

A shirtless, muscular man with a beard is performing a deadlift in a gym. He is wearing dark shorts and a brown leather belt. The background shows gym equipment like a squat rack and a bench. The lighting is dramatic, highlighting his physique.

4X/WEEK

POWERBUILDING PHASE 2.0

JEFF NIPPARD



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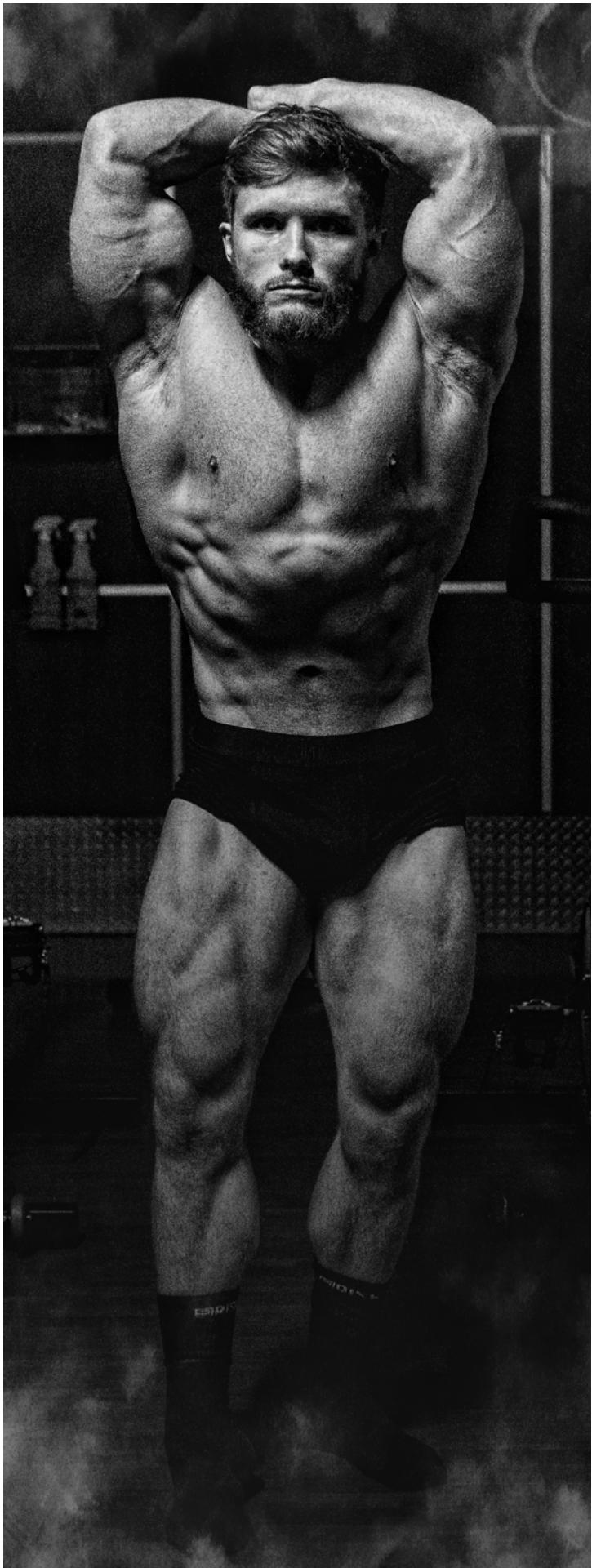
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ABOUT ME

Jeff is a professional natural bodybuilder and powerlifter. Through his science-based [Youtube channel](#) which has gathered a fan-base of over 2 million subscribers, Jeff shares the knowledge he has gathered through university education and field experience with others who are passionate about the science behind building muscle, losing fat and gaining strength.

He earned the title of Mr. Junior Canada for natural bodybuilding in 2012 and as a powerlifter, Jeff held the Canadian national record for the bench press in 2014. As a powerlifter, Jeff has claimed a 502 lb squat, 336 lb bench press and a 518 lb deadlift with an all time best Wilks score of 446.



With a Bachelor of Science degree in biochemistry, Jeff has gathered the requisite scientific knowledge to complement his practical experience acquired through training and coaching. Jeff has coached women's bikini and men's bodybuilding national and provincial champions, professional natural bodybuilders and nationally and IPF Worlds qualified raw powerlifters. He has presented seminars on Block Periodization, concurrent training and nutrition and training for natural bodybuilding in academic settings including the 2019 Ultimate Evidence Based Conference (UEBC), Lehman College and the University of Iowa. He has aspirations of completing a PhD in exercise science or a related field.

Jeff currently lives in Ontario, Canada, where he is producing YouTube videos and programs for people around the world.



KEY TERMS

Note: Terms are listed in alphabetical order

1RM: 1 rep max

ACCUMULATION: In block periodization theory, an accumulation training phase (block) is when volume is progressively increased to develop muscular size and work capacity.

AMRAP: As many reps as possible (with good form). Often performed as a test to determine max strength.

BACK OFF SET: A lighter set performed after a top set to help accumulate volume and/or technique practice on a lift.

CONCENTRIC: The contracting ("positive") aspect of the lift.

DOUBLE: A two rep set.

ECCENTRIC: The lowering ("negative") aspect of the lift.

EFFORT: How hard you are pushing the set relative to failure. Measured with RPE and/or %1RM.

FREQUENCY: How often you directly train a given muscle or lift every seven days.

HYPERTROPHY: The growth of (muscle) tissue.

INTENSITY: Effort and load.

INTENSITY BRACKETS: When using %1RM to determine load, intensity brackets give the trainee a range of weights to use. For example, 80-85% would be an intensity bracket indicating that you will pick a weight between 80% and 85% of your 1RM, depending on how strong you feel that day.

LOAD: The weight of the external resistance.

PERIODIZATION: The organization of training over time.

POWERBUILDING: The combination of bodybuilding and powerlifting training styles; simultaneously training for size and strength.

POWERLIFTS: Squat, bench press and deadlift.

PR: Personal record. Hitting either an amount of weight you've never hit before or a number of reps you've never hit before with good form.

PRIMARY EXERCISE: Main heavy compound movements that involve a large muscle mass (for example: squats, bench presses, deadlifts and overhead

presses).

PROGRESSIVE OVERLOAD: The gradual increase of stress placed upon the body during exercise training. In training contexts, this generally involves progressively increasing some lifting parameter over time (usually increasing weight/reps or improving technique/mind-muscle connection).

ROM: Range of motion.

RPE: Rate of perceived exertion. A measure of how difficult a set was on a 1-10 scale, with 10 meaning muscular failure was achieved. An RPE of 9 means you could have gotten one more rep, an RPE of 8 means you could have gotten two more reps, etc.

SECONDARY EXERCISE: Compound exercises which involve less muscle mass (for example: cable rows, lunges, hip thrusts, pull-ups).

SINGLE: A one rep set.

TEMPO: The speed at which the lift occurs.

TERTIARY EXERCISE: Isolation movements involving only one joint and primarily targeting a single muscle – these are usually used to isolate a specific, smaller muscle or to generate metabolic stress (for example: hammer curls, tricep pressdowns, calf raises).

THE BIG 3: The powerlifts: squat, bench press and deadlift.

TOP SET: A single heavy and/or high-effort set performed before back off sets (always performed after a progressive warm-up).

TRANSMUTATION: In block periodization theory, a transmutation training phase (block) is when progressively heavier loads are used to "transmute" hypertrophic and work capacity adaptations into maximum strength

development.

TRIPLE: A three rep set.

VOLUME: Total amount of work performed. Usually approximated as tough working sets.

WORK CAPACITY: The ability to do higher volumes (more work)



ABOUT THIS PROGRAM

WHO IS POWERBUILDING PHASE 2.0 FOR?

This program is Phase 2 of the Powerbuilding System. It is designed to expand and improve on the adaptations built in Powerbuilding Phase 1. If you haven't completed Phase 1 yet, I would recommend [running that program first](#), then starting this one after.

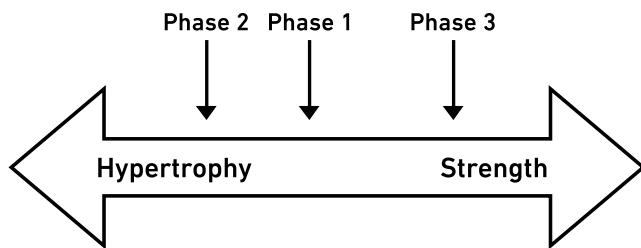
Phase 1 was designed with a roughly equal focus on developing strength

and muscle growth. It could be considered a pure "50:50" powerbuilding plan. Phase 2 will focus more on the muscle building aspect of powerbuilding through the use of slightly higher volumes, more exercise variation and advanced hypertrophy techniques. This phase will set us up to have an enormous work capacity and increased muscle mass leading into Phase 3, which will focus more on developing raw strength. The goal of Phase 3 will be to transmute that ability to tolerate high volumes into maximum strength. The primary goals of each phase are outlined below.

PHASE 1: Building the base (equal focus on strength and size)

PHASE 2: Building volume tolerance (more focus on hypertrophy)

PHASE 3: Peaking for strength (more focus on maximum strength)



WHO IS THE POWERBUILDING APPROACH FOR? (A REVIEW FROM PHASE 1)

Powerbuilding is a training style that combines elements of bodybuilding and powerlifting. It involves training for maximum strength on the "Big 3" lifts (squat, bench press and deadlift), while simultaneously building muscle mass proportionally and symmetrically. Rather than trying to mostly gain size or

mostly gain strength, a pure powerbuilding approach puts both of these goals on equal footing.

Getting bigger and stronger at the same time is a very admirable goal as, in my experience, most people don't want to just be muscular-looking – they want to actually be able to put that muscle to use. There is something much more impressive about a human who doesn't just look like they can lift heavy stuff, they actually can lift heavy stuff! More than that, there are several unique advantages of employing a hybrid size-and-strength approach that we will cover later in this manual.

Trainees looking to push deeper into the intermediate-advanced level of physique and strength development will benefit from this program the most. The detailed focus on maximum strength development will have long-term benefits for the bodybuilder since increasing strength on the Big 3 will increase your strength potential on many other movements, increasing the potential to overload and break through hypertrophic plateaus. Similarly, the additional focus on exercise variation and the inclusion of higher rep ranges than what you'd see in a typical powerlifting program will have long-term benefits for the powerlifter since the resulting increase in muscular size will help you break through plateaus in strength. In other words, whether you see yourself as a bodybuilder first, a powerlifter first or some combination of the two, this program will be of benefit to you.

WHAT THIS PROGRAM IS:

As stated, this program is the second of a three-part Powerbuilding system and runs for 12 weeks. The main goals of this program are to develop a large work capacity on the Big 3 lifts and their accessories while promoting total body hypertrophy which can be transmuted into maximum strength in the upcoming Phase 3.

Like Phase 1, this program uses a number of advanced periodization and progression schemes, and as such is much more appropriate for those in the intermediate-advanced stage of training advancement. It also uses a number of new exercises and progression methods from Phase 1 that will be helpful in progressing through plateaus in both size and strength.

Of course, it's difficult to pin down exactly what "intermediate-advanced" means in terms of a specific training age due to the fact that training years in the gym are not equal across individuals. For example, some folks may have spent 10 years training in the gym, but that time may only actually be "worth" 1 or 2 years if they've spent the majority of their time simply going through the motions without focus or direction. But as a general guide, if you've been training for roughly 2-5 years, with a generally serious approach toward your training sessions, you will benefit from this program. If you've been training without adequate structure for even a few months, it doesn't matter if you've been in the gym for most of your life, this program will get you back on the right

track.

