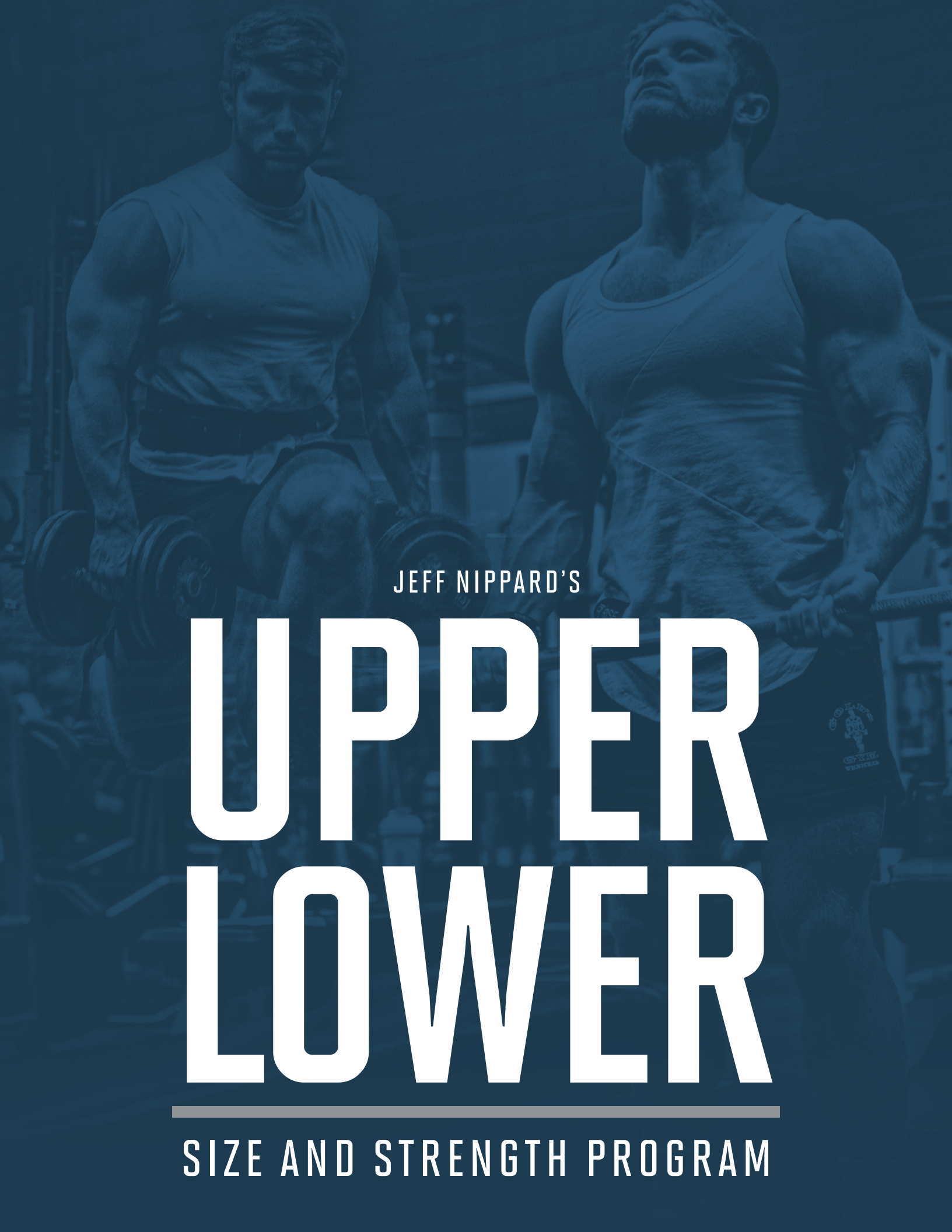
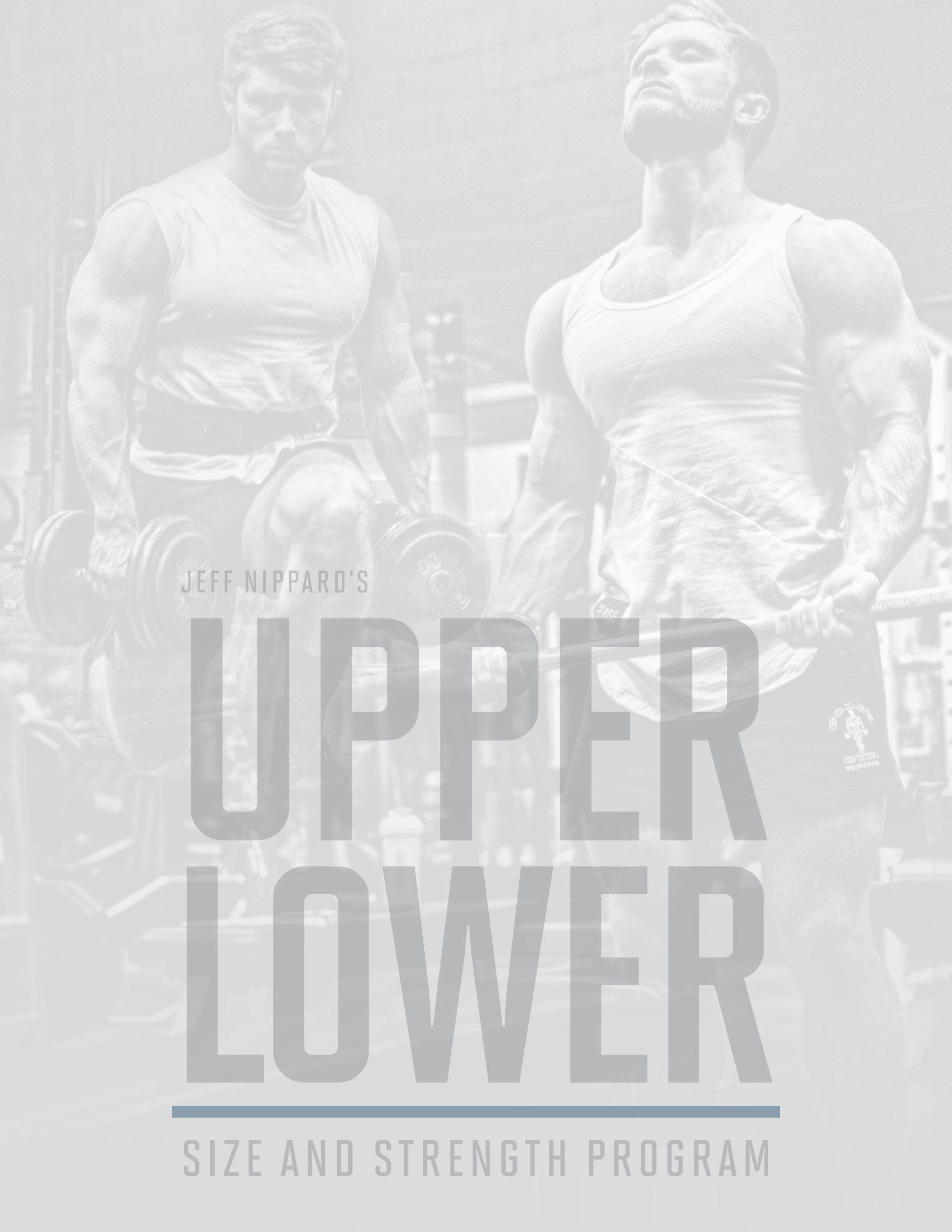


JEFF NIPPARD'S

UPPER LOWER

SIZE AND STRENGTH PROGRAM



JEFF NIPPARD'S

UPPER LOWER

SIZE AND STRENGTH PROGRAM

DISCLAIMER

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Jeff Nippard is not a doctor or registered dietitian. The contents of this document should not be taken as medical advice. It is not intended to diagnose, treat, cure, or prevent any health problem - nor is it intended to replace the advice of a physician. Always consult your physician or qualified health professional on any matters regarding your health. Use of the information in this program is strictly at your own risk. Jeff Nippard and/or STRCNG Incorporated will not assume any liability for any direct or indirect losses or damages that may result including, but not limited to, economic loss, injury, illness or death.

