed lifter, not a strength lifter. Max effort lifts are equal to lifters who total 400 pounds less than I do. This tells me I have to get stronger on max effort work while at the same time harnessing my speed.

There are other lifters who are strength lifters. They're very strong but very slow. What happens if you lift a weight slow? Very simple, it takes longer to lift the weight. The longer it takes to complete the lift, the stronger you'll have to get.

What do you do after the speed or dynamic movement?

You do whatever you need to do. l'd suggest you hit your weak point first. What if you don't know your weak point? First, you could find a good coach to help you out. Second, you can check the list below for help.


## Squat Weak Points

Weak at the top: In this situation, you stall out near the top of the lift, but don't fall forward or backward. This is one of the best problems to have as you've kept the proper squat form but just stalled out. There are no technical problems for this except not driving your hips forward. Usually this isn't the problem.

The first thing to do to fix this problem is to get stronger! This sounds simple and it is. Sometimes you don't have to look so hard for what your weaknesses are. I think too many people feel they're being held back by some secret weakness when in fact they just need to get the entire body stronger.

The second thing you can do is get faster. If you get fast enough, the momentum will bust you through the sticking point. The third thing you can do is to take a reality check. Is this your sticking point because you now own it? What I mean here is, do you always fail at this same spot? Have you always failed there? Have you engrained it in your mind that this is where you fail? If so, fix it!

Getting smashed at the bottom: There are many things that can cause this to happen. The first and most apparent problem is it was just too much weight. I know many of you are thinking, "Well, no crap!" but you'd be shocked at some of the e-mails and calls I get.

For example, I had one guy call because he got crushed with a 315 bench and couldn't figure out why. I later find out he barely made 275! It was simply too heavy for him!

This could also be improper set up from the start. If you don't start with a good arch and tight abs and then don't sit back, you'll sit straight down. You have to sit back into the squat to get the most out of your hamstrings, lower back, and
hips. If you sit straight down you're forcing most of the weight onto the quads and allowing the bar to actually travel forward.

The third reason could be you're not forcing your knees out on the way down and keeping them forced out of the hole. This could be fixed with a simple verbal queue like "Knees out!" You may also need to do more hip work. Some great things for this are seated abductions with bands around the knees. We call them "knee-outs with the band." A second thing that'll help with this is wide stance low box squats with light weight and higher reps (around ten). Squat to the bottom position and then only raise half to one-forth of the way up, then go back down. This will keep the tension in the range of motion you're having your problem with.

A fourth reason you may miss in the hole is you're letting your chest drop on the way down. A fifth reason is that your hamstrings aren't strong enough to sit back on. I see this one all the time in the seminars we conduct. What happens is the lifter will sit back so far and then just drop. The strength is just not there to keep sitting back. To fix this, use a box height on speed day that you can sit back on and keep good form. Who cares if it's four inches high? Just do it! Then, over the next few weeks, lower the box half to one inch each week, but keep the form 100\% correct.

You can also strengthen the hamstrings with glute ham raises, reverse hypers, good mornings, pull-throughs, and many other movements. This could be due to weak abs and lower back muscles. This is another reason why we all need more ab and back work.

Falling forward coming out of the hole: This is the king of missed squats. I see this one more than any other sticking point. This can happen for several reasons, many physical and many technical.

One technical reason is not rising with your chest first out of the bottom. You're rising with your hips first. When your hips flex first your chest will always go forward. You have to think of rising with your chest first and squatting the bar back, not up. If you have the bar driving back it'll travel in a straight line instead of going forward. The shortest distance between two points is a straight line and this is how the bar must travel.

You may also have allowed your head to drop down. Your body will always follow your head so you must keep your head back. Notice I didn't say up, but back. Watch the eyes of any great squatter as he rises out of the bottom. Through the blood clots you'll see his eyes are focused up and he's driving his neck back into the bar. Even the guys you think are looking down are still driving their head into their traps.

Now, why are these technical problems happening in the first place and how do you fix them? All technical problems should be corrected by learning what you're supposed to do and then perfecting it with the lighter weights. You should also use verbal queues. The best queues l've used for this one are "Head up!" or "Chest up!"