Because this is a hybrid program, meaning we are balancing multiple goals simultaneously, recovery management is a top priority. Before I move any further with explanations about the programming, it is imperative that I emphasize the importance of always using proper technique and "listening to your body" throughout this program. I would also like for you to feel comfortable adjusting some aspects of the program to fit your individual needs and weak points. I have provided volume analytics for each bodypart, so you have a starting point from which you can adjust up or down based on your specific training history and goals. If you find that you are not recovering well in a specific bodypart or during a certain week of the program, you should absolutely feel free to adjust the volume down to fit your circumstance. You can also [**contact my highly knowledgeable coaching team**](#) for advice on any specific questions you may have as you run the program.

WHAT THIS PROGRAM ISN'T

If you've been in the gym for less than 2 years, I'd recommend running through my [**Fundamentals Program**](#) at least once, then running at least one of the [**Upper Lower Program**](#) and/or [**High Frequency Full Body**](#) programs, then [**Phase 1 of my Powerbuilding System**](#) before advancing to this routine. This is encouraged to ensure that you have already established an adequate

strength and technique base before running this more complex program.

This program is not intended to be an all-inclusive resource for all things training related. For more background and information on my general training philosophy, I encourage you to watch my [**Fundamentals Series on YouTube**](#) and my [**Powerbuilding Science Explained**](#) video.

With that said, there is still plenty of information within these pages, including a FAQ section, a detailed description of the program's progression methods, the programming principles at play (volume, intensity, etc.), video links for technique demonstration for each exercise, a list of exercise substitutions and 29 unique scientific references.

There are also other resources included alongside this program: an excel spreadsheet for tracking your lifts, a Technique Handbook for helping you break through weak points and a Get Ready Manual to make sure you have everything in place before starting the program.



FAQS

1. HOW IS POWERBUILDING PHASE 2.0 DIFFERENT FROM THE FIRST POWERBUILDING PROGRAM?

They are completely different programs, however, Phase 2 is intended to build on Phase 1.

- Phase 2 alternates between push/pull/legs weeks (more hypertrophy focused) and full body weeks (more strength focused) while Phase 1 alternated between upper/lower weeks and full body weeks

- Phase 2 is higher volume overall
- Phase 2 uses slightly more exercise variation
- Phase 2 uses more advanced hypertrophy techniques (myo-reps, dropsets and tempo techniques)
- Phase 2 is two weeks longer than Phase 1

In the Block Periodization framework, Phase 1 can be thought of as a "base" phase, Phase 2 as an "accumulation phase" and Phase 3 as a "transmutation and peaking phase". Phase 1 builds a base of strength, size and technique. Phase 2 accumulates volumes, develops hypertrophy and builds work capacity. Phase 3 will transmute (convert) the adaptations developed in Phase 2 into maximum strength.

2. ISN'T THIS OVERTRAINING? HOW DO I KNOW IF I AM RECOVERING ENOUGH?

Overtraining occurs when your training demands consistently exceed your body's ability to recover over time.

First of all, true overtraining is pretty rare. When it does occur, it doesn't just "happen" all of a sudden. There are all sorts of warning signs that can hint toward overtraining territory including: a clear and continued loss of progress in strength/size, disturbed sleep, persistently achy joints and muscles and an extreme lack of motivation to train. Regardless of what training program you

are running, it is important to pay attention to your own body's feedback to determine if you are recovering properly and then to adjust accordingly.

Secondly, overtraining typically results from either too much volume and/or too much intensity. Generally speaking, most truly intermediate-advanced trainees will not experience overtraining using the weekly set volumes in this routine (generally 10-20 sets per week per body part) unless intensity is also very high. To be sure, this program emphasizes strict adherence to RPE's, where typically 1-2 reps are being "left in the tank" per set to avoid this concern.

Additionally, on Weeks 1, 3, 5, 7, 9 and 11 (the "Odd Weeks"), you will be hitting full body workouts. This means you will hit some of the same muscles on consecutive training days. Some may think that this presents an overtraining concern, but for intermediate-advanced trainees, hitting the same muscle within 24 hours is perfectly viable, especially when volumes and intensities are moderated.

With all of that said, I do think there is slightly more of a concern for fatigue accumulation when combining strength and size goals in a hybrid routine, even if weekly volumes are distributed appropriately and intensity is well controlled. This is especially true if this is a new way of training for you. For this reason, in this program we will be using auto-regulation to determine how hard you should push each set each day. I also must emphasize the importance of doing a general warm up and a complete pyramid warm up before primary exercises

and prioritizing technique over weight lifted. How you lift is usually more important than how much you lift.

3. "I CAN'T SQUAT" AND/OR "I CAN'T BENCH PRESS" AND/OR "I CAN'T DEADLIFT": WHAT SHOULD I DO?

Because one of the main objectives of this program is to increase strength on those Big 3 lifts, if you're unable to perform any of them for whatever reason, this may not be the best program for you at this time. I suggest you should consider running one of [**my other programs**](#) instead.

On the other hand, if you're able to do two of the three lifts, it may still be possible for you to tweak the program to fit your needs. For example, if you can squat and deadlift, but can't bench press, you could replace the bench work in this program with dips, dumbbell press, smith-machine press or machine chest press and run the rest of the program as is. If you can squat and bench press but can't deadlift, you could replace the deadlift work with hip thrusts and/or lower back extensions. If you can bench press and deadlift but can't squat, you could replace the squat work with front squats, hack squats or leg press. Granted, this program was written with the Big 3 lifts in mind, so you may need to adjust some of the reps and loads on some weeks if you decide to make either of those substitutions. Feel free to [**contact my coaching team**](#) if you'd like some guidance on how to proceed.

Additionally, if there are any other exercises in the program that you can't

perform, please see the [**Substitutions List**](#) for suggestions.

4. I DON'T KNOW MY 1 REP MAX ON THE SQUAT, BENCH PRESS AND DEADLIFT. SHOULD I TEST IT BEFORE RUNNING THE PROGRAM?

Because loads are prescribed for these lifts based on a percentage of your 1 rep max (%1RM), it is important that you at least have an estimate of your 1 rep maxes for all three lifts before running this program. There are two ways you can estimate your 1RM:

Plug the results of a recent AMRAP test or recent tough set in the three-five rep range into a 1RM calculator; or do a true one rep max test.

See page [**84**](#) for a detailed explanation of which method is likely better for you.

5. I AM GETTING VERY SORE FROM MY WORKOUTS. SHOULD I SKIP THE GYM UNTIL I AM NOT SORE?

You may experience increased soreness when you first begin the program because it is presenting a new stress to your body. Foam rolling can help reduce DOMS [1] and increase ROM [2]. If you are consistently getting sore week after week, then consider adding a short three - five minute foam rolling routine at the end of your workouts. Otherwise, training while sore is not inherently problematic for muscle growth, unless it puts you at an increased risk of injury. If you're having a difficult time getting into position or completing

a full range of motion for any of the planned exercises, it would be wise to skip that exercise until you feel properly recovered. You can then add the volume for that exercise later in the week, so the total weekly volume remains the same. Otherwise, in the case of mild soreness, perform a slightly longer warmup for each exercise and use your own discretion, with avoiding injury being a top priority. One extra rest day will not set you back very far, but a serious injury will.

6. HOW DO I KNOW IF I AM PROGRESSING?

Because this is a hybrid routine, you should be monitoring both strength and physique progress over time.

Strength is relatively easy to track. For the primary exercises, there is a progression built into the program so that by the end of the 12 weeks, you will almost certainly have gained strength automatically. Because this program is more focused on hypertrophy and work capacity than peaking for strength, there isn't a formal max testing week at the end of this program like there is at the end of Phase 1. Still, there is an AMRAP test for the deadlift in Week 9 and an AMRAP test for the bench press in Week 12 where you will aim to set new rep PRs. For the secondary and tertiary exercises, you will aim to progressively overload by either adding some weight, a rep or by improving technique and the mind-muscle connection.

It's a little trickier to tell if you're making progress from a physique standpoint,

especially the deeper you get into the intermediate and advanced stages of training. Taking physique progress photos every four – six weeks and comparing them side by side is a good way to detect visual differences that you simply wouldn't notice in the mirror. You can also use a body weight scale and waist measurements to detect gains in muscle mass versus gains in fat mass. However, because of the relationship between strength gain and muscle gain, the main metric I want you to use for tracking your progress overall is strength. If you're getting stronger, you're progressing. It is strongly recommended to log every workout either in writing (print the program out or use a separate notebook), in the excel spreadsheet included or in a separate app, so you don't have to rely on memory to keep track of PRs. Taking body measurements a few times a year can also be helpful (arms, thigh, waist, neck) but in my experience, simply focusing on steady strength progression will be your best proxy for determining muscular progress.

7. HOW MUCH MUSCLE CAN I EXPECT TO GAIN?

How you respond to training will be largely determined by genetic factors and your specific training history (i.e. how close you are to your "genetic limit"). As a rough ballpark estimate for early intermediates with about one to two years of lifting experience, you can expect to gain roughly 0.5-1 pounds of muscle per month (six to twelve pounds of muscle gained in your second year). For intermediate-advanced trainees, 0.25-0.5 pounds of muscle gain per month is reasonable (three to six pounds of muscle gained per year). For practical

purposes, women can divide muscle gain estimates in half.

8. HOW MUCH STRENGTH CAN I EXPECT TO GAIN?

Similar to muscle gains, the strength gains you see on this program will be individual and depend on your training history (e.g. how much have you already been training The Big 3?). It will be impossible to give exact numbers for how much you can expect to add to each lift, but aiming to see a 2.5-7.5 percent strength increase on any of The Big 3 lifts is realistic for many intermediate-advanced trainees. Those of you in the early-late intermediate stage can likely expect to see faster and greater gains; more in the 5-10 percent range. If you are bordering on the advanced-elite end of the spectrum, you will need to be more conservative with expectations and be satisfied with something closer to a 1-2.5 percent increase in max strength, depending on just how close you are to your "genetic ceiling".

To put these figures in context, let's say you are an early-mid intermediate trainee and your starting 1 rep max is 225 pounds on the bench press. Assuming you follow the program appropriately, you should expect to see something in the range of 5-7.5 percent strength gain in these coming 12 weeks, meaning your bench will have increased to something around 235-245 pounds. On the other hand, if you have been training the bench press for over 5-10 years and currently have a one rep max of 350 pounds, you should realistically be satisfied with any increase in strength you see. Even hitting a 5-10 pound PR of

355-360 pounds would be impressive for a truly late-stage advanced trainee in 12 weeks of training.

9. WHAT GYM TRAINING GEAR SHOULD I USE?

Gym gear is optional, as there are no required pieces of equipment to gain muscle and increase strength. With that being said, investing in some chalk or liquid chalk, a 10mm prong or lever belt, knee sleeves, squat shoes, and straps can be beneficial in allowing you to lift more weight for certain exercises. There are more specific recommendations made in the Get Ready Manual.

You can find most of my recommended equipment at the following affiliate link:

<http://Rise.ca/jeff>

10. I HAVE A BELT. WHEN SHOULD I WEAR IT?

I will most often use a lifting belt for hard working sets on the squat, bench press, deadlift and overhead press. I wouldn't recommend wearing a belt on light warmup sets.