COMMENTS FROM JEFF

For customer support please email info@strcng.com. As much as I love connecting on social media, I am not able to reliably respond to the questions I receive across platforms so please direct any questions to the email above. Please allow 3-5 business days for an email reply.

Thank you so much for your support and good luck with the training!

TABLE OF CONTENTS

ABOUT ME

Jeff is a professional drug-free bodybuilder and powerlifter. Through his informative and entertaining Youtube channel which has gathered a fan-base of over 1 million subscribers, Jeff aims to share 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 getting healthier.

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 compliment 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 2014 Online Fitness Summit, 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 Kelowna, Canada where he is producing informative YouTube videos and podcasts .

KEY TERMS

DB: Dumbbell

LSRPE: Last set RPE

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 weight or reps)

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.

TEMPO: The speed at which the lift occurs.

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

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

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

LOAD: The weight of the external resistance

INTENSITY: Effort and load

VOLUME: Total amount of work performed. Usually approximated as sets x reps x load

FREQUENCY: How often you directly train a given muscle per 7 days

HYPERTROPHY: The growth of (muscle) tissue

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

PRIMARY EXERCISE: Main heavy compound movements that involve a large muscle mass (For Example: squats, bench presses and deadlifts)

SECONDARY EXERCISE: Compound exercises which involve less muscle mass (For Example: cable rows, lunges, hip thrusts, military presses, pull-ups, etc.)

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

PERIODIZATION: The organization of training over time

ABOUT THIS PROGRAM

WHAT THIS PROGRAM IS

The primary goal of this program is to maximize muscle hypertrophy and strength development for individuals in the intermediate-advanced stage of training advancement. The secondary goal of this program is to introduce more advanced and specialized intensity techniques to recruit a larger spectrum of muscle fibers and focus on weak point development. 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 pumping and 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 how long you've been in the gym, this program will get you on the right track.

This program is intended to build on my Push Pull Legs Hypertrophy Program but you can still run this program without having run the PPL program first. You can also run these in "reverse order" where you run the upper/lower program first and then run the PPL program after.

Before we dive into the nuts and bolts of the program itself, I want to first make it clear what this training manual is intended to accomplish. As I'll allude to throughout the document, this program is only comprised of a single training block lasting 9 weeks. Because wave-loading is used as the main progression model, there is no formal deload included, however, fatigue will be managed by "waving" efforts in the gym (where Weeks 1, 4 and 7 serve as "mini-deload weeks"). We will be using three separate 3-week waves: Week 1 will feel relatively easy, Week 2 will be a bit harder and Week 3 will be quite challenging. Then in Week 4, efforts will be lower again and we will build back up from there over the next 3 weeks. This is what is meant by "waving".

As you get more and more advanced, progress becomes more and more difficult to achieve. To break through sticking points in progression, this routine focuses heavily on training variables like advanced intensity techniques, specific form cues, mind-muscle connection and recovery management.

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 before advancing to this routine to ensure

that you have already established an adequate strength and technique base before running this high frequency program.

This program is not intended to be an all-inclusive resource for all things training related. I initially wrote this document as a supplemental resource to my Science Applied YouTube Series and my Fundamentals YouTube Series, meaning that there will be information covered in the series that won't be recapitulated here.

With that said, there is still plenty to chew on here: just about 80 pages in total, including a full blown anatomy section (something I didn't have the chance to cover in a single YouTube Series in detail), a section explaining the specific programming principles at play (volume, intensity, frequency, etc.), video links for technique demonstration for each exercise and over 30 scientific references.

FUNCTIONAL ANATOMY

It's important to understand the functional anatomy and biomechanics of the main muscles we'll be targeting before we can understand how to best train them. Functional anatomy determines what muscles can do. There are two things to consider when looking at a muscle's functional anatomy – origin and insertion. Muscles attach to bone by tendons from at least two points. The origin is the fixed attachment which does not move and the insertion is the attachment which moves closer to the origin when a muscle contracts. This contracting phase, referred to as the concentric phase (known as the "positive" phase), is normally followed by the eccentric phase (lowering the weight – also known as the "negative" phase).