Falling forward may also be caused by weak abs and lower back. If your core isn't strong enough to transfer the flex from the lower body to the bar, then the body will have no choice but to collapse. The best movements for this are exercises that work both the abs and hip flexors (pulldown abs, leg raises, spread eagle sit-ups etc.) For the lower back, reverse hypers, back raises, and good mornings are ideal. One last thing that can really help with this is to use a cambered squat bar for low box squats. The reason? If you don't rise with your chest first you'll have some very
serious instability issues. This will only happen once and then you'll automatically figure out what to do.

The bottom line here is, no matter what weakness you have, act on them and fix them! This will take commitment and discipline. Basically, do what you gotta do because no one will do it for you!

Falling forward halfway up: This is probably the second most common problem or sticking point I see with the squat. What happens here is the lifter comes out of the hole strong and then about halfway up he begins to fall forward. This happens because he has great reversal strength out of the bottom but then, as he begins to hit the mid-point, he stalls. He can't continue to strain because the torso is beginning to die out and the force of the movement keeps the hips coming up, yet the upper body can't stay upright.

To fix this he needs to make sure the time-undertension on the max effort movement is specific to the time of the strain needed in competition. This will be around 3.0 to 4.0 seconds. Second, the ab work has to come up and be heavy. A third remedy for this problem is to do static work in the position at which you lose the lift. To do this, use a bar with a light weight (around 20\%) and a band. Squat down to the spot you lose it at and hold for five seconds, then squat back up and hold at the top for five seconds. This would best be done with 3 to 5 sets of 5 reps. The good morning can also be used for this and may even be a better choice as there'll be more work on the torso when compared to the barbell squat.

One last solution for this problem is to use the safety squat bar for max effort work. The safety squat bar tries to toss you forward as you squat up because of the design of the bar. If the bar is trying to toss you forward, there's only one way to keep this from happening: you have to fight to keep the bar in position, thus developing those muscles.

Falling backwards: This is actually the best thing that could happen because you're squatting the bar back and all the strength is there. The only thing that really needs to be done here is technical. Just sit back more to allow the torso to lean in some. The lifter may also not be sitting back because of weakness in the hamstrings.

Knees coming in while squatting down: This is also a very common problem with beginners and intermediate lifters. This can happen for many reasons: weak hips, poor flexibility, or bad form. If the lifter has bad form all he needs is verbal queues of "Knees out!"

If this is a flexibility problem then the lifter should squat on a higher box at the point where he can keep the knees out. Over time the box height will come down as he gets more flexible. If this is a strength problem with the hips, then the same solutions as "getting smashed at the bottom" should be followed.


## Bench Weak Points

Missing at the top: If you miss at the top of the bench press it can be because of a missed groove or weak triceps. There are many ways to bring up your triceps listed earlier in this series.

Missing on the chest: This can also be caused by many problems. First, lack of reversal strength and speed. This is where the speed training comes in. If you have any type of explosive strength then you should never miss off your chest unless the weight is too heavy in the first place.

The second reason for missing off the chest can be a factor of weak starting strength after the press command. The bench shirt may also affect this as the tighter the shirt, the harder it is to get down, thus the harder it is to use reversal strength because the bar won't be able to come down as fast as without using a shirt. This means the lifter will pretty much be pressing from a dead stop. One of the best things for this is low pin presses with the bar just off the chest for max effort work or as a second movement for max sets of 3 or 5 reps. Make sure to pause on the pins for a second or two.

Missing off your chest can also be caused by weak lats, upper back, and rotator muscles: Think of these muscles as your launch pad. If you don't have a solid base to press off, you're firing from a weak foundation. A few other things to help strengthen the bottom of the bench are close grip inclines, dumbbell work, and pushups.

Missing halfway up: This sticking point means the lifter is blasting the weight off the bottom very well and then dies a few inches off the chest. This can also be fixed with more bar speed as this will allow the lifter to bust through this sticking point.

This can also be caused by weak triceps. The best max effort exercises for this problem are mid-position pin presses, two board presses, and floor presses.