11. I AM NOT GETTING SORE FROM MY WORKOUTS. IS THE PROGRAM NOT WORKING?

Muscle soreness is largely attributed to eccentric contractions [3] and long muscle length contractions [4]. Delayed onset muscle soreness (DOMS) isn't required for hypertrophy to occur, but the associated muscle damage might play a role in hypertrophy [5]. With that said, the main goal of this program is to build muscle and strength, not to get you feeling sore. In fact, reduced soreness over time indicates that your body is adapting and recovering, which is actually a good thing for continued progress.

12. SHOULD I EAT IN A CALORIC DEFICIT, MAINTENANCE, OR SURPLUS WHILE RUNNING THIS PROGRAM?

I recommend finishing up any cut you are running, if possible. While you certainly can still gain strength on this program while running a fat loss phase, a caloric deficit will dampen your strength gains and prevent you from maximizing your strength and size results.

Instead, when running this program, aim to be at least at caloric maintenance or, more ideally, in a 20-25 percent caloric surplus. However, if your main goal is fat loss right now, eating in a caloric deficit will be necessary. As a beginner, you can continue to make strength and size progress while in a moderate caloric deficit and achieve body recomposition (lose fat and build muscle

at the same time), if protein intake is sufficient (0.8–1g/lb bodyweight as a ballpark) [6, 7]. As an intermediate-advanced level trainee, the likelihood of achieving substantial **body recomposition** is smaller, but still possible. So, in all, a caloric surplus is recommended for optimal progress, but some progress can still occur at caloric maintenance and even in a caloric deficit, depending on your specific level of advancement and current training state.

13. THE WARMUP ISN'T ENOUGH FOR ME. CAN I ADD TO IT?

In the program, there is a column for the suggested number of warmup sets you should do. Depending on how heavy the weight is that you're working up to, you may need slightly more or less warmup sets. For example, on Day 1 of Week 1, I suggest that you hit four warmup sets for the squat. However, if you are working up to very heavy weight, some of you may need five or six warmup sets to feel fully prepared for your top set. On the other hand, if you haven't built a great deal of strength yet, three warmup sets might be enough for you.

You can also feel free to add more warmup drills to the protocol but your warmup doesn't need to take any longer than 10–20 minutes. Still, it is important to stay injury-free, so don't rush into your workout.

14. WHY ISN'T THERE MUCH EXERCISE VARIATION FROM WEEK TO WEEK?

Changing exercises from week to week is more likely to flatten out the strength progression curve. Consistency of exercises throughout the program ensures both progression, by adding volume incrementally to these specific movements, and mastery of these movements, in terms of form and technique. To avoid monotony and stagnation, there is plenty of variation in exercise selection between Odd Weeks (Week 1, 3, 5, 7, 9 and 11) and Even Weeks (Week 2, 4, 6, 8, 10 and 12).

15. ISN'T THIS TOO MUCH VOLUME?

Please see "A disclaimer about volume" on page [99](#).

16. ISN'T THIS TOO LITTLE VOLUME?

Please see "A disclaimer about volume" on page [99](#).

17. WHAT SHOULD I DO AFTER I FINISH THE PROGRAM?

After you've finished the program, you should move on to Phase 3 (which will begin with a deload/intro week) to complete the Powerbuilding System in its entirety. In the event that you'd like to move onto a new program with a different approach, you can move onto another [program](#), depending on your

specific goals moving forward. Feel free to [contact my coaching team](#) if you would like some suggestions or guidance moving forward.

18. WHAT ARE THE BLANK BOXES IN THE MIDDLE OF EACH PROGRAM FOR?

They are there for you to track your weights each week, so you can focus on strength progression. You can either print out the program itself and track using a paper and pen, or simply use the excel spreadsheet included. Keeping up with this habit of tracking is going to be an extremely important part of your success on this program.

19. I CAN'T DO "X EXERCISE". WHAT SHOULD I REPLACE IT WITH?

Please see "Exercise Substitutions" on page [108](#).

20. FIVE TO SIX DAYS PER WEEK IS TOO MUCH FOR ME (OR 4 DAYS PER WEEK ISN'T ENOUGH FOR ME). WHAT SHOULD I DO?

If you only have four days per week to train, you should run the [four day version](#) of the program. If you would like to train 5-6x per week, then you should run the [5-6 day version](#) of the program.

21. SHOULD I ADD CARDIO TO THIS PROGRAM?

I would be extra conservative with cardio on this program. While doing some POWERBUILDING PHASE 2.0 ([4X/WEEK](#))

low intensity cardio will not derail your recovery or progress, it will impose an additional recovery demand and if excessive, may interfere with your recovery from weight training [8, 9].

The main point of cardio from a physique and strength standpoint is to create or increase a caloric deficit for fat loss. If you are in a fat loss phase, I would recommend prioritizing the deficit from your diet, rather than relying heavily on cardio. As a general rule, I recommend keeping cardio to an effective minimum on this program. If you must do cardio to achieve your fat loss goals, try to keep it to a maximum of one to four low intensity sessions per week around 20-30 minutes in duration. High intensity cardio should be used very sparingly; once or twice per week, if at all.

22. THE LOADS DON'T FEEL HEAVY ENOUGH TO ME ON THE TOP SETS. SHOULD I GO HEAVIER THAN THE TOP END OF THE INTENSITY BRACKET?

First of all, top sets are not meant to feel excruciatingly heavy, especially at the beginning of the program. If you're used to training to failure frequently, even RPE 8-9 sets may feel a bit light to you. In this case, remember that just because something "feels harder" doesn't mean it's providing a better stimulus for strength or size. Secondly, you may be underestimating your 1RM inputs. Try adding ~10-15 lbs to your input 1RM for the lift and see if that puts the top set in the appropriate RPE zone. Keep in mind, while there are individual differences in relative strength when it comes to rep maxes, the intensity brackets included in this program should be plenty challenging for just about every truly POWERBUILDING PHASE 2.0 (4X/WEEK)

intermediate-advanced trainee and have been peer-reviewed by elite level coaches.

23. THE LOADS FEEL TOO HEAVY ON TOP SETS. IS IT OKAY TO GO LIGHTER?

Top sets are meant to get you in the RPE 8-9 zone and have you close to PR lifts for the rep count given. If the weight given feels really heavy on any given day for whatever reason, you should absolutely pick a weight that puts you in the right RPE zone. I discuss this at more length in the Program Explained section on auto-regulation.

24. THE LOADS FEEL TOO LIGHT ON SOME OF THE BACK-OFF SETS AND TECHNIQUE WORK. SHOULD I GO HEAVIER?

No. Keep in mind that both load and effort generally increases as the program progresses so if it feels easier at the beginning, that is fine. Use these sets for their intended purpose: to really refine your lifting technique and accumulate volume. Unless you have underestimated your input 1RMs (see question 22) you should go with the loads given. This is a relatively high frequency program and combines many different training modalities so it is very important that recovery not be spread too thin. Save that extra energy for the top sets!

25. I UNDERSTAND RPE, BUT WHAT DOES RPE 8.5 MEAN EXACTLY?

RPE 8.5 is exactly what it sounds like: something between an RPE 8 and RPE 9. It doesn't mean you could've gotten exactly one and a half more reps; it just means that the set was a bit tougher than a typical RPE 8 set, but not quite a true RPE 9 set. Many of the top sets in this program are listed as an RPE 8.5 to ensure that the set is in fact "tough" but the exertion isn't so high that technique is significantly compromised.

26. WHAT DOES "A1, A2" OR "B1, B2" MEAN IN THE PROGRAM?

This indicates that these exercises are to be done as a circuit or superset. You can go back and forth between the exercises to cut down on total workout time using the shorter rest periods indicated in the program.

Please direct all other questions to my [coaching team](#) through the contact form on my website. Please avoid directing questions about this program to my social media, as it is not a reliable means of making contact with me or getting the correct information.



WARMUP

Warmups serve an important purpose for any training program, but are particularly crucial on this program because of the use of heavy loads on compound exercises. Before we look at exactly how you should warm up, it's important to consider what warming up serves to accomplish.

The main purpose of warming up is to increase core body temperature, which improves performance and reduces risk of injury [10, 11]. Your circadian rhythm (variations throughout the day) will largely determine your core body

temperature. When you wake up, your core temperature is at its lowest and it increases throughout the day. In terms of safety and performance, there seems to be a "sweet spot" for core body temperature, so try not to train too hot or too cold. Before jumping into any heavy lifting, breaking a light sweat through some form of cardio activity is a great idea. If you train early in the morning, doing at least five to ten minutes of low-moderate intensity cardio is especially prudent [12].

Warmups may also serve as a way to increase muscle activation. Dynamic warmup drills (active stretches that take joints through a range of motion) can improve performance and force output [13]. Don't simply "go through the motions." The goal is to always be very mindful about what muscles are contracting and what movement that contraction is creating.

Lastly, foam rolling has been shown to reduce DOMS (delayed onset muscle soreness) [2] and brief foam rolling with a specific focus on "tight areas" before a session can both improve range of motion [14] and possibly prevent injury [15]. Light foam rolling for two to three minutes prior to lifting is recommended.

THE GENERAL WARMUP

EXERCISE	SETS	REPS/TIME	NOTES
Low intensity cardio	N/a	5-10min	Pick any machine which elevates your heart rate to 100-135bpm
Foam rolling/lacrosse ball	N/a	2-3min	Foam roll large muscle groups: quads, lats, calves. Optionally use a lacrosse ball for smaller muscle groups: pecs, delts, hamstrings
Front/back leg swing	1	12	12 Each leg
Side/side leg swing	1	12	12 Each leg
Standing glute squeeze	1	15 Sec	Squeeze your glutes as hard as possible
Prone trap raise	1	15	Mind muscle connection with mid back
Cable external rotation <i>(Optional)</i>	1	15	15 Each side
Cable internal rotation <i>(Optional)</i>	1	15	15 Each side
Overhead shrug <i>(Optional)</i>	1	15	Light squeeze on traps at the top of each rep

THE SPECIFIC PYRAMID WARMUP

Before the first exercise for each bodypart, perform a basic loading pyramid:

- Pyramid up in weight with 3-4 light sets, getting progressively heavier.
- Such a warmup is only required for Primary Exercises
- For example, if you were working up to 4 sets of 350 pounds for 5 reps on the squat, you could warm up as follows:
 - Bar (45 lbs) x 15 reps
 - 135 lbs x 5 reps

- 225 lbs x 4 reps
 - 275 lbs x 3 reps
 - 315 lbs x 2 reps
 - Then begin working sets with 350 lbs for 5 reps
-
- On a %1RM basis, warm up pyramids can be structured like this:
 - Bar (45 lbs) x 15 reps
 - 40% lbs x 5 reps
 - 50% lbs x 4 reps
 - 60% lbs x 3 reps
 - 70-75% lbs x 2 reps
 - Begin working sets