Figure 1A: The Main Posterior Muscles

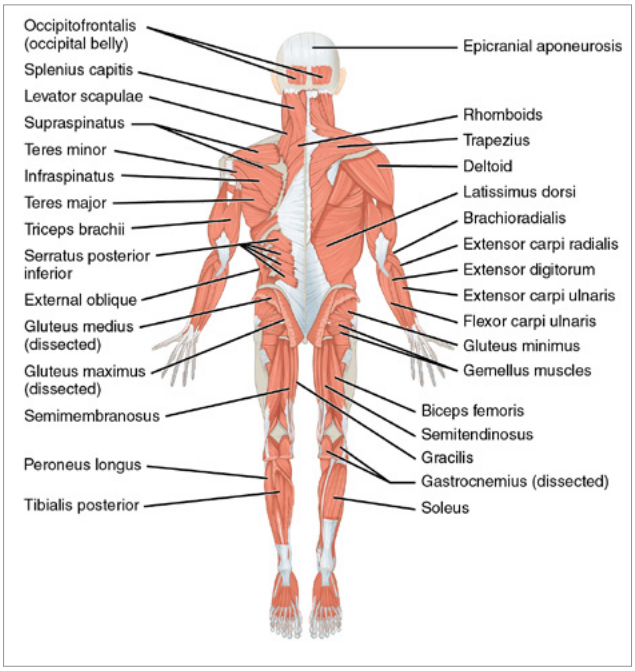


Figure 1B: The Main Anterior Muscles

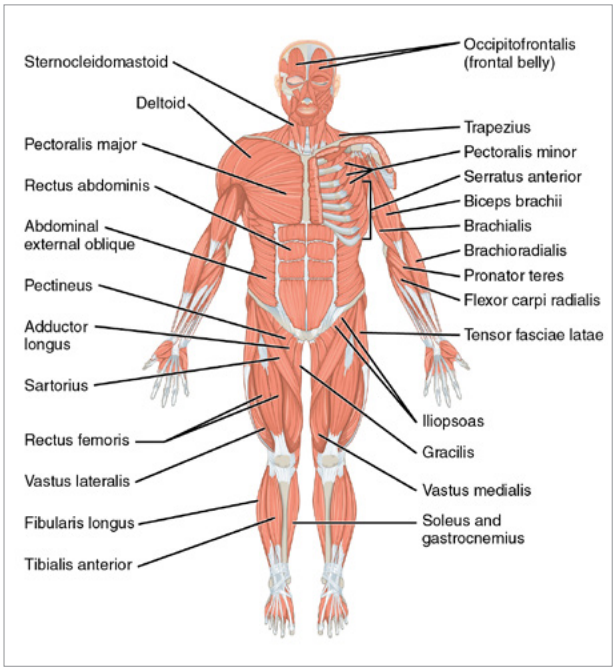
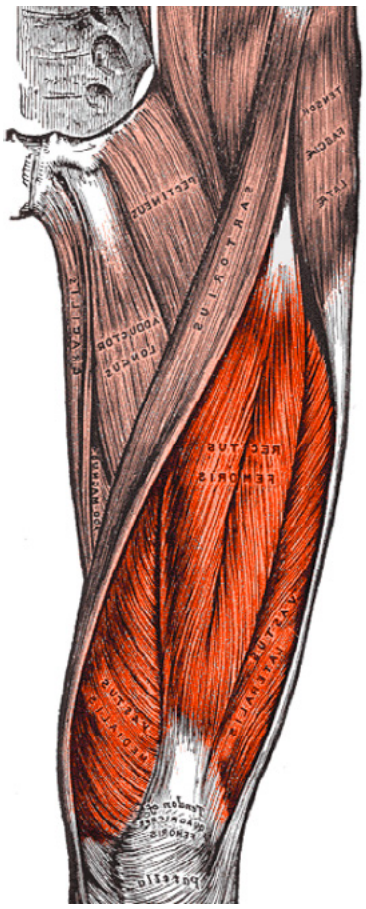


Figure 2: Quadriceps Anatomy



QUADRICEPS: The quadriceps ("quads" for short) are comprised of four muscles, often referred to as "heads": the vastus lateralis ("quad sweep"), vastus medialis ("tear drop"), rectus femoris (the middle portion of your upper thigh), and vastus intermedius (which runs underneath rectus femoris). The quads act to extend the knee, taking the leg from a bent position to a straight position. Each muscle of the quad has its own unique insertion which we won't worry about too much here. Just remember that the main action of the quads is to extend (straighten) the knee.

ORIGIN: The vasti muscles originate on the body of femur ("thigh bone"). The rectus femoris originates on the illium of the "hip bone"

INSERTION: Tibial tuberosity

EXERCISES: Back squat, leg press, front squat, leg extension, dumbbell walking lunge, Bulgarian split squat, knee-banded leg press, dumbbell step-up

HAMSTRINGS: The hamstrings are actually a complex of four muscles: semimembranosus, semitendinosus, and biceps femoris (which consists of a long head and a short head). The hamstrings collectively act to both flex the knee (take the leg from a straightened position to a bent position, as in a leg curl) and extend the hip (pushing your hips forward, as in a deadlift).

ORIGIN: The semitendinosus, semimembranosus, and long head of the biceps femoris originate on the ischial tuberosity. The short head of the biceps femoris originates on the linea aspera.

INSERTION: The semitendinosus and semimembranosus both insert on the tibia, while both the long and short heads of the biceps femoris insert at the fibula.

EXERCISES: Stiff leg deadlift, good morning, deadlift, lying leg curl, seated leg curl, cable pull-through, deficit deadlift, barbell 45° hyperextension, sliding leg curl, reverse hyper

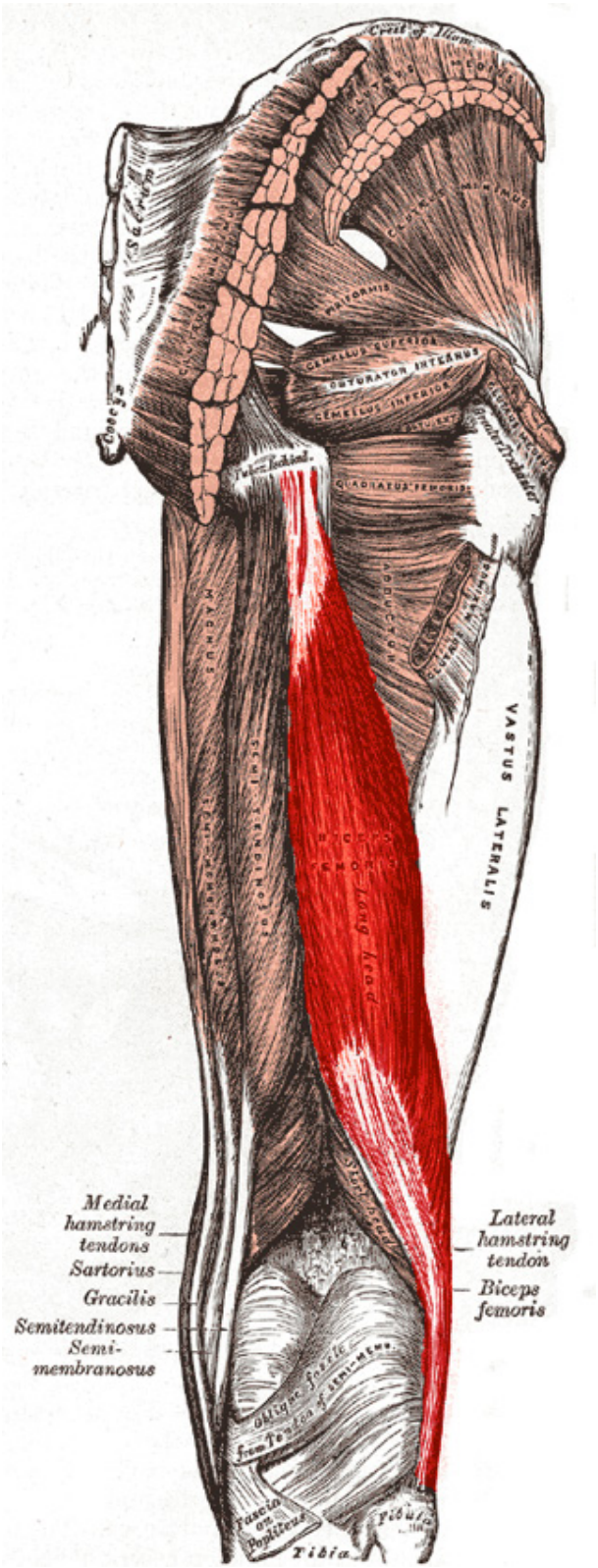


Figure 3: Hamstrings Anatomy

GLUTEALS: The gluteals (or "glutes") are also a complex of muscles consisting of the gluteus maximus, gluteus medius, and gluteus minimus. As the name suggests, the

gluteus maximus is the largest of the three, followed by the gluteus medius, and the smallest gluteus minimus. The gluteus maximus has multiple origins including the pelvis, sacrum, coccyx, and thoracolumbar fascia and multiple insertions including the upper femur and IT band. Because of this, it is able to perform a wide variety of functions, but primarily:

- Hip extension (push your hips forward)
- Hip abduction (move your thigh away from the midline)
- Hip external rotation (rotating your thigh bone outwards)
- Posterior pelvic tilt (tucking your butt "in")

The smaller glute medius still occupies a hefty portion of the rear hip musculature and functions primarily as a stabilizer during dynamic movement and as a hip abductor. It originates on the pelvis and inserts on the femur. It is most effectively trained with exercises that require a high degree of stability, especially unilateral movements such as walking lunges, and exercises that train hip abduction, such as machine hip abductions.

ORIGIN: The gluteus maximus, medius, and minimus originate on the ilium.

INSERTION: The gluteus maximus and gluteus minimus insert to the iliotibial tract (IT band) and the gluteal tuberosity on the femur. The gluteus medius inserts to the greater trochanter on the femur.