Bar flying off your chest and straight back into the rack: This is mostly a bench shirt issue. You either don't know how to use the shirt or you have a bad shirt. With a shirt you have to bring the bar low and not heave it off your chest. If you heave, the bar will fly back. You have to press the bar up off the chest and build speed as the bar leaves the chest. If your shirt is bad it'll also cause the bar to fly back.

This problem can also occur because your shoulders are stronger than the triceps. You're trying to get the load off the triceps and onto where you're the strongest and that's causing the problem. On the flip side, it can also be because your shoulders aren't strong enough to keep the bar in the right path.

Another technical reason this may happen: you aren't keeping your arms under the bar. This can happen if your wrists get folded back and the bar ends up being behind the forearm. If this happens, then the force isn't under the bar. These problems can all be fixed with proper coaching and training. Make sure your form is on and bring up the lockout power with specific triceps work and high board and high pin presses for max effort work.

## Deadlift Weak Points

Most all deadlift weak points will mimic the same muscle groups and patterns that are weak with the squat. So outside of technical issues, the squat will take care of the deadlift. The max effort deadlift training and speed deadlifts are intended to train the form of the deadlift, so double check your form and make sure you're keeping your shoulders behind the bar and keeping your body falling backward.

As you can see, most of the solutions to these problems are already being taken care of with the general guidelines presented earlier. The general template is intended to bring up the most general weaknesses with the hamstrings, lower back, hips, abs, and triceps. Just follow the basic guidelines, pay attention to what you're doing, and don't skip the key things you need to do.

## Closing

Whew! That wraps up the speed portion of the eight keys. Next week in the fourth and final installment, l'll explore the last three components of the system: recovery, nutrition, and attitude. I'll also layout a complete nine week training program. Stay tuned!


## The Eight Keys, Part IV

## Recovery

As l've mentioned in this series already, GPP or General Physical Preparation is very important, especially for recovery. According to Yuri Verkhoshansky in The Fundamentals of Special Strength Training in Sport and as outlined in Supertraining by the late Mel Siff, there are several functions of GPP:

- To form, strengthen or restore motor skills, which play an auxiliary, facilatory role in perfecting sports ability.
- To teach abilities developed insufficiently by the given sport and to increase the general work capacity or preserve it.
- To provide active rest, promote restoration after strenuous loading, and counteract the monotony of training. One solution to GPP is sled dragging. The use of a sled has many benefits:
- The sled is easy to use and doesn't require a special trip to the gym.
- The sled is specific to the development of the special skills necessary for maximal strength. (And by the way, we never run with the sled.)
- Virtually every muscle can be trained with a sled. There are movements for the abdominals, shoulders, hamstrings, etc.
- The sled is a great way to induce active restoration. In many of the upper body dragging movements, the eccentric (negative) is eliminated because of the nature of the sled. This is great for recovery because the tearing down of the muscle is much less in concentric-only movements.

Instead of making this article even longer than it already is, l'll just direct you to my Drag Your Butt Into Shape article here at T-mag, which will give you all the info you need. For a good sled, visit www.elitefts.com.

## Nutrition

I'll keep this very short and simple. Yes, nutrition is important and you shouldn't live on junk food. I had to learn this the hard way and feel many of my past injuries are due in some part to poor nutritional habits.

I'm by no means an expert on this and don't feel I'm any type of authority on telling you what to do or what not to do.

There are many sources for this information, most of them right here in T-mag. You should read as much as you can and come up with what you feel is the best system for you. I'm still learning about good nutrition myself, and T-mag is working with me on correcting some bad habits, most notably on increasing meal frequency, upping protein intake, and the use of supplements in general. I do use protein and Tribex from time to time, but I've got a long way to go.

## Attitude

"Everything can be taken away from man but one thing, the last of the human freedoms to choose one's attitude in any given set of circumstances, to choose one's own way."
—Victor E Frankl
We all have those times in life I like to call "defining moments." These moments in time can be glorious or disastrous, but always shape the direction and path of who we become. From these moments we grow and become better or worse for it. The difference between better or worse is how the situation is perceived. If something bad happens to you, do you view it as a learning experience and move on, or do you let it tear you up? If something good happens, do you look back to ask why or write it off as luck?