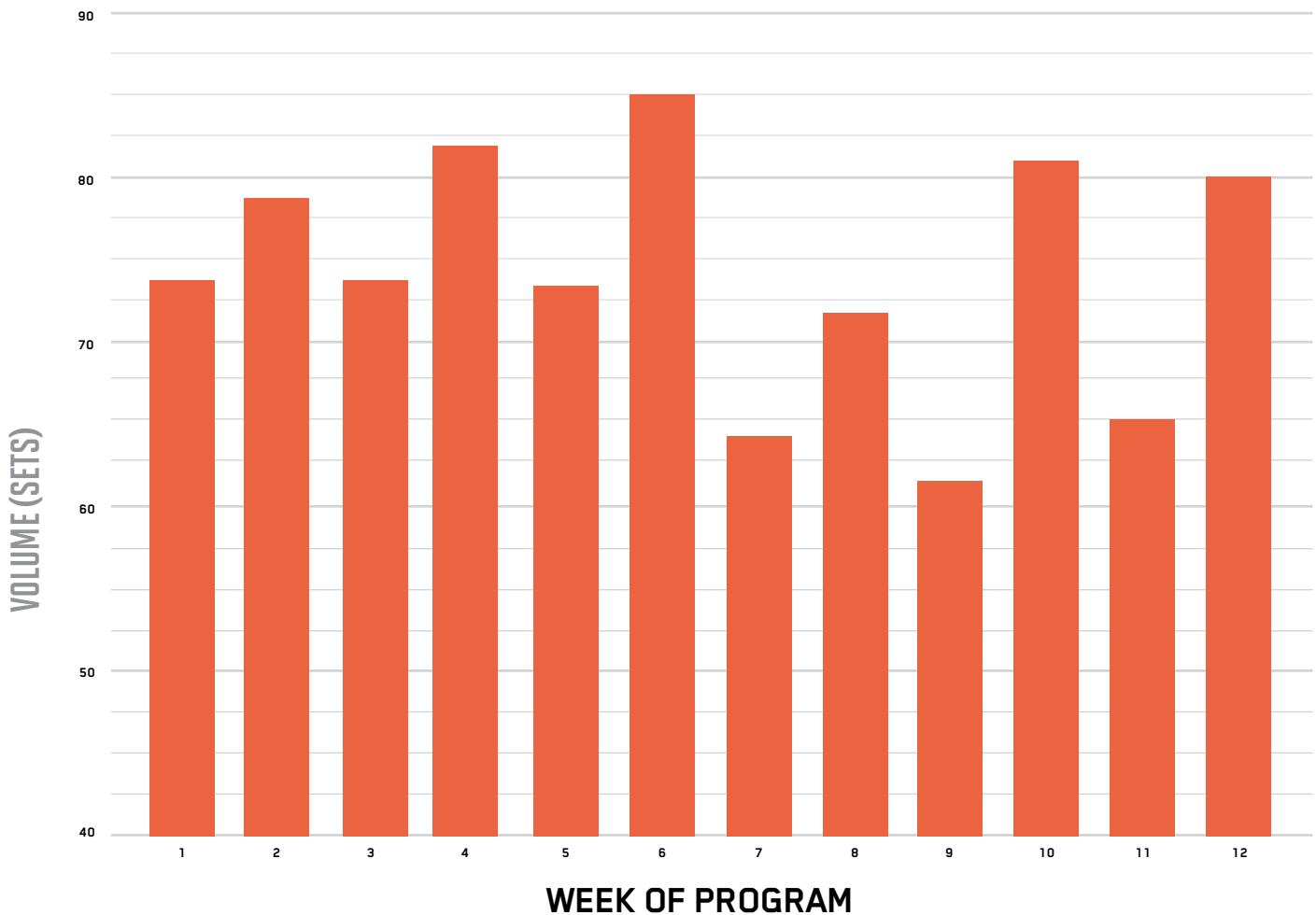
Remember that such an extensive warmup is only required for Primary Exercises.

Weekly Volumes (Sets)	1	2	3	4	5	6	7	8	9	10	11	12
Chest	12	8	12	9	12	10	9	6	9	9	9	8
Back	22	13	22	13	22	13	17	12	17	12	17	12
Biceps	6	5	6	5	6	5	3	6	3	6	3	6
Triceps	4	5	4	5	4	5	6	3	6	3	6	3
Delts	18	15	18	17	18	19	11	14	12	16	13	15
Upper Traps	5	3	5	3	4	3	8	5	6	5	9	5
Neck	0	3	0	3	0	3	0	0	0	0	0	0
Quads	14	13	14	14	13	15	14	10	11	12	13	12
Hamstrings	11	11	11	11	10	11	10	9	8	11	11	11
Glutes	19	22	19	23	18	24	14	14	11	16	13	16
Calves	3	6	3	6	3	6	3	6	3	6	3	6
Abs	0	9	0	9	0	9	3	5	3	6	3	6

Weekly Volumes (Sets)	1	2	3	4	5	6	7	8	9	10	11	12
Total	74	79	74	82	73	85	64	72	62	81	65	80

Note: Adding the Pump Day to Odd Weeks will effect these totals

TOTAL WEEKLY VOLUME OF PROGRAM



EXERCISE DEFINITIONS

CHEST	Barbell Bench Press, Close-Grip Bench Press, Larsen Press, Pause Barbell Bench Press, Deficit Push-Up, Pec Flye, Pause DB Incline Press, Dip, Close-Grip Incline Barbell Bench Press, Multi-Height Cable Crossover
BACK	Weighted Pull-Up, Meadows Row, Seated Face Pull, Wide-Grip Lat Pulldown, Helms Row, Seated Cable Row, Chin-Up, Cable Reverse Flye, Weighted Neutral-Grip Pull-Up, Chest-Supported Row, One-Arm Row, Constant-Tension Kneeling Pullover, Machine Chest-Supported Row, Single-Arm Pulldown, Band Pull-Apart, Omni-Grip Lat Pulldown, Reverse Pec Deck, Weighted Eccentric-Overload Pull-Up, Eccentric Accentuated Pull-Up, Pendlay Row, Bent Over Row, Machine "Strict Form" Row, Prone Trap Raise
BICEPS	Barbell or EZ Bar Curl, Hammer Curl, Chin-Up, Eccentric-Accentuated Barbell or EZ-Bar Curl, Hammer "Cheat" Curl, Incline Dumbbell Curl, Bayesian Curl, Inverse Zottman Curl, EZ Bar Pronated Curl, EZ Bar Supinated Curl, Barbell Curl, Pinch Grip Curl
TRICEPS	Close-Grip Barbell Bench Press, Close-Grip Incline Barbell Bench Press, Rope Overhead Triceps Extension, Triceps Pressdown, Single-Arm Overhead Triceps Extension, Dip, Eccentric-Accentuated Barbell Skull Crusher, Constant-Tension Cable Triceps Kickback, Cable Triceps Kickback, Triceps Pressdown 21s
DELTs	Barbell Overhead Press, Barbell Bench Press, Close-Grip Bench Press, Larsen Press, Pause Barbell Bench Press, Pause DB Incline Press, Close-Grip Incline Barbell Bench Press, Egyptian Lateral Raise, DB Lateral Raise, Machine Shoulder Press, Lateral Raise (option), Dumbbell Lateral Raise 21s, Dumbbell Lateral Raise Iso-Hold
UPPER TRAPS	Deadlift, Opposite Stance Deadlift, Reset Deadlift, Block Pull, Prone Trap Raise, Plate Shrug, Incline Dumbbell Shrug, Cable Shrug-In
NECK	Neck Flexion/Extension
QUADS	Back Squat, Front Squat, Pin Squat, Hack Squat, Bulgarian Split Squat, Leg Press, Deadlift, Opposite Stance Deadlift, Reset Deadlift, Block Pull, Leg Extension, Unilateral Leg Press, Eccentric-Accentuated Leg Extension, Sissy Squat
HAMSTRINGS	Deadlift, Opposite Stance Deadlift, Reset Deadlift, Block Pull, Glute-Ham Raise, Sliding Leg Curl, Leg Curl (Option), Nordic Ham Curl, Unilateral Leg Curl (Option)
GLUTES	Back Squat, Front Squat, Pin Squat, Hack Squat, Bulgarian Split Squat, Leg Press, Glute-Ham Raise, Deadlift, Opposite Stance Deadlift, Reset Deadlift, Romanian Deadlift, Block Pull, Single-Leg Hip Thrust, Unilateral Leg Press, Cable Pull-Through, Prisoner Back Extension, Unilateral Hip Thrust, Hip Abduction
CALVES	Standing Calf Raise, Single-Leg Standing Calf Raise, Unilateral Standing Calf Raise, Enhanced-Eccentric Calf Raise
ABS	Hanging Leg Raise, Weighted Crunch, Long-Lever Plank, V Sit-Up, Cable Wood Chopper, L-Sit Hold, Cable Crunch



PROGRAM EXPLAINED

In this section, I will outline how the program is set up in terms of the split, autoregulation, progression and periodization.

THE SPLIT

This program alternates between full body weeks and legs/push/pull weeks. We can think about the program as being separated into Odd Weeks and Even Weeks.

Odd Weeks (Week 1, 3, 5, 7, 9, and 11) are the more "powerlifting-focused" full

body weeks:

- Generally heavier loads
- Slightly less volume
- Includes one "Arm and Pump Day", which I will sometimes call a "Roaming Hypertrophy Day" (Day 5) where volume for body parts that were "neglected" throughout the week are caught up on. You can do this day at any time during the week as it should not impact recovery significantly.

Throughout the program, top sets have been implemented and are highlighted in orange in the program sheets. This is intended to maintain familiarity with what high exertion feels like and to keep confidence high throughout the program. These are not meant to be all out, max effort sets, but should still feel challenging. For example, in Week 1 you will do one heavy set of two reps on the back squat. In Week 3, you will do one heavy set of four on the back squat and in Week 5 you do one heavy set of six on the back squat. While there are no formal top sets for the deadlift, a block pull at 90% 1RM occurs on Odd weeks, with the height of the blocks gradually decreasing until Week 9, when an AMRAP is performed with no blocks (i.e. a standard deadlift from the floor). This progression serves a similar purpose of building confidence with heavier loads and a novel way of applying progressive overload via gradual increases in ROM.

Even Weeks (Week 2, 4, 6, 8, and 10) are the more "bodybuilding-focused"

Legs/Push/Pull weeks:

- Generally lighter loads
- Generally higher reps
- More emphasis on variations and technique for primary exercises
- More emphasis on mind-muscle connection for secondary and tertiary exercises
- More advanced hypertrophy techniques like myo-reps, static holds and dropsets

THE AUTOREGULATION

Autoregulation is when you make some choices about your training during your workout rather than having everything locked into place before your workout. If you're new to autoregulation, it may sound like a technical concept, but it's actually very simple. If you've ever done a few extra reps because you were feeling good or took an extra minute of rest to recover after a tough set, then you've already used autoregulation in your training. It essentially just means "adjusting on the fly."

Autoregulation doesn't mean you get to completely go by feel and suddenly have an excuse to totally sandbag your workouts on bad days. Instead, it can be seen as leveraging the fact that performance will differ from day to day.

When running a fixed program, on a day that you're feeling extremely strong

and performing extremely well, you might be confined to doing work that is well below your potential for that day. That's wasted potential. On an autoregulated program, however, if you're feeling particularly strong on one day, you have the freedom to go heavier than usual. And the same thing applies for days that you're not feeling as strong, you have the permission to use weights that match your abilities on that specific day.

This isn't just something I do because it seems intuitively appealing. Research consistently shows that an autoregulated approach results in better strength gains [16-18]. Remember, autoregulation does not mean just tossing in the towel when you're having a bad day. Instead, these studies use techniques, such as tracking bar velocity loss, to allow more informed and structured adjustments to be made. And while most of us don't have access to a bar velocity tracker, luckily there are several other methods that don't require any equipment and still offer better results than a fixed program [16, 17]. That brings us to the two main ways that autoregulation will be used in this program: RPE and Intensity Brackets.

1. RPE

RPE stands for Rating of Perceived Exertion and ranks how hard a set was on a scale of 1-10. This table, adapted from the MASS Research Review should help clarify what each RPE value means.