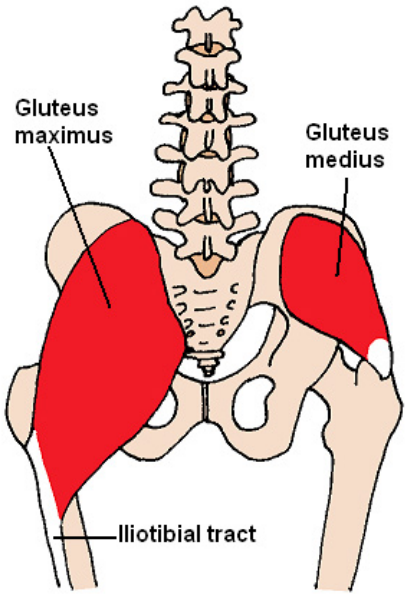


Figure 4: Gluteals Anatomy

EXERCISES: Back squat, stiff leg deadlift, good morning, deadlift, front squat, barbell hip thrust, dumbbell walking lunge, cable pull-through, machine hip abduction, deficit deadlift, Bulgarian split squat, barbell 45° hyperextension, knee-banded leg press, dumbbell step-up, reverse hyper, cable standing hip abduction

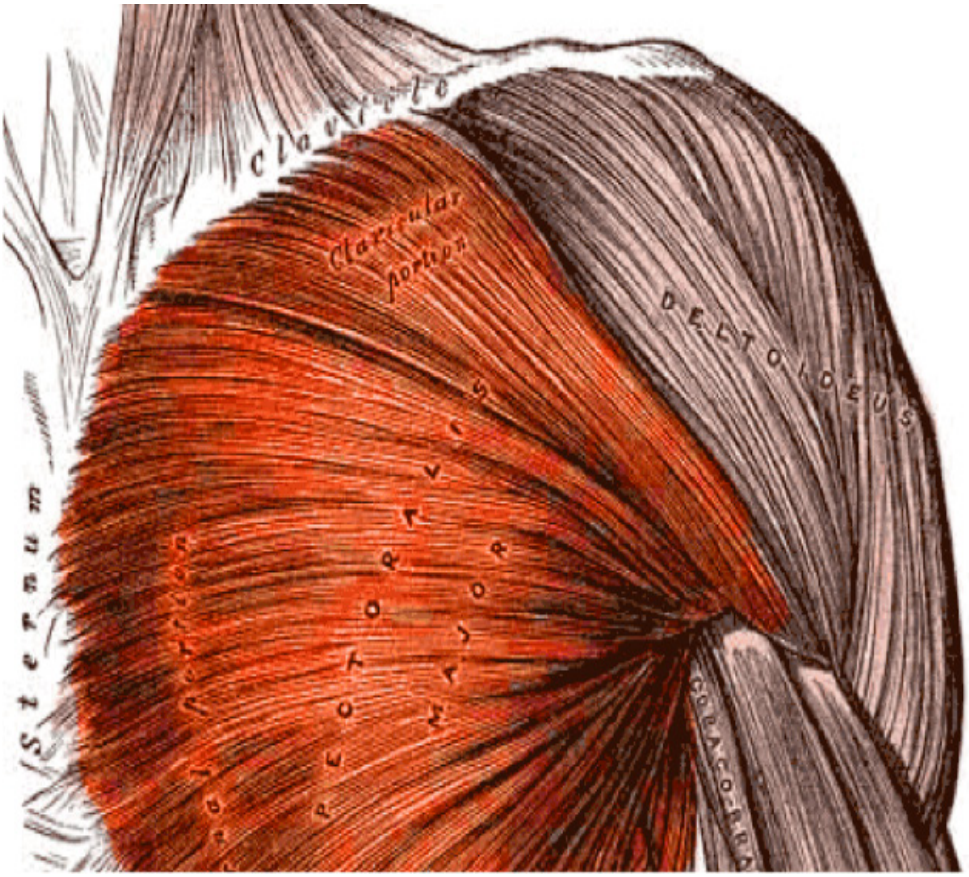


Figure 5: Pectoral Anatomy

PECTORALIS: There are two pectoralis muscles (pecs for short) located on your chest: the pectoralis major and the pectoralis minor. The pectoralis major can be divided into two heads: the clavicular head or "upper chest" (which originates at the clavicle) and the sternal head or "lower chest" (which originates at the sternum). The pecs act to adduct the upper arm (bring the upper arm across the body), and to internally rotate the shoulder joint. The clavicular fibers also aid in shoulder flexion (raising your upper arm up), but the sternal fibers do not.

ORIGIN: The pectoralis major originates on the sternum and clavicle. The pectoralis minor originates on the 3rd-5th ribs.

INSERTION: The pectoralis major inserts on the humerus. The pectoralis minor inserts to the coracoid process (front of your shoulder).

EXERCISES: Barbell bench press, pause dumbbell incline press, barbell close-grip bench press, cable flye 21s, barbell incline press, dip, machine chest press, barbell floor press, push-up, California press.

BACK: The back is comprised of a massive web of muscles, so for the sake of simplicity we will only look at the largest back muscles. The latissimus dorsi (lats for short) is a big muscle which runs from just underneath your arm pit all the way down to the bottom of your back. The lats primarily act to extend the shoulder (bring your upper arm downward) and adduct the shoulder (moving your elbows towards your mid back).