What does all this have to do with strength training? It has everything to do with strength training, powerlifting, sports, and life! There are many qualities needed to succeed in the strength training game. I like to sum them all up with three very simple words: Live, Learn, and Pass On.

Live - The most important quality is to live the life you want to have, not the life you have. In other words, if you're a bottom 100 powerlifter but want to be a top ten lifter, do you live the life of a top ten lifter or a bottom 100 lifter? Do you do the same things the top ten lifter does? Do you think the same way he does? Do you skip sessions? Are you as serious as he is? If not, then how are you ever going to get where he is?

You only go around once so you may as well make the best of your time here by living the life you really want to live! "Well, Dave, I'd like to but..." But what? Do what you gotta do! There are many people out there who live "but lives," "I shoulda lives," "I coulda lives," or "if only lives."

These people are very easy to find. They're the ones we call critics; those who've become masters of the "have not" and love to spend their time telling us what we can and can't do. They make up $90 \%$ of the people l've met. Avoid them! They love to pull you down. If you happen to be one, then fix it fast because it'll affect your training and your life.

Learn - The most successful people spend their time learning from their mistakes and other people. If strength is your game then read about it, talk about it, and do everything you can to make yourself better. Talk to anyone you feel can help you. Steal from the strong and use it in your training. You can never learn too much. Your success may depend on one very small thing you could never have figured out yourself.

Pass On - Many years ago, in a dark stairway in the back of a junior high gym that smelled like sweat stained wrestling mats, was a ninth grade wrestler who'd only won one match in the last two years. This same kid wasn't a very good athlete up to this point. He played many sports and always did okay but was never good enough to start or be a standout.

As he waited for his mother to pick him up he decided to run the stairs instead of just sitting as he'd usually do. After about five minutes he was thinking he'd had enough and would call it a day and sit down to wait for his ride. About this time, the head wrestling coach walked by and asked him what he was doing. The kid replied that he was running the stairs because he was sick of getting beat all the time. The coach then spoke one sentence that stuck in the kid's mind for the rest of his life: "If you work hard enough you can do whatever you want to do."

I ran the stairs for the next forty-five minutes and didn't lose a match during the entire season. I went on to have a very successful career in sports. That one sentence taught me how to run for what I wanted and l've been running ever since. One kid, one sentence and a totally changed life.

Why do I do this? Why do I write these articles? Why do I spend so much time helping people for free? Why do I care so much when I know most lifters and coaches will never listen? The answer is simple. Why did my coach care so much when he knew most of his athletes would never listen? Because I listened. What would I be today if he didn't care? I owe it to him to pass on the great gift he gave me. This is why I try so hard.

I'm sure you have the same type of story. Somewhere, some time, someone took the time to help shape your way. You owe it to them to pass on what you know. When we leave this earth, it's not what we take with us that maters, it's what we leave behind. There have been many people along my path and I can tell you today I'll never forget who they were and what they did. This is the greatest success in life one can have.

Vince Lombardi once said, "I firmly believe that any man's finest hour - his greatest fulfillment to all he holds dear - is that moment when he has worked his heart out in a good cause and lies exhausted on the field of battle, victorious." Do you want to lie on the ground victorious or with your face in the dirt?


## Summary

I went back and reread the first paragraph of the first article in this series. I realized that I'm no better than the guy who wrote the huge instructional guide for the baby crib. To tell you the truth, I just tossed the instructions, looked at the picture on the box and did it the easy way. To stay with the same concept, here's the "picture on the box" for this series:

- One day per week, train the squat with different three-week cycles for 8 sets of 2 reps and maximal speed.
- One day per week, train the bench press with a prescribed percentage for 8 sets of 3 reps.
- One day per week, train using a special max effort movement for the squat or deadlift.
- One day per week, train using a special max effort movement for the bench press.
- Train the hamstrings hard.
- Train the abs hard.
- Train the triceps hard.
- Bring up your GPP.
- Get some good training partners.
- Find a good coach.
- Take an attitude check.
- Don't eat crap 100\% of the time.