TABLE 1: RESISTANCE TRAINING-SPECIFIC RIR-BASED RPE SCALE

RPE SCORE	RIR/DESCRIPTION
10	Maximal Effort
9.5	No RIR, but could increase load
9	1 RIR
8.5	Definitely 1, maybe 2RIR
8	2 RIR
7.5	Definitely 2, maybe 3RIR
7	3 RIR
5-6	4-6 RIR
3-4	Light Effort
1-2	Light to no Effort

Adapted from Zourdos et al (2016)

RPE= Rating of Perceived Exertion, RIR= Repetitions in Reserve

Source: MASS Research Review, Volume 3, Issue 9

Whenever an RPE value is given in this program, you will select a weight that will put you at the appropriate RPE for the number of reps given.



WEEK 1	EXERCISE	WARM-UP SETS	WORKING SETS	REPS	%IRM	RPE	REST	SET 1	SET 2	SET 3	SET 4	NOTES
FULL BODY 1	BACK SQUAT	4	1	2	82.5-87.5%	7	3-4 MIN					TOP SET, GET COMFORTABLE WITH HEAVIER LOADS WHILE KEEPING PERFECT TECHNIQUE
	FRONT SQUAT (OR BOX SQUAT)	0	3	8	N/A	7	3-4 MIN					IF YOU LOW BAR SQUAT, DO FRONT SQUAT. IF YOU HIGH BAR SQUAT, DO BARBELL BOX SQUAT
	BARBELL BENCH PRESS	4	1	4	80-85%	8.5	3-4 MIN					TOP SET, GET COMFORTABLE WITH HEAVIER LOADS WHILE KEEPING PERFECT TECHNIQUE
	BARBELL BENCH PRESS	0	2	6	75-80%	7	1-2 MIN					SUBMAXIMAL BENCH PRESS, BE HYPERCRITICAL OF FORM
	WEIGHTED PULL-UP	1	3	4-6	N/A	8	1-2 MIN					1.5X SHOULDER WIDTH GRIP, PULL YOUR CHEST TO THE BAR
	GLUTE-HAM RAISE (OR NORDIC HAM CURL)	1	3	6-8	N/A	7	1-2 MIN					KEEP YOUR HIPS STRAIGHT, DO NORDIC HAM CURLS IF NO GHR MACHINE
	SEATED FACE PULL	0	4	15-20	N/A	9	1-2 MIN					DON'T GO TOO HEAVY, FOCUS ON MIND-MUSCLE CONNECTION

For example, let's say I was assigned to do three sets of 10 on a penday row to an RPE of eight. From previous training experience, I can guess that I could probably do about 185 pounds for 12 reps, as a max effort set with good

technique. So, after warming up, I would select 185 pounds to be my working weight for the first set, stopping at 10 reps (even though I could've done 12). However, if I reach 10 reps and think the actual RPE was less than eight (let's say the true RPE was six) I should adjust by increasing the weight for the next set. If I reach eight reps and think the RPE was more than eight (say, I actually hit failure or my form started to deteriorate significantly), I should adjust by decreasing the weight for the next set.

Using RPE, on days that you are performing well, you can push heavier than normal. On days that you are not feeling as strong, you can train lighter but still reach the appropriate effort threshold. Obviously, RPE is not intended to be used as an excuse to train light all the time, and it is still important to keep yourself accountable and progressing overall.

2. INTENSITY BRACKETS

For heavier sets and top sets, I use intensity brackets in the program to assign load. For example on Day 1 of Week 1, we kick the program off with a top set for two reps on the back squat, using 82.5-87.5% 1RM. So, for example, if your back squat one rep max is 405 pounds, you'd load something between 82.5 percent and 87.5 percent of 405 pounds. This would give you a loading range of approximately 335-355 pounds.

WEEK 1	EXERCISE	WARM-UP SETS	WORKING SETS	REPS	%1RM	RPE	REST	SET 1	SET 2	SET 3	SET 4	NOTES
FULL BODY 1	BACK SQUAT	4	1	2	82.5-87.5%	7	3-4 MIN					TOP SET, GET COMFORTABLE WITH HEAVIER LOADS WHILE KEEPING PERFECT TECHNIQUE
	FRONT SQUAT (OR BOX SQUAT)	0	3	8	N/A	7	3-4 MIN					IF YOU LOW BAR SQUAT, DO FRONT SQUAT. IF YOU HIGH BAR SQUAT, DO BARBELL BOX SQUAT
	BARBELL BENCH PRESS	4	1	4	80-85%	8.5	3-4 MIN					TOP SET, GET COMFORTABLE WITH HEAVIER LOADS WHILE KEEPING PERFECT TECHNIQUE
	BARBELL BENCH PRESS	0	2	6	75-80%	7	1-2 MIN					SUBMAXIMAL BENCH PRESS, BE HYPERCRITICAL OF FORM
	WEIGHTED PULL-UP	1	3	4-6	N/A	8	1-2 MIN					1.5X SHOULDER WIDTH GRIP; PULL YOUR CHEST TO THE BAR
	GLUTE-HAM RAISE (OR NORDIC HAM CURL)	1	3	6-8	N/A	7	1-2 MIN					KEEP YOUR HIPS STRAIGHT, DO NORDIC HAM CURLS IF NO GHR MACHINE
	SEATED FACE PULL	0	4	15-20	N/A	9	1-2 MIN					DON'T GO TOO HEAVY, FOCUS ON MIND-MUSCLE CONNECTION

On days you are not feeling as strong, you should aim for the bottom end of the range.

This is SO IMPORTANT that it bears repeating.

When using intensity brackets, DO NOT feel as though you always need to hit the top end of the bracket in order for that workout to be considered a success. Knowing when to push and when to pull back is an extremely important skillset to develop as a mature lifter. In fact, this is the entire point of using autoregulation in the first place – you have the freedom to go a bit heavier on days when you feel strong and to go a bit lighter on days when you do not feel strong.

In my coaching experience, trainees will often feel like a failure if they don't hit the top end of the bracket. This can be a dangerous trap. Pushing yourself to the top end of the limit on days that you're feeling weak can result in form breakdown, excessive fatigue accumulation and poor lifting psychology. I use the mid or low end of the intensity bracket in training any time the warmups feel heavy and my performance is low.

As a general rule, if you have some outside stressor in your personal life, didn't sleep well the night before, or even didn't time your pre-workout optimally due to legitimate time constraints, you have every reason to opt for the low end of the bracket. In fact, opting for the low end of the bracket on a day you are feeling weaker will actually induce a more effective training stimulus than if you were to push beyond your limits for that day, as that would present yet another high-stress demand for your body to overcome.

Of course, it's still a good idea to have an idea in your head of what weights you're planning to hit for each lift, but most of the time I won't know whether I'm going to use the low, mid or high end of the bracket until I get into my warmup sets. Also, you can't always go by how you're feeling going into the workout. Some days that I feel really good going into the workout, the warmup sets end up feeling really heavy, so I opt for the low end of the bracket. And other days I feel really bad going into the workout, but the warmup sets actually end up feeling really easy, so I opt for the high end of the bracket.

Remember, for autoregulation to be effective, you need to actually autoregulate. This means you need to pay attention to how you're feeling that day, notice how the warmups move and then make an educated decision about what weight you should load for your top set. And again, there is no shame in using a lighter load on days where your performance is clearly not at 100 percent. As long as you're honest with yourself, a day will come when you feel at 100 percent again very soon, and because you had the wherewithal

to hold back when appropriate, you will be recovered and ready for when the timing feels right for a push.

THE PROGRESSION

PRIMARY EXERCISES:

As mentioned previously, all primary exercises use either a fixed percentage of your one rep max (%1RM) or intensity brackets using a range of %1RM.

If you are given a fixed %1RM, you simply have to execute the sets and reps at that weight, and the progression will take care of itself.

If you are given a range of %1RM (intensity brackets), you should use the autoregulation method explained above to help you determine the weight you will use for that day.

HOW TO DETERMINE YOUR ONE REP MAX

Of course, to use a %1RM approach, you must know (or at least have a rough idea of) what your one rep max is for that exercise. Because there is max testing at the end of Phase 1, you should have a good idea of your maxes if you recently completed Phase 1. However, not everyone will run Phase 2 immediately after Phase 1 and so, you may need to ballpark it using another

method.

Remember that the 1RMs you use should be your CURRENT 1RMs. Just because you hit a certain weight a year ago does not mean that is your current 1 rep max. Input 1RMs are not necessarily all-time PRs. They are the weights you could hit for a 1 rep max today.

If you don't know your one rep max currently for any of the lifts, there are three different ways you can estimate it. Remember, you don't need to know exactly what your true one rep max is to find the right loads, you just need to be in the right ballpark. Let's use the squat as an example to illustrate for anyone who can't already currently estimate their 1RM.

Always use a spotter's assistance and safety pins when testing 1 rep maxes!

OPTION 1 - Do an AMRAP test as follows:

- Warm up by pyramiding up in weight using estimated 1RM:
- Bar x 15, 50% x 8, 60% x 4, 70% x 3, 80% x 2, 85% x 1.
- Do a set of as many reps as possible with 90-92.5 percent of your estimated 1RM using a spotter for safety
- Alternatively, you can pick a weight you think you can do about three to five reps with, and do as many reps as possible using a spotter for safety
- Plug the results of the AMRAP test in to this 1RM calculator to determine your

new working 1RM:

- <http://www.exrx.net/Calculators/OneRepMax.html>

OPTION 2 – Plug the results of any recent “tough set” taken close to failure in the six or lower rep range into this calculator, which will estimate your 1RM:

- <http://www.exrx.net/Calculators/OneRepMax.html>

OPTION 3 – Do an actual 1 rep max test:

This approach is more suitable for experienced powerlifters accustomed to hitting heavy singles. For everyone else, this is generally not my preferred option because if you aren't accustomed to maxing out with heavy loads, it can result in form breakdown and potentially carry a higher risk of injury. If you are going to use this approach, think of it more like an “RPE 9.5 max” rather than a true RPE 10 max that you risk failing. Remember, we're only trying to get an estimate of what you could do to help determine the loads you should use. It isn't important for us to know exactly where your strength ceiling actually is in order to apply a progressive stimulus in the program. If you decide to go this route, perform the max test as follows:

- Warm up by pyramiding up in weight using currently estimated 1RM:
- Bar x 15, 50% x 8, 60% x 4, 70% x 3, 80% x 2, 85% x 1, 95% x 1
- Pick a weight between 100 percent and 107.5 percent of your currently

estimated 1RM and complete it for one rep

- Stop once you feel like you're in the RPE 9-10 zone. You've found your estimated 1RM.

Note: Options 1 and 2 are preferred for those with primarily bodybuilding goals.

Because powerlifters are generally more accustomed to doing heavy singles, Option 3 may be simpler for those with primarily powerlifting goals.

Note: If you do any AMRAP tests or max tests before beginning the program, do them on their own day for each lift and then rest at least two days before beginning Week 1, Day 1.

SECONDARY/TERTIARY EXERCISES:

For secondary and tertiary exercises, there is typically a rep range given (for example, "10-12 reps" or "12-15 reps"). Ideally, you would progress by adding reps with the same weight until you reach the top end of the rep range. Once you reach the top end of the range, you would add some minimum amount of weight and start back at the bottom of the range again. On some exercises, it will be impossible to add reps and/or weight every week because it will be impossible to maintain good form by the end of the program. Therefore, the main goal of every secondary and tertiary exercise is simply to make an effort to do something better from week to week. This can be any of the following:

- Increasing either rep(s) or weight;

- Improving technique (such as by controlling the tempo better than last time);
- or
- Improving the mind-muscle connection (such as by "squeezing" the target muscle harder than last time)

THE PERIODIZATION

A technical definition of periodization is "a method for employing sequential or phasic alterations in the workload, training focus, and training tasks contained within the microcycle, mesocycle, and annual training plan. The approach depends on the goals established for the specified training period. A periodized training plan that is properly designed provides a framework for appropriately sequencing training so that training tasks, content, and workloads are varied at a multitude of levels in a logical, phasic pattern in order to ensure the development of specific physiological and performance outcomes at predetermined time points." [19].