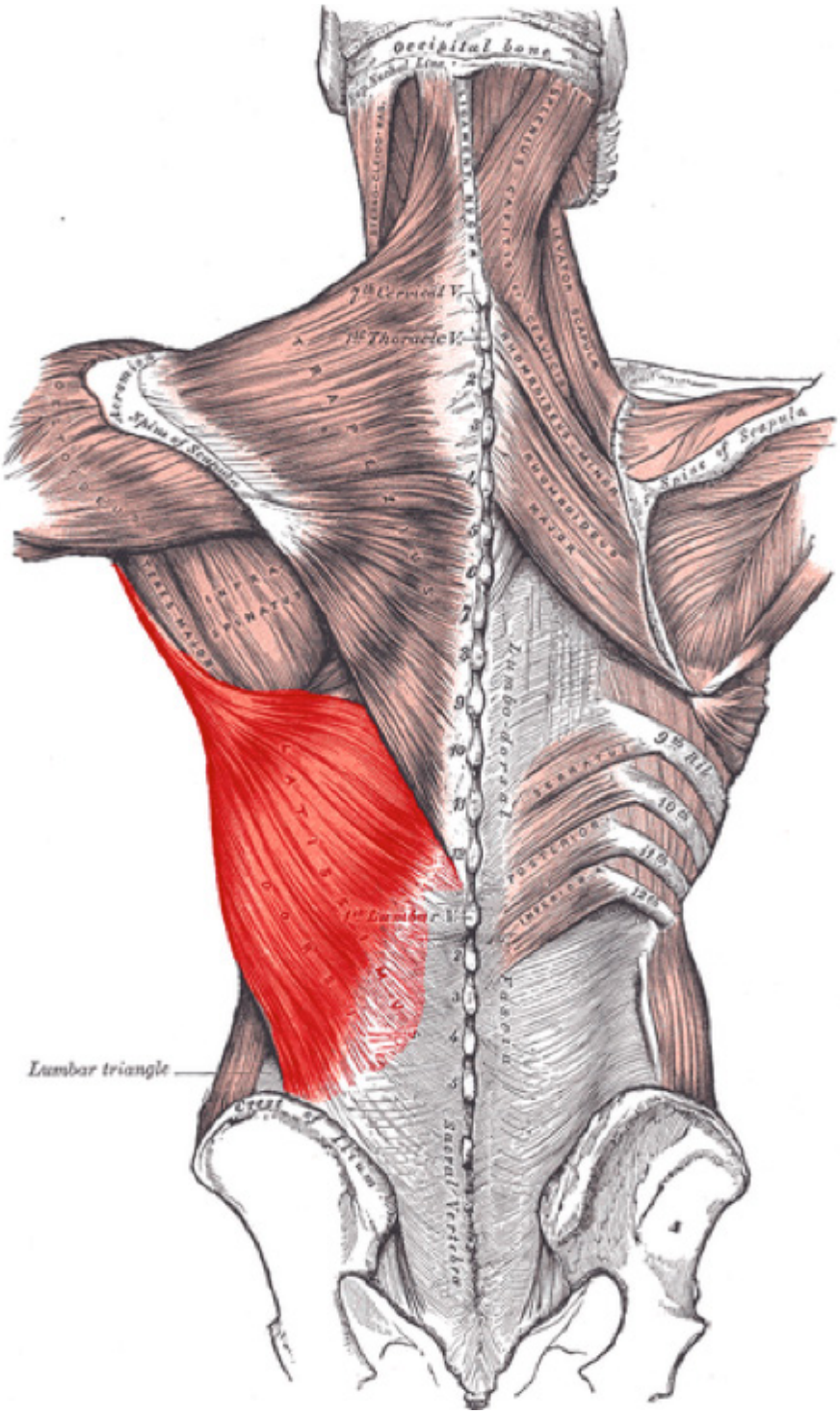


Figure 6: Latissimus Dorsi Anatomy

The trapezius (traps for short), is another large muscle running from the base of the skull down to the middle of your inner back. When people think about the traps, they tend to only think of the upper fibers, but the middle and lower fibers take up a very large surface area as well. The traps act to elevate the scapulae (shrugging your shoulders), retract the scapulae (pull the shoulder blades back), and extend the shoulder (pull your arms backward when your elbows are raised).

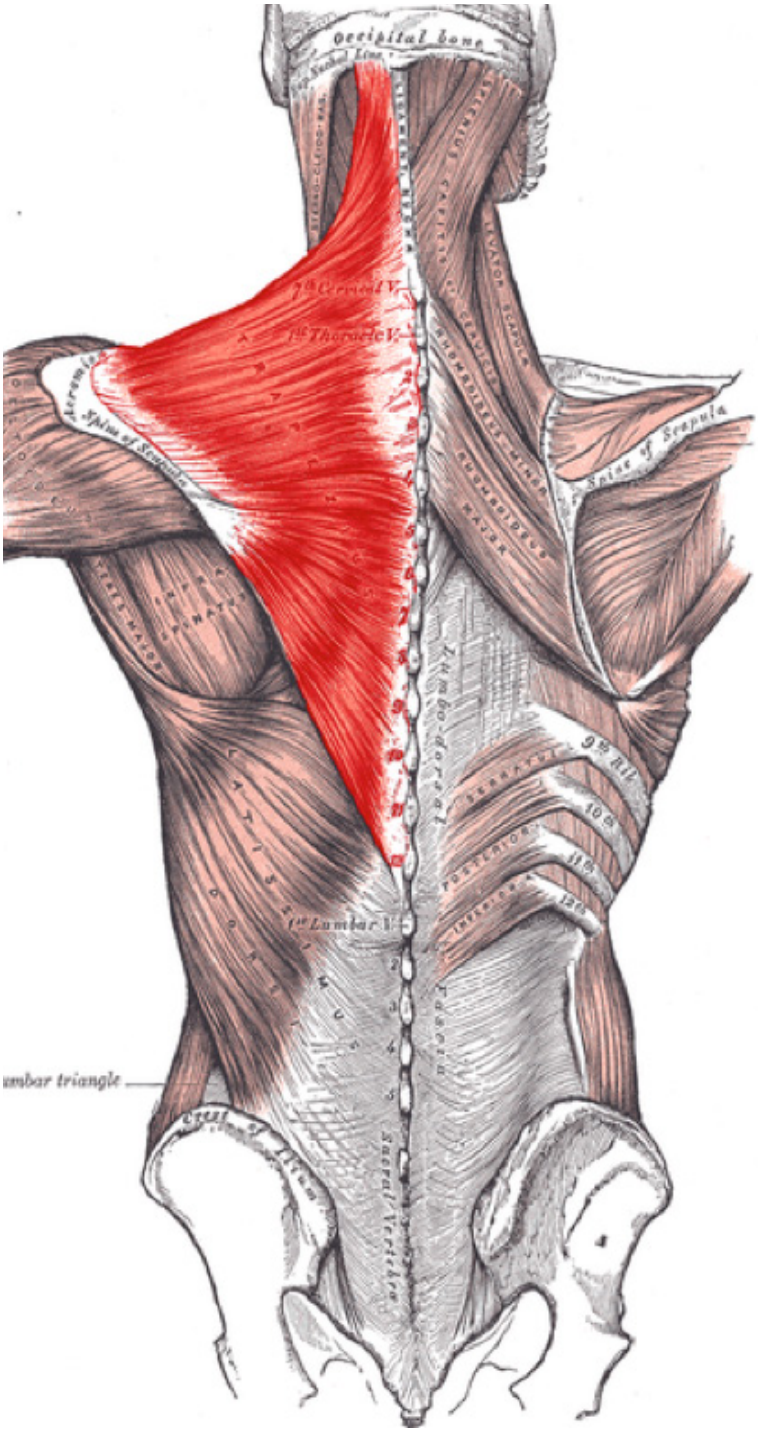


Figure 7: Trapezius Anatomy

INSERTION: Nuchal ligament

EXERCISES: Pull-up, pendlay row, machine high row, seated face pull, neutral-grip pulldown, cable seated row, kneeling straight-arm cable pull-over, cable reverse flye, dumbbell one-arm row, chest-supported T-bar row w/band, low-to-high reverse flye, single-arm pulldown, seal row, reverse pec deck

LATS:

ORIGIN: : Illiac crest and thoracolumnar fascia

INSERTION: Humerus

EXERCISES: Lat pulldown, Pendlay row/bent over row, wide-grip pull-up, cable close grip row, machine chest-supported row w/ band, seated T-bar row, neutral-grip pull-up, eccentric-accentuated cable row, banded chest-supported row, barbell supinated row, supinated lat pulldown, machine high row, barbell bent over row

TRAPS:

ORIGIN: Occipital bone (upper traps), corresponding supraspinous ligaments for the mid and lower traps

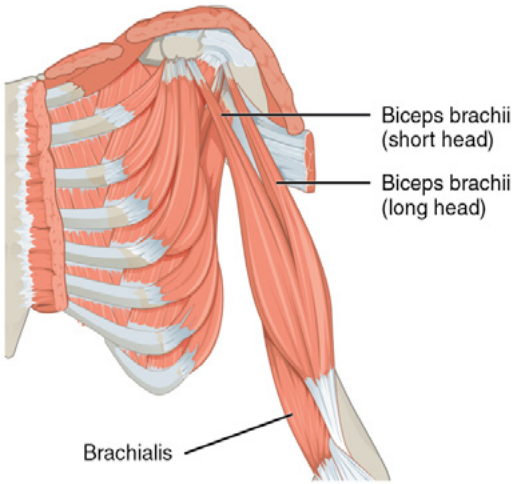


Figure 8: Biceps Anatomy

BICEPS: The biceps brachii are a two-headed muscle containing a long head and a short head. They collectively act to flex the elbows (bring the elbow from a straightened position to a bent position), and supinate the wrist (twist the pinky upwards). The brachialis, which runs underneath the biceps brachii, is also a strong elbow flexor.