## General Program Questions

Let me guess, you've got a bunch of questions anyway, right? That's okay, we've answered thousands dealing with this type of training. Some of the same questions keep coming up over and over so l'll address them here.

## How long should each training session last?

This really depends on how many people you train with and if you use warm-ups or not. A good general recommendation would be to try and keep the main session under 45 minutes. This doesn't include the warm-up time. Don't use this as a golden rule, though. Get done what you have to get done and then get out of the gym. If it takes you 60 minutes, then so be it.

## What if I don't have a reverse hyper, glute ham raise, chains or bands?

If you don't have chains or bands then use the barbell without chains and bands! Keep in mind the lifters at Westside went without chains and bands for twenty years and still made gains! Then the chains were brought in and they got stronger. Chains were used for two years before the bands were brought it. The better question to ask would be, do you need chains and bands at this time?

If you don't have a GHR or reverse hyper then stick with what you can do (pull-throughs, stiff leg deadlifts, Dimel deadlifts, and other lower back and hamstring work). I do feel the GHR and reverse hyper are better. The lifters at Westside live and die by these two movements and use them both at least twice a week, but this program can be followed without them.

## What day should I do each session?

Most lifters will follow this basic template:
Monday — Max Effort Squat/Deadlift Day
Wednesday — Max Effort Bench Day
Friday — Dynamic Effort Squat Day
Sunday - Dynamic Effort Bench Day

## What do I do if I can only get in the gym three times per week?

Then use an eight day rotation, then a seven. Here's an example:

Monday — Max Effort Squat/Deadlift Day
Wednesday - Max Effort Bench Day
Friday — Dynamic Effort Squat Day
Monday — Dynamic Effort Bench Day
Wednesday - Repeat cycle


## Sample Program

As promised, here's a sample training program for intermediate lifters.

## Week 1

## Day 1 (max effort squat day)

Good Mornings: Warm up doing sets of three reps until you feel you can no longer perform three reps. At this point drop the reps to one and continue working up to a one rep max.

Glute Ham Raises: 3 sets of 10 reps. Stress the eccentric, try to get a four count on the way down.

Reverse Hypers: 3 sets of 8 reps using the small strap

Pulldown Abs: 5 sets of 10 to 15 reps
Straight Leg Raises: 5 sets of 15 reps

## Day 2 (max effort bench day)

Board Press: Warm up doing sets of three reps until you feel you can no longer perform three reps. At this point drop the reps to one and continue working up to a one-rep max.

Lying Barbell Triceps Extensions: 6 sets of 10
reps
Pushdowns: 3 sets of 10 reps
One Arm Press: 3 sets of 15 reps

## Day 3 (dynamic effort squat day)

Box Squats: 10 sets of 2 reps with $50 \%$ of 1RM, 45 to 60 seconds rest between sets

Reverse Hypers: 3 sets of 8 reps using the small strap

One Leg Squats: 4 sets of 10 with each leg
Dumbbell Rows: 4 sets of 6 reps
Barbell Shrugs: 3 sets of 15 reps

## Day 4 (dynamic effort bench day)

Bench Press: 10 sets of 3 reps with 60\% of 1RM. Use three different grips, 45 to 60 seconds rest between sets

Lying Dumbbell Triceps Extensions: 4 sets of 8 reps

Dumbbell Side Raises: 3 sets of 10 reps
Bent Over Dumbbell Side Raises: 3 sets of 10 reps

## Week 2

## Day 1 (max effort squat day)

Good Mornings: Warm up doing sets of three reps until you feel you can no longer perform three reps. At this point drop the reps to one and continue working up to a one-rep max.

Glute Ham Raises: 3 sets of 8 reps. Stress the eccentric, try to get a four count on the way down.

Reverse Hypers: 3 sets of 8 reps using the small strap

Pulldown Abs: 5 sets of 10 to 15 reps
Straight Leg Raises: 3 sets of 20 reps

## Day 2 (max effort bench day)

Board Press: Warm up doing sets of three reps until you feel you can no longer perform three reps. At this point drop the reps to one and continue working up to a one-rep max.