Yeah, it's a mouthful. For this reason, most evidence-based coaches prefer to think of periodization simply in terms of how a program is organized over time. In general, we can organize training into three main categories based on time frame: the macrocycle (usually a full calendar year or competition season), the mesocycle (usually a single training program) and the microcycle (usually one week of training).

A. THE MACROCYCLE:

The macrocycle takes a big picture look at how a given training program fits into a yearly training plan. This program serves the purpose of gaining strength and building size simultaneously, with a slight emphasis on building size. For someone who personally places bodybuilding above powerlifting, this program can fit into the yearly training plan something like this:

QUARTER 1	QUARTER 1	QUARTER 1	QUARTER 1
<ul style="list-style-type: none">• Approach: Powerbuilding• Main goal: Equal focus on size and strengthEx. Powerbuilding Phase 1	<ul style="list-style-type: none">• Approach: Bodybuilding• Main goal: Gain size (put strength work at maintenance)Ex. Powerbuilding Phase 2	<ul style="list-style-type: none">• Approach: Powerlifting• Main goal: Gain strength (put hypertrophy work at maintenance)Ex. Powerbuilding Phase	<ul style="list-style-type: none">• Approach: Bodybuilding• Main goal: Gain size (put strength work at maintenance)Ex. Pure Bodybuilding Program

A full calendar year of training can be split up into distinct phases, each with a specific primary goal. This is how powerbuilding and strength phases can be organized for a trainee mostly concerned with gaining muscle.

For someone who places powerlifting above bodybuilding, this program can fit into the yearly training plan something like this:

QUARTER 1	QUARTER 1		QUARTER 1	QUARTER 1
<ul style="list-style-type: none"> • Approach: Powerbuilding • Main goal: Equal focus on size and strength (slightly more size emphasis) <p>Ex. Powerbuilding Phase 2</p>	<ul style="list-style-type: none"> • Approach: Powerlifting (peaking) • Main goal: Develop max strength leading into competition <p>Ex. Powerbuilding Phase 3</p>	Competition	<ul style="list-style-type: none"> • Approach: Hypertrophy • Main goal: Gain muscle to help break strength plateaus <p>Ex. Pure Bodybuilding Program</p>	<ul style="list-style-type: none"> • Approach: Powerbuilding • Main goal: Equal focus on size and strength (slightly more strength emphasis) <p>Ex. Powerbuilding Phase 1</p>

How powerbuilding phases can fit into a yearly training plan for a powerlifter.

Of course, these are just examples. There are virtually an infinite number of ways you could plan out your goals across a full year of training according to your own goals, weak points and preferences. The point here is that, from a periodization standpoint, a powerbuilding program fits nicely into a macrocycle for both someone primarily concerned with building size and for someone primarily concerned with gaining strength.

B. THE MESOCYCLE:

The mesocycle typically refers to how training is organized over a period of a few months. Some coaches prefer to use shorter mesocycle lengths of three or four weeks, while others write programs over longer time frames in the one to

three month range. Since this program is 12 weeks in length, we can consider the entire program itself as one mesocycle.

The mesocycle is organized such that the training focus alternates from week to week. As explained previously, odd weeks are heavier and more strength focused, and even weeks are lighter and more hypertrophy focused.

Overall, the volume slightly decreases as load and intensity increase across the odd weeks. Here, to ensure adequate recovery, the goal is to gradually handle heavier weights as volume tapers slightly.

The even weeks utilize a more basic progressive overload approach, where volume remains roughly constant throughout the program, with the main goal being to overload week to week using the methods discussed in the Progression section.

Throughout the program there are principles borrowed from a variety of different periodization strategies including daily undulating periodization (different reps and loads are used for the same lift within the training week), weekly undulating periodization (rep counts progress non-linearly from week to week) and conjugate periodization (exercise variations are switched regularly).

DELOAD (WEEK 8)

There is a semi-deload week in Week 8, where volume and RPEs are lowered slightly. Rather than think of this week as a complete deload, I prefer to think of it as a “technique week” where you check in on your form on the main lifts and focus on improving the mind-muscle connection on the accessories. It is important to strictly follow RPEs in Week 8 to promote recovery in preparation for the challenging remainder of the program.

MAX TESTING

Besides an AMRAP for the deadlift at 90% of your 1RM in Week 9 and an AMRAP for the barbell bench press at 85% of your 1RM in Week 12, there is no max testing in this program. This is because Phase 2 of the Powerbuilding System is more focused on hypertrophy and work capacity than peaking for strength directly. Phase 3 will end with a full blown max testing week since it is a more strength-focused program.

C. THE MICROCYCLE

The microcycle typically refers to a single week of training. In this program, there are two separate microcycles that alternate throughout the 12 week mesocycle. As mentioned before, odd weeks use a full body setup and focus

more on strength, while even weeks use a legs/push/pull setup and focus more on hypertrophy. Let's take a quick look at both:

ODD WEEKS (FULL BODY)

In the odd weeks, the back squat and barbell bench press are usually hit twice per week with the heavier and harder sets coming earlier in the week and technique and volume work coming later in the week.

Deadlifts from the floor are hit once per week on the Odd weeks, however, a block pull is also included that starts at 6" off the floor, and gradually works down to a 0" block pull throughout the program. In the second half of the program, as the blocks are getting close to deadlifting from the floor, the first deadlift day is replaced by a lighter "opposite stance" deadlift variation, to avoid overwhelming that same movement pattern with heavy sets just a few days later.

Finally, at the end of the week is an "Arm & Pump Day," which is intended to fill in any gaps in bodypart volume throughout the week. Because this day will have a small impact on recovery, it can be done on any day you have free throughout the week, according to what best fits your schedule. If you have no preference, simply hit it the day after Day 4.

EVEN WEEKS (LEGS/PUSH/PULL)

In the even weeks, the Big 3 are hit through the use of variations on the main movement pattern, along with one day of standard barbell bench press and back squats once per week. For example, on even weeks throughout the program, you will train the hack squat, pin squat, Romanian deadlift, reset deadlift, close-grip bench press, larsen press, and deficit push-ups. Despite all the variation, some version of the Big 3 is still being hit at least two times per week. Most of the even weeks' work is dedicated to proportional muscular development through the use of a variety of exercises and rep ranges.



PROGRAM VARIABLES

TECHNIQUE

From a strength perspective, I consider technique to be the most fundamental variable in this program and it's covered in detail in the Powerbuilding Technique Handbook included with this program. Make sure to give it a thorough read, as in terms of both size and strength, it will be critical for determining your success on this program. If there are any other exercises that you are not sure how to perform with proper technique, please see the [Exercise](#)

Video Demonstrations section. For now, let's move on to the other training variables.

EFFORT/INTENSITY

How hard should you push each set?

As mentioned, this program uses both percentage-based and RPE-based methods for determining what weights you should use, which will ultimately determine your level of effort. How hard you should be pushing yourself mainly depends on the exercise you're performing.

- **PRIMARY EXERCISES:** Primary exercises will see a wide range of RPEs. On the strength-focused weeks (Odd Weeks), top sets are in a higher RPE zone of eight to nine. These sets SHOULD feel challenging and should regularly have you either hitting or approaching rep PRs. Later in the week, the percentages on primary lifts decrease, as emphasis shifts to practicing and refining technique while accumulating volume. In general, I recommend avoiding failure on primary exercises since it presents a large recovery demand without a significant additional stimulus for hypertrophy or strength. Research repeatedly tells us that it simply isn't necessary to train all the way to failure to make strength and size gains. In addition, it clearly can be counterproductive if it causes fatigue to consistently exceed your ability to recover [20-22].

- **SECONDARY/TERTIARY EXERCISES:** Most sets on secondary and tertiary exercises are in the eight to nine RPE zone in this program, meaning one or two reps are being “left in the tank.” However, when a secondary or tertiary exercise is the last exercise for a given body part that day, you can take the last set to failure with good technique. Also, it’s important to remember that an RPE 9 set is still a tough set. It means that, if you had a gun to your head, you could only barely squeeze out one more rep with good form. This is a far cry from simply “going through the motions” and just “getting a pump” in the gym. RPE 10 sets are also included in various exercises throughout the program to ensure that you are in fact adequately pushing yourself and comfortable with pushing to your limits when appropriate.

While I admire a strong work ethic, similar to volume, more effort is not always better. Properly applied effort is what we are always looking for. This means that we should reserve training to failure (or near failure) for when it fits within the context of the program as a whole.

VOLUME

Volume loosely refers to the total amount of work you are doing. This is often approximated as sets x reps x load, but is often simply thought of as the total number of working sets. Total volume can be viewed as both volume per-session and volume per-week. Per-session volume requirements are actually quite low, with the research showing just one single set to be an adequate stimulus for hypertrophy [23]. However, multiple sets per muscle

group are thought to be required to maximize hypertrophy [24]. It is important to remember that not all volume is created equally, and more volume is not always the answer. A study comparing five sets of 10 reps versus 10 sets of 10 reps on the squat actually showed greater strength responses in the five sets group, despite using half the volume. Additionally, the 10 x 10 group lost muscle (on average) in their legs [25], so there appears to be a volume limit, past which more volume is not helpful for hypertrophy.

I have also provided the weekly volume analytics for each body part and in terms of total working sets. From these, you can adjust the figures slightly up or down based on your previous training experience. Granted, while these values provide some insight, they can be very misleading. For example, when it comes to both stimulus and fatigue, there is an enormous difference between a set of eight on squats and a set of eight on leg extensions. Yet, in the volume analytics, these would both count as one set for the quads. Similarly, for muscles like the triceps, I have decided to only count isolation work, close-grip bench press (flat and incline) and dips. As such, the numbers may appear artificially deflated, since we know the triceps will be hammered indirectly from all of the horizontal and vertical pressing in the program. Therefore, I encourage you to view the volume analytics merely as another tool in your toolbox, rather than as a determinative factor for the results you'll get from this program. Not all volume is created equally, and more isn't necessarily better.

AN IMPORTANT DISCLAIMER ABOUT TRAINING VOLUME

If you're coming to this program from a background of super high volume training, hopefully this routine will help you find the balance you need for a long and prosperous training career. Try to keep in mind that volume is organized in this program in a structured manner and, throughout the program, our number one priority is quality of execution.

Just because someone may be running a higher volume training program than you, it does not imply that they will see better results. This is because there are so many factors other than volume that go into proper program design. It is therefore, careless and shortsighted to judge a program based merely on how many sets it has you doing. Granted, volume has been identified as one of the primary factors driving muscle growth, so it must still be considered a central tenet of program design [26-29]. Still, this shouldn't tempt us to fall for either of the two most common volume misconceptions:

1. The "Pedestal Myth": the false idea that volume matters more than everything else. The reality is that ALL program variables must fit together like a puzzle, and it would be inappropriate to put one variable on a pedestal.
2. The "Quantity-Over-Quality Myth": the false idea that more volume is always better. Like the rest of the training variables, volume must be properly

managed within the training week and complement the other, more foundational programming factors like proper exercise execution (technique), the prioritization of recovery and the management of effort.