ORIGIN: coracoid process, supraglenoid tubercle

INSERTION: Radial tuberosity

EXERCISES: Cable close-grip row, supinated dumbbell curl, seated T-bar row, eccentric-accentuated cable row, dumbbell row, EZ bar curl 21s, barbell supinated row, neutral-grip pull-up, supinated lat pulldown, machine high row, eccentric-accentuated hammer curl

TRICEPS: The triceps lie on the back of your upper arm and are made up of three heads: a long head, a medial head, and a lateral head. The triceps collectively act to extend the elbow (bring the elbows from a bent position to a straightened position).

ORIGIN: Infraglenoid tubercle, radial groove

INSERTION: Olecranon process on ulna

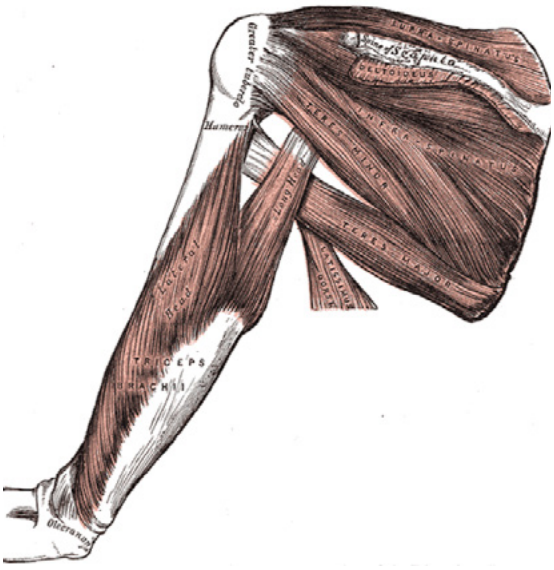


Figure 9: Triceps Anatomy

EXERCISES: barbell bench press, dumbbell incline press, barbell close-grip bench press, dip, myo reps floor skull crusher, machine chest press, cable triceps kickback,

barbell floor press, push-up, California press, eccentric-overloaded rope overhead triceps extensions

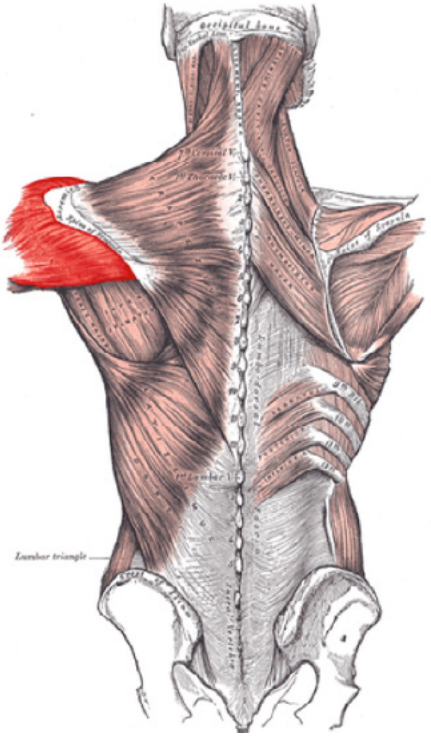


Figure 10: Deltoid Anatomy

DELTOIDS: The deltoids (or delts for short) are comprised of 3 different heads, the anterior deltoid (the "front" delt), the lateral deltoid (also known as the "middle" delt, and often mistakenly called the "medial delt"), and the posterior delt (also known as the "rear" delt). The anterior delt acts to flex the shoulder (raise the arm up), the lateral delt acts to abduct the upper arm (raise your upper arm out directly to your sides), and the posterior delt acts to abduct the shoulder (pull the shoulder back when the elbows are raised).

ORIGIN: Clavicle, acromion process, spine of scapula

INSERTION: Deltoid tuberosity of humerus

EXERCISES: Barbell bench press (anterior), pendlay row (posterior), machine lateral raise (lateral), constant-tension shoulder press (anterior, lateral), barbell overhead press (anterior, lateral), close-grip bench press (anterior), machine chest-supported row w/ band (posterior), dip (anterior), seated T-bar row (posterior), db front raise/lateral raise (anterior, lateral), pec deck (anterior), barbell push press (anterior, lateral), barbell floor press (anterior), Arnold press (anterior, lateral, posterior), cable upright row (lateral), barbell bent over row (posterior), band pull-apart (posterior)

ABS: The abs are a huge web containing many muscles which all have a similar function. When talking about the abs, we are typically referring to the rectus abdominis – which is the muscle that makes the "6-pack". The rectus abdominis acts

to flex the spine, rotate the torso, and resist spinal extension (prevent your lower back from arching inwards).

ORIGIN: Crest of pubis

INSERTION: Xiphoid process

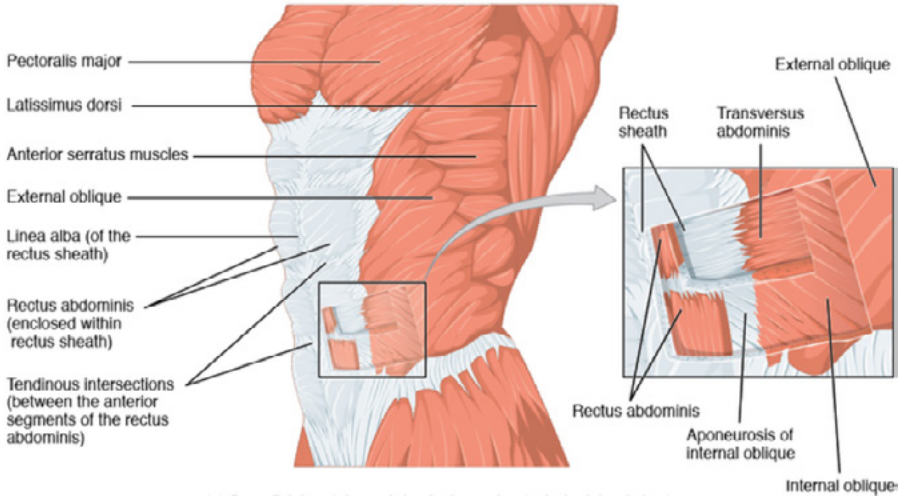


Figure 11: Abdominal Anatomy

EXERCISES: Cable crunch. Weighted crunch, hanging leg raise, plank, dumbbell row (via anti-rotation)

Figure 12: Anatomy of the Calf Muscles

CALVES: The calves are a complex consisting of two muscles – the gastrocnemius (or gastroc for short) and the soleus. The gastrocnemius is the big muscle underneath the back of your knee and the soleus is a smaller, flatter muscle which runs underneath the gastroc down to your ankle. Both the gastroc and soleus act to plantarflex the ankle (point your toes down).