Lying Barbell Triceps Extensions: 6 sets of 10 reps

Pushdowns: 3 sets of 10 reps
One Arm Press: 3 sets of 15 reps

## Day 3 (dynamic effort squat day)

Box Squats: 10 sets of 2 reps with $54 \%$ of 1RM, 45 to 60 seconds rest between sets

Reverse Hypers: 3 sets of 8 reps using the small strap

One Leg Squats: 4 sets of 10 with each leg
Dumbbell Rows: 4 sets of 6 reps
Barbell Shrugs: 3 sets of 15 reps

## Day 4 (dynamic effort bench day)

Bench Press: 10 sets of 3 reps with 60\% of 1 RM, use three different grips, 45 to 60 seconds rest between sets

Lying Dumbbell Triceps Extensions: 4 sets of 8 reps

Dumbbell Side Raises: 3 sets of 10 reps
Bent Over Dumbbell Side Raises: 3 sets of 10 reps

## Week 3

## Day 1 (max effort squat day)

Good Mornings: Warm up doing sets of three reps until you feel you can no longer perform three reps. At this point drop the reps to one and continue working up to a one-rep max.

Glute Ham Raises: 3 sets of 8 reps using the small strap

Reverse Hypers: 3 sets of 8 reps using the small strap

Pulldown Abs: 5 sets of 10 to 15 reps
Straight Leg Raises: 3 sets of 20 reps

## Day 2 (max effort bench day)

Board Press: Warm up doing sets of three reps until you feel you can no longer perform three reps. At this point drop the reps to one and continue working up to a one-rep max.

Lying Barbell Triceps Extensions: 6 sets of 10 reps

Pushdowns: 3 sets of 10 reps
One Arm Press: 3 sets of 15 reps

## Day 3 (dynamic effort squat day)

Box Squats: 10 sets of 2 reps with $56 \%$ of 1RM, 45 to 60 seconds rest between sets

Reverse Hypers: 3 sets of 8 reps using the small strap

One Leg Squats: 4 sets of 10 with each leg
Dumbbell Rows: 4 sets of 6 reps
Barbell Shrugs: 3 sets of 15 reps

## Day 4 (dynamic effort bench day)

Bench Press: 10 sets of 3 reps with 60\% of 1 RM, use three different grips, 45 to 60 seconds rest between sets

Lying Dumbbell Triceps Extensions: 4 sets of 8 reps

Dumbbell Side Raises: 3 sets of 10 reps
Bent Over Dumbbell Side Raises: 3 sets of 10 reps

## Week 4

## Day 1 (max effort squat day)

Low Box Squat: Warm up doing sets of three reps until you feel you can no longer perform three reps. At this point drop the reps to one and continue working up to a one-rep max.

Glute Ham Raise: 5 sets of 5 reps
Partial Deadlifts: 3 sets of 20 reps
Reverse Hypers: 3 sets of 8 reps using the small strap

Pulldown Abs: 5 sets of 10 to 15 reps

## Day 2 (max effort bench day)

Floor Press: Warm up doing sets of three reps until you feel you can no longer perform three reps. At this point drop the reps to one and continue working up to a one-rep max.

JM Press: work up to 2 sets of 3 reps
Incline Dumbbell Press: 2 sets of 10 reps
Seated Dumbbell Cleans: 4 sets of 8 reps
Straight Leg Raises: 5 sets of 15 reps

## Day 3 (dynamic effort squat day)

Box Squats: 10 sets of 2 reps with $60 \%$ of 1RM, 45 to 60 secondsw rest between sets.

Note: After your sets of box squats, work up to a heavy double. This isn't a maximum attempt so don't miss the lifts.