I elaborate on basic volume concepts at the links below:

- Fundamentals Ep 2: <https://www.youtube.com/watch?v=7SONjKYIJ7I>
- Volume Science Explained: <https://www.youtube.com/watch?v=qwv3JqOUqWs>
- Is (Too Much) Volume Killing Your Gains?: <https://www.youtube.com/watch?v=Mja2fDwYA5s>



EXERCISE VIDEO DEMONSTRATIONS

Note: All exercises are listed in alphabetical order and are written exactly as they appear in the program. For example, "Pull Ups" are listed under "Weighted Pull-Up" and "Bench Press" is listed under "Barbell Bench Press". You can use the Command+F function to find the exercise you need if you are on a computer.

BACK SQUAT: <https://youtu.be/bEv6CCg2BC8?t=147>

BAND PULL-APART: https://youtu.be/bN_lGBqZURw

BARBELL BENCH PRESS: <https://youtu.be/vcBig73ojpE?t=134>

BARBELL OR DUMBBELL ISOMETRIC HOLD (GRIP WORK): <https://youtu.be/mpyGvcodAEs>

BARBELL OR EZ BAR CURL: <https://youtu.be/i1YgFZB6all?t=139>

BARBELL OVERHEAD PRESS: https://youtu.be/_RIRDWO2jfg?t=121

BARBELL RDL: https://youtu.be/_oyxCn2iSjU?t=95

BAYESIAN CURL: <https://youtu.be/eUYY19p4IRY?t=962>

BLOCK PULL: <https://youtu.be/qOH1ZqkW-hw>

BOX SQUAT: <https://www.youtube.com/watch?v=Bl-IkWLs-pY> (choose a stance that feels comfortable to you)

BULGARIAN SPLIT SQUAT: <https://youtu.be/htDXu61MPio>

CABLE CRUNCH: <https://youtu.be/2RrGnjxSsiA?t=124>

CABLE CURL: <https://youtu.be/rBFn11V32mM>

CABLE PULL-THROUGH: <https://www.youtube.com/watch?v=NV8oPOpLsQU>

CABLE REVERSE FLYE: <https://www.youtube.com/watch?v=uCV40OQMGpM>

CABLE SHRUG-IN: <https://youtu.be/C6sYjDFuq9I?t=354>

CABLE TRICEPS KICKBACK: <https://youtu.be/94DXwlcX8Po?t=327>

CHEST-SUPPORTED ROW:

DUMBBELLS: <https://youtu.be/bsx8PIGlual>

MACHINE: <https://youtu.be/qVek72z3F1U?t=956>

T-BAR OPTION: <https://youtu.be/160n9FBX84s>

CHIN-UP: <https://youtu.be/Hdc7Mw6BIEE?t=234>

CLOSE-GRIP BENCH PRESS: <https://www.youtube.com/watch?v=xGfUcV11x5g>

CLOSE-GRIP INCLINE BARBELL BENCH PRESS: <https://youtu.be/OP4Ep0SBW5Q>

CONCENTRATION CURL: https://youtu.be/FbWfA_s0XL8?t=379

CONSTANT-TENSION CABLE KNEELING PULLOVER: <https://youtu.be/Vf7wf6bZODQ>

(except with a consistent pace of 1 second up and 1 second down)

CONSTANT-TENSION CABLE TRICEPS KICKBACK: <https://youtu.be/94DXwlC8Po?t=327>

(except with a consistent pace of 1 second up and 1 second down)

DB LATERAL RAISE: https://youtu.be/v_ZkxWzYnMc?t=215

DB LATERAL RAISE SWING: <https://youtu.be/D4YWXJjVLJA?t=1167>

DEADLIFT:

CONVENTIONAL: <https://youtu.be/VL5Ab0T07e4?t=175>

SUMO: <https://youtu.be/XsrD5y8EIku?t=176>

DEFICIT PUSH-UP: <https://youtu.be/gDoTTdAhsDg>

DIP: https://youtu.be/yN6Q1UI_xkE?t=75

DUMBBELL LATERAL RAISE 21S: <https://youtu.be/qVek72z3F1U?t=848>

DUMBBELL LATERAL RAISE ISO-HOLD: <https://youtu.be/5TuiimwF-iY>

ECCENTRIC-ACCENTUATED BARBELL SKULL CRUSHER: <https://youtu.be/qVek72z3F1U?t=380>

ECCENTRIC-ACCENTUATED EZ BAR OR BARBELL CURL: <https://youtu.be/i1YgFZB6all?t=139> (except with a slower ~3 second negative)

ECCENTRIC-ACCENTUATED LEG EXTENSION: <https://youtu.be/qVek72z3F1U?t=178>

ECCENTRIC-ACCENTUATED PULL-UP: <https://youtu.be/Hdc7Mw6BIEE?t=99>

(except with a slower ~3 second negative)

EGYPTIAN LATERAL RAISE: <https://youtu.be/SJqInYJcg5k?t=653>

ENHANCED-ECCENTRIC CALF RAISE: <https://youtu.be/JGvIODOgY6E>

(concentric with both legs, then 3 second lowering phase on one leg only -- alternate the eccentric leg from rep to rep)

EZ BAR PRONATED CURL: https://youtu.be/MfMxT_jXcPE?t=75

EZ BAR SUPINATED CURL: <https://youtu.be/i1YgFZB6all?t=139>

FRONT SQUAT: https://youtu.be/v-mQm_droHg?t=135

GLUTE-HAM RAISE: https://youtu.be/psdbgvbdd_M

HACK SQUAT: <https://youtu.be/qVek72z3F1U?t=618>

HAMMER CURL: <https://youtu.be/Kd3tbUnbueU>

HAMMER "CHEAT" CURL: <https://youtu.be/qVek72z3F1U?t=536>

HANGING LEG RAISE: <https://youtu.be/2RrGnjxSsiA?t=247>

HELMS ROW: <https://youtu.be/axoeDmW0oAY?t=419>

HIP ABDUCTION:

BANDED: <https://youtu.be/u8xxroQrqjU>

MACHINE: <https://youtu.be/zfUWbpdjczg>

WEIGHTED: <https://youtu.be/tkDW0dXYfMY>

INCLINE DUMBBELL CURL: <https://youtu.be/3FAvFJ0Vtag>

INCLINE DUMBBELL SHRUG: https://youtu.be/HsdwUZtGG_0

INVERSE ZOTTMAN CURL: https://youtu.be/oU0Lb2dD_js

L-SIT HOLD: <https://youtu.be/qVek72z3F1U?t=711>

LARSEN PRESS: <https://youtu.be/RQjPWrMMDqQ>

LATERAL RAISE (CHOICE):

BAND: <https://youtu.be/JLssC9qliZ4>

CABLE: <https://youtu.be/SJqlnYJcg5k?t=653>

DUMBBELLS: https://youtu.be/v_ZkxWzYnMc?t=215

LEG CURL (CHOICE):

LYING LEG CURL: https://www.youtube.com/watch?v=e_48W0vIU58

SEATED LEG CURL: <https://youtu.be/2CMmuH4qJh0>

LEG EXTENSION: <https://youtu.be/IjO4jkwv8wQ?t=202>

LEG PRESS: <https://youtu.be/didU4ZwAkPI?t=241>

LONG-LEVER PLANK: <https://youtu.be/1G0y8D5rFDc?t=227>

MACHINE SHOULDER PRESS: <https://www.youtube.com/watch?v=fIrl4ohSl0j8>

(or similar machine that you feel working your shoulders well)

MACHINE "STRICT FORM" ROW: <https://youtu.be/qVek72z3F1U?t=956> (can be done on any similar machine with a double overhand grip)

MEADOWS ROW: <https://youtu.be/f2JDJV0AnyY?t=336>

MULTI-HEIGHT CABLE CROSSOVER: <https://youtu.be/ST4NftL6IAQ>

NECK FLEXION/EXTENSION:

EXTENSION: <https://youtu.be/gimeRpdqWQw?t=294>

FLEXION: <https://youtu.be/gimeRpdqWQw?t=243>

NORDIC HAM CURL: <https://youtu.be/qVek72z3F1U?t=683>

PARTNER ASSISTED: <https://www.youtube.com/watch?v=TThU76oORK4>

LAT PULLDOWN OPTION: https://youtu.be/KUVo0_NruP8

OMNI-GRIP LAT PULLDOWN: <https://youtu.be/qVek72z3F1U?t=927>

ONE-ARM ROW: <https://youtu.be/djKXLt7kv7Q?t=115>

PAUSE BARBELL BENCH PRESS: <https://youtu.be/vcBig73ojpE?t=134> (with a 2-3 second pause on the chest on each rep)

PAUSE DB INCLINE PRESS: <https://www.youtube.com/watch?v=p2t9daxLpB8>
(plus a 2-3 second pause at the bottom in the stretched position)

PEC FLYE:

BAND: <https://youtu.be/d9WHnFu1xao>

CABLE: <https://youtu.be/-ElhKMDSjBY?t=110>

DUMBBELLS: <https://youtu.be/wkyadIB54wE>

PENDLAY ROW/BENT OVER ROW:

BENT OVER ROW: <https://youtu.be/djKXLt7kv7Q?t=273>

PENDLAY ROW: <https://youtu.be/axoeDmW0oAY?t=185>

PIN SQUAT: <https://youtu.be/fxitGcBp5DI>

PINCH GRIP CURL: <https://youtu.be/PJi2kKn0tbs>

PLATE SHRUG: <https://youtu.be/dWsbU1Rv7Lk>

PRISONER BACK EXTENSION: <https://youtu.be/qVek72z3F1U?t=683>

PRONE TRAP RAISE: <https://youtu.be/m2Hc5BjXbdQ>

RESET DEADLIFT:

SUMO: <https://youtu.be/KEOtP4w1KUg>

CONVENTIONAL: <https://youtu.be/c3PzzJqsKMQ>

REVERSE PEC DECK (Protracted Scapulae): <https://youtu.be/qVek72z3F1U?t=1025>

REVERSE PEC DECK (Protraction/Retrotraction ROM): <https://youtu.be/qVek72z3F1U?t=1040>

ROPE OVERHEAD TRICEPS EXTENSION: <https://youtu.be/qIW3z-ydg-M>

SEATED CABLE ROW: https://youtu.be/FbWfA_s0XL8?t=273

SEATED FACE PULL: <https://www.youtube.com/watch?v=x0WLWRbNdWM>

SINGLE-ARM OVERHEAD TRICEPS EXTENSION: <https://youtu.be/popGXI-qs98?t=367>

SINGLE-ARM PULLDOWN: https://youtu.be/tQ2LSSP_0GQ?t=437

SINGLE-LEG HIP THRUST: <https://youtu.be/qVek72z3F1U?t=672>

SISSY SQUAT: <https://youtu.be/51NvYk1lvvw>

An informative video explaining benefits of Sissy Squats from my friend Alex:

https://www.youtube.com/watch?v=82z9d_QciX8

SLIDING LEG CURL: https://youtu.be/0a_fVS2s4Ho?t=247

STANDING CALF RAISE: https://youtu.be/-qsRtp_PbVM?t=185

TRICEPS PRESSDOWN: <https://youtu.be/94DXwlcX8Po?t=106>

TRICEPS PRESSDOWN 21S: <https://youtu.be/p47splApw0Q> (do these in this order)

UNILATERAL LEG CURL (CHOICE):

LYING LEG CURL: <https://youtu.be/Y4Vv2ASsyhs?t=619>

SEATED LEG CURL: <https://youtu.be/2CMmuH4qJh0> (except with one leg at a time)

UNILATERAL LEG PRESS:

UNILATERAL OPTION: <https://youtu.be/07U0jrOxvgU>

STANDARD OPTION: <https://youtu.be/Gvgm70v4sPU>

UNILATERAL STANDING CALF RAISE: <https://youtu.be/f7DdxvcmSQQ>

WALL SLIDE: <https://youtu.be/CFiAOwA342Y>

WEIGHTED CRUNCH: <https://youtu.be/qVek72z3F1U?t=275>

WEIGHTED ECCENTRIC-OVERLOAD PULL-UP: <https://youtu.be/R7D6gFTpp2c>

WEIGHTED NEUTRAL-GRIP PULL-UP: <https://youtu.be/qXa1BUY1Gzk> (add weight as needed using a weight belt)

WEIGHTED PULL-UP: <https://youtu.be/Hdc7Mw6BIEE?t=99>

WIDE-GRIP LAT PULLDOWN: <https://youtu.be/qVek72z3F1U?t=927>



EXERCISE SUBSTITUTIONS

If there are any exercises in the program that you cannot perform due to injury, pain or lack of equipment, below are some suggested alternatives that you can substitute. The substitutions are listed in order of preference.