ORIGIN: Lateral and medial condyle of femur

INSERTION: tendo calcaneus

EXERCISE: Standing calf raise, tempo standing calf raise

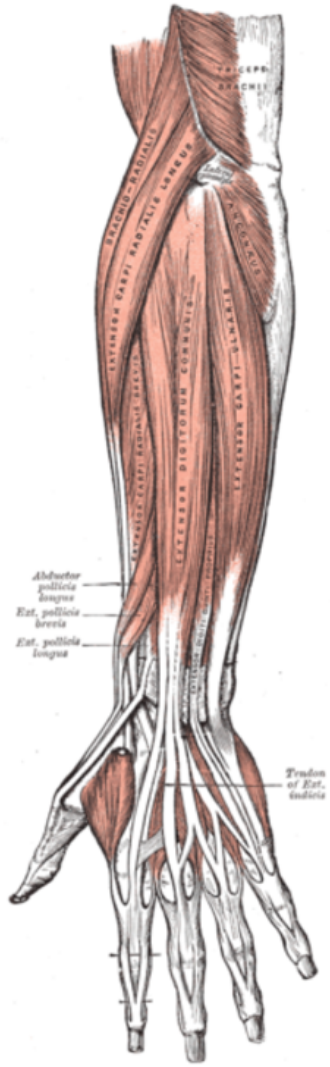


Figure 13: Posterior Forearm Anatomy

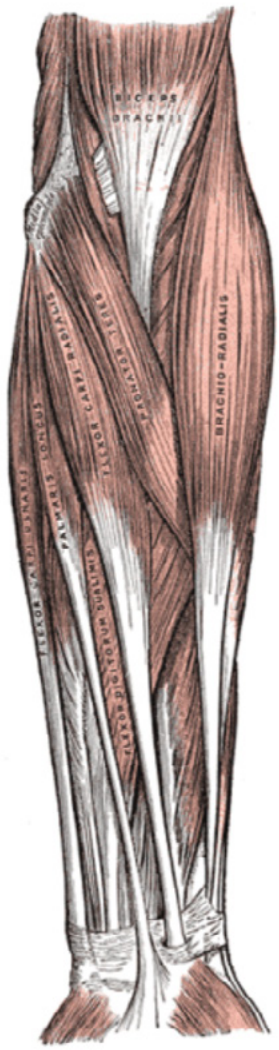


Figure 14: Anterior Forearm Anatomy

FOREARMS: The web of musculature of the forearms perform a few primary functions: wrist flexion, wrist extension, wrist supination, and elbow flexion. Wrist flexion is pulling your palm towards your inner elbow; wrist extension is the opposite: pulling your palm away from your inner elbow; wrist supination is rotating your hand such that your pinky is higher than your every other finger, and elbow flexion is pulling your forearm closer towards your shoulder ("curling"). The forearm elbow flexors are stronger when the wrist is in a pronated (palms down) position.

ORIGIN: Most of the posterior muscles originate on the lateral epicondyle of the humerus. Most of the anterior muscles originate on the common flexor tendon.

INSERTION: There are numerous and varied insertion points, but most muscles insert somewhere on the fingers

EXERCISES: Pull-up, deadlift, reverse grip EZ bar curl, dumbbell preacher curl, hammer curl, wrist extension/flexion, high cable curl, dumbbell pronated curl, dumbbell hammer curl, dumbbell supinated curl

F.A.Q.

1: How do I know if I am progressing?

A: Bodybuilding is a marathon, not a sprint. It can be difficult to accurately determine if you are making visual progress day-to-day or even week-to-week. Taking physique progress photos every 4-6 weeks and comparing them side by side is a good way to detect visual differences that you simply wouldn't notice in the mirror. But ultimately, because of the relationship between strength gain and muscle gain, the main metric I want you to use for tracking your progress 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) or in an app, so you don't have to rely on memory to keep track of personal strength records. Taking body measurements a few times a year can also be helpful (arms, thigh, waist, neck) but simply focusing on steady strength progression will be your best proxy for determining muscular progress.

2: How much muscle can I expect to gain?

A: How you respond to training will be largely determined by genetic factors and your specific training history (i.e. How close your are to your genetic "limit".) As a rough ballpark estimate for early intermediates with about 1-2 years of lifting experience, you can expect to gain roughly 0.5-1 lbs of muscle per month (6-12 lbs of muscle gained in your second year). For intermediate-advanced trainees, 0.25-0.5 lbs of muscle gain per month is reasonable (3-6 lbs of muscle gained per year). For practical purposes, women can divide muscle gain estimates in half.

3: What gym equipment should I use?

A: Gym equipment is optional as there are no required pieces of equipment to gain muscle and increase strength. With that being said, investing in an 10mm prong or lever belt, knee sleeves, squat shoes, and straps can be beneficial in allowing you to lift more weight for certain exercises.

You can find all of my recommended equipment at the following link:
http://Rise.ca/jeff

4: I have a belt. When should I wear it?

A: Optionally use a lifting belt for working sets on exercises like squats, deadlifts and overhead (military) presses. Strength is a specific skill, so practice every rep in exactly the same way (meaning, if you're going to use a belt at all, use it consistently and for the same movements). I wouldn't recommend wearing on a belt on light warm-up sets.

5: I am not getting sore from my workouts. Is the program not working?

A: Muscle soreness is largely attributed to eccentric contractions [1] and long muscle length contractions [2]. Delayed onset muscle soreness (DOMS) isn't

required for hypertrophy to occur, but the associated muscle damage might play a role in hypertrophy [3]. With that said, the main goal of the program is to increase strength and size, 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.

6: I am getting very sore from my workouts. Should I skip the gym until I am not sore?

A: 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 [4] and increase ROM [5], so if you are consistently getting sore week after week, consider adding a short 3-5 minute foam rolling routine at the end of the 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 for any of the planned exercises, or finding it difficult to complete a full ROM due to pain, do not train. Otherwise, in the case of mild soreness, perform a slightly longer warm up 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.

7: Should I eat in a caloric deficit, maintenance, or surplus while running this program?

A: Eating in a slight caloric surplus will yield the best results and best recovery, however, if your main goal is fat loss, 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). 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 caloric deficit.

8: The warm-up isn't enough for me. Can I add to it?

A: You can add warm-up exercises to the protocol but your warm-up shouldn't take any longer than 10-20 minutes. It is important to stay injury-free, so don't rush into your workout.

9. Why is there such little exercise variation from week to week?

A: Changing exercises from week to week is more likely to flatten out the strength progression curve. This is to ensure both progression by adding volume incrementally to these specific movements and mastery of these movements in terms of form and technique. There is exercise variation in exercise selection between Waves 1, 2 and 3 to avoid monotony and create a novel training stimulus.

10. Isn't this too much volume?

A: Please see "A disclaimer about volume" on page 72.

11. Isn't this too little volume?

A: Please see "A disclaimer about volume" on page 72.

12. What do I do after I finished the program?

A: Please see the "Progression" section on page 61 to be able to run this program over and over again.

13. What are the blank boxes in the middle of each program for?

A: They are for you to track your weights each week, so you can focus on strength progression from week 1 to week 9. Of course, this will only work if you print the program out. The other option would be to keep a notebook and simply pencil

in your lifts each week. Keeping up with this habit of tracking is going to be an extremely important part of your success on this program.

14. I can't do "X Exercise". What should I replace it with?

A: Please see "Exercise Substitutions" on page 74.

15. 6 days is too much for me. What should I do?