Reverse Hypers: 5 sets of 8 reps
Chest Supported Rows: 4 sets of 8 reps
Glute Ham Raises: 3 sets of 6 reps
Pulldown Abs: 5 sets of 10 reps

## Day 4 (dynamic effort bench day)

Bench Press: 10 sets of 3 reps with $60 \%$ of 1RM, use three different grips, 45 to 60 sec rest between sets

Close Grip Bench Press: work up to 2 sets of 3 reps

One Arm Dumbbell Extensions: 3 sets of 10 reps

Front Plate Raises: 3 sets of 10 reps

## Week 5

## Day 1 (max effort squat day)

Low Box Squat: Warm up doing sets of three reps until you feel you can no longer perform three reps. At this point drop the reps to one and continue working up to a one-rep max.

Glute Ham Raises: 5 sets of 5 reps
Partial Deadlifts: 3 sets of 20 reps
Reverse Hypers: 3 sets of 8 reps using the small strap

Pulldown Abs: 5 sets of 10 to 15 reps

## Day 2 (max effort bench day)

Floor Press: Warm up doing sets of three reps until you feel you can no longer perform three reps. At this point drop the reps to one and continue working up to a one-rep max.

JM Press: work up to 2 sets of 3 reps
Incline Dumbbell Press: 2 sets of 10 reps
Seated Dumbbell Cleans: 4 sets of 8 reps
Straight Leg Raises: 5 sets of 15 reps

## Day 3 (dynamic effort squat day)

Box Squats: 10 sets of 2 reps with $50 \%$ of 1RM, 45 to 60 seconds rest between sets

Speed Deadlifts: 8 sets of 2 reps with $50 \%$
Reverse Hypers: 5 sets of 8 reps
Chest Supported Rows: 4 sets of 8 reps
Glute Ham Raises: 3 sets of 6 reps
Pulldown Abs: 5 sets of 10 reps

## Day 4 (dynamic effort bench day)

Bench Press: 10 sets of 3 reps with 60\% of 1 RM, use three different grips, 45 to 60 seconds rest between sets. Note: After your sets, work up to a heavy single. This isn't a maximum attempt so don't miss the lift.

Close Grip Bench Press: work up to 2 sets of 3 reps

One Arm Dumbbell Extensions: 3 sets of 10 reps

Front Plate Raises: 3 sets of 10 reps

## Week 6

## Day 1 (max effort squat day)

Low Box Squat: Warm up doing sets of three reps until you feel you can no longer perform three reps. At this point drop the reps to one and continue working up to a one-rep max.

Glute Ham Raises: 5 sets of 5 reps
Partial Deadlifts: 3 sets of 20 reps
Reverse Hypers: 3 sets of 8 reps using the small strap

Pulldown Abs: 5 sets of 10 to 15 reps

## Day 2 (max effort bench day)

Floor Press: Warm up doing sets of three reps until you feel you can no longer perform three reps. At this point drop the reps to one and continue working up to a one-rep max.

JM Press: work up to 2 sets of 3 reps
Incline Dumbbell Press: 2 sets of 10 reps
Seated Dumbbell Cleans: 4 sets of 8 reps
Straight Leg Raises: 5 sets of 15 reps

## Day 3 (dynamic effort squat day)

Box Squats: 10 sets of 2 reps with $52 \%$ of 1RM, 45 to 60 seconds rest between sets

Speed Deadlifts: 8 sets of 2 reps with 55\%
Reverse Hypers: 5 sets of 8 reps
Chest Supported Rows: 4 sets of 8 reps
Glute Ham Raises: 3 sets of 6 reps
Pulldown Abs: 5 sets of 10 reps

## Day 4 (dynamic effort bench day)

Bench Press: 10 sets of 3 reps with 60\% of 1 RM, use three different grips, 45 to 60 seconds rest between sets

Close Grip Bench Press: work up to 2 sets of 3 reps

One Arm Dumbbell Extensions: 3 sets of 10 reps

Front Plate Raises: 3 sets of 10 reps

## Week 7

## Day 1 (max effort squat day)

Good Morning Squats: Warm up doing sets of three reps until you feel you can no longer perform three reps. At this point drop the reps to one and continue working up to a one-rep max.