Note: All exercises are listed in alphabetical order and are written exactly as they appear in the program. For example, "Pull Ups" are listed under "Weighted POWERBUILDING PHASE 2.0 (4X/WEEK)

Pull-Up" and "Bench Press" is listed under "Barbell Bench Press". You can use the Command+F function to find the exercise you need if you are on a computer.

BACK SQUAT: Hack squat, smith machine squat, [leg press + 15 reps of back extensions]

BAND PULL-APART: Bent over reverse dumbbell flye, reverse cable crossover

BARBELL BENCH PRESS: Dumbbell bench press, machine chest press, smith machine bench press

BARBELL OR DUMBBELL ISOMETRIC HOLD (GRIP WORK): Plate pinch (hold two 10 lb plates together side-by-side and pinch with your fingers)

BARBELL OR EZ BAR CURL: Dumbbell curl, cable curl

BARBELL OVERHEAD PRESS: Seated barbell overhead press

BARBELL RDL: Good morning, stiff-leg deadlift

BAYESIAN CURL: Incline dumbbell curl

BLOCK PULL: Snatch-grip deadlift

BOX SQUAT: Front squat, goblet squat, safety bar squat

BULGARIAN SPLIT SQUAT: Dumbbell high step-up, reverse lunge

CABLE CRUNCH: Plate-weighted crunch, bodyweight crunch, V sit-up, bicycle crunch

CABLE CURL: Dumbbell curl, EZ bar curl, barbell curl

CABLE PULL-THROUGH: Glute-ham raise, glute bridge, reverse hyper, barbell hip thrust

CABLE REVERSE FLYE: Reverse pec deck, bent over reverse dumbbell flye

CABLE SHRUG-IN: Wide-grip barbell shrug, dumbbell shrug (shrug up and in)

CABLE TRICEPS KICKBACK: Dumbbell triceps kickback, V-bar pressdown

CHEST-SUPPORTED ROW: Cable single-arm row, chest-supported T-bar row, DB chest-supported row

CHIN-UP: Pull-up, supinated lat pulldown

CLOSE-GRIP BENCH PRESS: Close-grip dumbbell bench press, dip, machine dip

CLOSE-GRIP INCLINE BARBELL BENCH PRESS: Close-grip incline dumbbell bench press

CONCENTRATION CURL: DB preacher curl

CONSTANT-TENSION CABLE KNEELING PULLOVER: Constant-tension dumbbell lat pullover, constant-tension band lat pullover

CONSTANT-TENSION CABLE TRICEPS KICKBACK: Constant-tension dumbbell triceps kickback, constant-tension band tricep kickback

DB LATERAL RAISE: Machine lateral raise, Egyptian lateral raise

DB LATERAL RAISE SWING: Machine lateral raise, Egyptian lateral raise

DEADLIFT:

- **CONVENTIONAL:** Sumo deadlift, trap bar deadlift
- **SUMO:** Conventional deadlift, trap bar deadlift

DEFICIT PUSH-UP: Barbell incline press, paused dumbbell incline press

DIP: Assisted dip, machine dip, flat DB press (feel the stretch at the bottom)

DUMBBELL LATERAL RAISE 21S: Machine lateral raise 21s, Egyptian lateral raise 21s

DUMBBELL LATERAL RAISE ISO-HOLD: Machine lateral raise iso-hold, Egyptian lateral raise iso-hold

ECCENTRIC-ACCENTUATED BARBELL SKULL CRUSHER: Eccentric-accentuated EZ bar skull crusher, floor press, pin press, JM press

ECCENTRIC-ACCENTUATED EZ BAR OR BARBELL CURL: Eccentric-accentuated dumbbell curl, eccentric-accentuated cable curl

ECCENTRIC-ACCENTUATED LEG EXTENSION: Sissy squat, eccentric-accentuated goblet squat

ECCENTRIC-ACCENTUATED PULL-UP: Eccentric-accentuated lat pulldown, eccentric-accentuated neutral-grip pull-up

EGYPTIAN LATERAL RAISE: Dumbbell lateral raise, machine lateral raise

ENHANCED-ECCENTRIC CALF RAISE: Standing calf raise, seated calf raise, leg press calf press

EZ BAR PRONATED CURL: Dumbbell pronated curl, cable pronated curl, barbell pronated curl

EZ BAR SUPINATED CURL: Dumbbell supinated curl, cable supinated curl, barbell supinated curl

FRONT SQUAT: High-bar box squat, safety bar squat, goblet squat

GLUTE-HAM RAISE: Nordic ham curl, glute bridge, reverse hyper, cable pull-through

HACK SQUAT: Smith machine squat, leg press (feet lower on platform), high-bar box squat

HAMMER CURL: EZ bar pronated curl, rope hammer curl

HAMMER "CHEAT" CURL: EZ bar pronated "cheat" curl, rope hammer "cheat" curl

HANGING LEG RAISE: Captain's chair crunch, reverse crunch

HELM'S ROW: Humble row, chest-supported T-bar row (pronated grip)

HIP ABDUCTION:

- **BANDED:** Machine hip abduction, weighted hip abduction
- **MACHINE:** Banded hip abduction, weighted hip abduction
- **WEIGHTED:** Banded hip abduction, machine hip abduction

INCLINE DUMBBELL CURL: Bayesian curl

INCLINE DUMBBELL SHRUG: T-bar shrug, smith machine shrug

INVERSE ZOTTMAN CURL: Hammer curl, EZ bar curl

L-SIT HOLD: Captain's chair straight-leg hold, hanging leg raise (5-10 reps), long-lever plank (30 sec hold)

LARSEN PRESS: Dumbbell bench press (no leg drive)

LATERAL RAISE (CHOICE):

- **BAND:** Machine lateral raise, Egyptian lateral raise, dumbbell lateral raise
- **CABLE:** Machine lateral raise, band lateral raise, dumbbell lateral raise
- **DUMBBELLS:** Machine lateral raise, Egyptian lateral raise, band lateral raise

LEG CURL (CHOICE):

- **LYING LEG CURL:** Seated leg curl, sliding leg curl
- **SEATED LEG CURL:** Lying leg curl, sliding leg curl

LEG EXTENSION: Sissy squat, goblet squat

LEG PRESS: Goblet squat, walking lunge

LONG-LEVER PLANK: Ab wheel rollout, plank, hollow body hold

MACHINE SHOULDER PRESS: Seated dumbbell shoulder press, dumbbell Arnold press

MACHINE "STRICT FORM" ROW: Cable "strict form" row, dumbbell "strict form" row

MEADOWS ROW: Helms row, humble row, chest-supported T-bar row (overhand

grip)

MULTI-HEIGHT CABLE CROSSOVER: Flat-to-incline dumbbell flye, pec deck

NECK FLEXION/EXTENSION: Neck bridge, isometric yoga ball wall neck hold

NORDIC HAM CURL: Swiss ball leg curl, sliding leg curl, seated leg curl, lying leg curl

OMNI-GRIP LAT PULLDOWN: Omni-grip pull-up, chin-up, neutral-grip pull-up

ONE-ARM ROW: Cable single-arm row, dumbbell chest-supported row

PAUSE BARBELL BENCH PRESS: Pause dumbbell bench press

PAUSE DB INCLINE PRESS: Pause deficit push-up, pause barbell incline press

PEC FLYE: Machine flye (pec deck), cable flye, DB flye, banded push up

PENDLAY ROW/BENT OVER ROW: Dumbbell row, cable seated row

PIN SQUAT: Pause barbell back squat (1-2 sec pause in the hole), box pause squat (1-2 second pause on the box)

PINCH GRIP CURL: Pronated (reverse-grip) dumbbell curl, pronated (reverse-grip) EZ bar curl

PLATE SHRUG: Dumbbell shrug, barbell shrug

PRISONER BACK EXTENSION: Dumbbell 45° hyperextension, supermans

PRONE TRAP RAISE: Face pull, dumbbell rear delt flye

RESET DEADLIFT: Sumo/conventional deadlift, trap bar deadlift

REVERSE PEC DECK (PROTRACTED SCAPULAE): Face pull, dumbbell rear delt flye

REVERSE PEC DECK (PROTRACTION/RETRACTION ROM): Cable reverse flye, dumbbell rear delt flye

ROPE OVERHEAD TRICEPS EXTENSION: Dumbbell overhead triceps extension,

band overhead triceps extension

SEATED CABLE ROW: Chest-supported T-bar row, dumbbell row, barbell row

SEATED FACE PULL: Cable reverse flye, dumbbell rear delt flye, reverse pec deck

SINGLE-ARM OVERHEAD TRICEPS EXTENSION: Single-arm dumbbell overhead triceps extension, single-arm band overhead triceps extension

SINGLE-ARM PULLDOWN: Lat pulldown, band lat pulldown

SINGLE-LEG HIP THRUST: Hip thrust, glute bridge, dumbbell 45° hyperextension

SISSY SQUAT: Leg extension, goblet squat

SLIDING LEG CURL: Seated leg curl, lying leg curl, swiss ball leg curl, Nordic ham curl

STANDING CALF RAISE: Seated calf raise, leg press calf press

TRICEPS PRESSDOWN: Band triceps pressdown, rope overhead triceps extension, dumbbell triceps kickback

TRICEPS PRESSDOWN 21S: Band tricep pressdown 21s, rope overhead triceps extension 21s, dumbbell triceps kickback 21s

UNILATERAL LEG CURL (CHOICE): Lying leg curl, seated leg curl, sliding leg curl

UNILATERAL LEG PRESS: Leg press, dumbbell walking lunge, reverse lunge, dumbbell step-up

UNILATERAL STANDING CALF RAISE: Unilateral leg press calf press, unilateral seated calf raise, standing calf raise

WALL SLIDE: Cable external rotation, band external rotation

WEIGHTED CRUNCH: Cable crunch, bicycle crunch, bodyweight crunch
(increase reps to hit RPE)

WEIGHTED ECCENTRIC-OVERLOAD PULL-UP: Pull-up (increase reps to hit RPE),

lat pulldown, neutral-grip lat pulldown

WEIGHTED NEUTRAL-GRIP PULL-UP: Pull-up, neutral-grip lat pulldown

WEIGHTED PULL-UP: Lat pulldown, neutral-grip lat pulldown

WIDE-GRIP LAT PULLDOWN: Wide-grip pull-up, wide-grip assisted pull-up,

band lat pulldown



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