Glute Ham Raises: 5 sets of 5 reps
Lunges: 4 sets of 10 reps (each leg)
Reverse Hypers: 3 sets of 8 reps using the small strap

Pulldown Abs: 5 sets of 10 to 15 reps

## Day 2 (max effort bench day)

Ball Press: 3 sets of 20 reps (average rest period $=5$ minutes)

Seated Dumbbell Shoulder Press: 5 sets of 10 reps

Incline Barbell Triceps Extensions: 5 sets of 6 reps

Face Pulls: 5 sets of 15 reps

## Day 3 (dynamic effort squat day)

Box Squats: 10 sets of 2 reps with $54 \%$ of 1RM, 45 to 60 seconds rest between sets.

Note: After your sets, work up to a heavy double. Again, this isn't a maximum lift so don't miss the attempts.

Reverse Hypers: 4 sets of 8 reps
Pulldowns: 3 sets of 8 reps
Glute Ham Raises: 4 sets of 15 reps

## Day 4 (dynamic effort bench day)

Bench Press: 10 sets of 3 reps with 60\% of 1 RM, use three different grips, 45 to 60 seconds rest between sets. Note: After your sets, work up to a heavy double. Again, this isn't a maximum lift so don't miss the attempts.

Dumbbell Triceps Extensions: 4 sets of 6 reps
Reverse Grip Pushdowns: 3 sets of 15 reps
Front/Side/Rear Delt Combo Raise: 2 sets of 60 reps (20 each raise)

Pulldown Abs: 5 sets of 10 reps

## Week 8

## Day 1 (max effort squat day)

Good Morning Squats: Warm up doing sets of three reps until you feel you can no longer perform three reps. At this point drop the reps to one and continue working up to a one-rep max.

Glute Ham Raises: 5 sets of 5 reps
Lunges: 4 sets of 10 reps (each leg)
Reverse Hypers: 3 sets of 8 reps using the small strap

Pulldown Abs: 5 sets of 10 to 15 reps

## Day 2 (max effort bench day)

Ball Press: 3 sets of 20 reps (avg. rest period $=$ 5 min )

Seated Dumbbell Shoulder Press: 5 sets of 10 reps

Incline Barbell Triceps Extensions: 5 sets of 6 reps

Face Pulls: 5 sets of 15 reps

## Day 3 (dynamic effort squat day)

Box Squats: 10 sets of 2 reps with $62 \%$ of 1RM, 45 to 60 seconds rest between sets Speed Pulls: 8 sets of 1 rep with 60\%

Reverse Hypers: 4 sets of 8 reps
Pulldowns: 3 sets of 8 reps
Glute Ham Raises: 4 sets of 15 reps

## Day 4 (dynamic effort bench day)

Bench Press: 10 sets of 3 reps with 60\% of 1 RM, use three different grips, 45 to 60 seconds rest between sets

Dumbbell Triceps Extensions: 4 sets of 6 reps Reverse Grip Pushdowns: 3 sets of 15 reps

Front/Side/Rear Delt Combo Raise: 2 sets of 60 reps (20 each raise)

Pulldown Abs: 5 sets of 10 reps

## Week 9

## Max day near end of week

Box Squat: work up to a 1 rep max
Bench Press: work up to a 1 rep max
Deadlift: work up to a 1 rep max
Note: These maxes will be used as the 1RM for the next eight-week cycle.

## Closing

Wow! I can't believe this is finally finished! I tried to cover all the information and questions we've been asked on the internet and in seminars over the past three years. I'm sure I've left many things out but feel over 90\% of what you need is here.

## SHOP VICTORY APPAREL $\rightarrow$



## DAVE TATE

Dave Tate 'Under The Bar' is the founder and CEO of elitefts. com Inc.. Dave has been involved with powerlifting for over three decades, coach, consultant and business owner. He has logged more than 20,000 hours of strength consulting with professional, elite and novice athletes, as well as with professional strength coaches, authored 20 books and written more than 500 articles for magazines and prominent websites. Dave works as a business adviser, speaker, coach, and author, he shows how athletic disciplines teach valuable lessons for overall achievement. He lives with his family in London, Ohio.

www.elitefts.com