A: This program was written with the vast majority of intermediate-advanced trainees in mind. If you only have 4 days per week to train, I'd recommend running my Fundamentals Upper Lower Program instead. If you can only train 5 days per week, I would recommend skipping day 5 and instead running the program as: Day 2, Day 1, Day 4, Day 3, Day 6 which will still allow you to hit your upper body 3x per week and lower body 2x per week while recovering sufficiently between sessions.

Please direct all other question to info@strcng.com. 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. Please allow 3-5 business days for a reply.

WARM UP

Before we look at exactly how you should warm-up, it's important to consider warming up serves to accomplish. The main purpose behind warming up is to increase core body temperature, which improves performance and reduces risk of injury [6] [7]. Your circadian rhythm will largely determine your core body temperature, meaning it varies throughout the day. When you wake up, your core temperature is at its lowest and it increases throughout the day. There seems to be a "sweet spot" for core body temperature in terms of safety and performance, so try not to train too hot or too cold. Generally speaking, breaking a light sweat through some form of cardio activity/machine is a good idea before jumping into any heavy lifting. Doing at least 5-10 minutes of low-moderate intensity cardio is especially prudent if you train early in the morning [8].

Warm-ups may also serve as a way to increase muscle activation. Dynamic warm-up drills (active stretches that take joints through a range of motion) can improve

performance and force output [9]. 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) [4] and brief foam rolling with a specific focus on "tight areas" before a session can both improve range of motion [10] and prevent injury [11]. Light foam rolling for 2-3 minutes prior to lifting is recommended.

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 warm up is only required for Primary Exercises
- For example, if you were working up to 4 sets of 350 lbs 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
- Note: Remember that such an extensive warm up is only required for Primary Exercises.

WARM UP PROTOCOL

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	2	12	12 EACH LEG
SIDE/SIDE LEG SWING	2	12	12 EACH LEG
STANDING GLUTE SQUEEZE	2	15 SEC	SQUEEZE YOUR GLUTES AS HARD AS POSSIBLE
PRONE TRAP RAISE	2	15	MIND MUSCLE CONNECTION WITH MID BACK
CABLE EXTERNAL ROTATION	2	15	15 EACH SIDE
CABLE INTERNAL ROTATION	2	15	15 EACH SIDE
OVERHEAD SHRUG	2	15	LIGHT SQUEEZE ON TRAPS AT THE TOP OF EACH REP

UPPER/LOWER
PROGRAM

WEEK

1

DAY 1

LOWER #1	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BACK SQUAT	3	4	75%	3-4MIN					SIT BACK AND DOWN, 15° TOE FLARE, DRIVE YOUR KNEES OUT LATERALLY	
ECCENTRIC-ACCENTUATED STIFF LEG DEADLIFT	3	10	RPE7	2-3MIN					4-SECOND LOWERING PHASE. KEEP YOUR HIPS HIGH	
CONSTANT-TENSION LEG PRESS	2	20	RPE8	2-3MIN					DON'T STOP IN BETWEEN REPS	
GOOD MORNING	3	8	RPE7	1-2MIN					KEEP YOUR SPINE NEUTRAL	
ECCENTRIC-ACCENTAUTED/ CONSTANT-TENSION STANDING CALF RAISE	4	6/6	RPE8	1-2MIN					FIRST 6 REPS 3-SECOND LOWERING PHASE, LAST 6 REPS DON'T STOP BETWEEN REPS	
CABLE CRUNCH	3	30	RPE8	1-2MIN					ROUND YOUR BACK AS YOU CRUNCH	

TOTAL SET VOLUME: 18

DAY 2

UPPER #1	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BARBELL BENCH PRESS	3	6	70%	2-3MIN					ELBOWS AT A 45° ANGLE. KEEP YOUR SCAPULAE RETRACTED AND DEPRESSED	
LAT PULLDOWN	3	10	RPE8	2-3MIN					PULL YOUR ELBOWS DOWN AND IN	
PAUSE DUMBBELL INCLINE PRESS	3	8	RPE7	2-3MIN					3-SECOND PAUSE	
PENDLAY ROW / BARBELL BENT OVER ROW	3	10/10	RPE8	2-3MIN					10 REPS PENDLAY ROW, 10 REPS BENT OVER ROW	
CONSTANT-TENSION MACHINE SHOULDER PRESS	2	12	RPE8	1-2MIN					DON'T STOP IN BETWEEN REPS	
MACHINE LATERAL RAISE	3	12/12	RPE9	1-2MIN					DROPSET	
UPPER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 17

DAY 3

LOWER #2	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
DEADLIFT	2	5	80%	3-5MIN					BRACE YOUR LATS, CHEST TALL, HIPS HIGH, PULL THE SLACK OUT OF THE BAR PRIOR TO MOVING IT OFF THE GROUND	
FRONT SQUAT	3	8	65%	3-4MIN					KEEP YOUR TORSO UPRIGHT	
BARBELL HIP THRUST	3	12	RPE8	2-3MIN					FULLY EXTEND YOUR HIPS	
CONSTANT-TENSION LYING LEG CURL	3	20	RPE8	1-2MIN					FLEX YOUR HAMSTRINGS	
UNILATERAL ECCENTRIC-OVERLOADED LEG EXTENSION	3	12	RPE8	1-2MIN					12 REPS EACH LEG. BILATERAL CONCENTRIC, UNILATERAL ECCENTRIC	
LOWER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 14

DAY 4

UPPER #2	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BARBELL OVERHEAD PRESS	2	4	75%	2-3MIN					SQUEEZE YOUR GLUTES TO KEEP YOUR TORSO UPRIGHT	
WIDE-GRIP PULL-UP	3	6	RPE7	2-3MIN					PULL YOUR CHEST TO THE BAR	
BARBELL CLOSE GRIP BENCH PRESS	3	10	60%	2-3MIN					SHOULDER WIDTH GRIP	
CABLE CLOSE-GRIP ROW	3	15	RPE8	2-3MIN					PULL VIA SHOULDER EXTENSION	
CABLE FLYE 21S	3	7/7/7	RPE8	1-2MIN					7 REPS TOP HALF OF ROM, 7 REPS BOTTOM HALF OF ROM, 7 REPS FULL ROM	
MACHINE CHEST-SUPPORTED ROW W/ BAND	2	20	RPE8	1-2MIN					FOCUS ON PROTRACTION/RETRACTION	
SUPINATED DUMBBELL CURL	3	15	RPE8	1-2MIN					SUPINATE AGAINST THE DUMBBELL	
UPPER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 19

DAY 5

LOWER #3	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BACK SQUAT	3	8	70%	3-4MIN					SIT BACK AND DOWN, 15° TOE FLARE, DRIVE YOUR KNEES OUT LATERALLY	
DUMBBELL WALKING LUNGE	3	15	RPE8	2-3MIN					15 STEPS PER LEG	
A1: SEATED LEG CURL	3	15	RPE9	0MIN					FOCUS ON SQUEEZING YOUR HAMSTRINGS	
A2: CABLE PULL-THROUGH	3	15	RPE9	1-2MIN					FOCUS ON SQUEEZING YOUR QUADS	
MACHINE HIP ABDUCTION	3	15	RPE8	1-2MIN					SQUEEZE YOUR GLUTES	
WEIGHTED CRUNCH	3	10	RPE7	1-2MIN					ROUND YOUR BACK AS YOU CRUNCH	

TOTAL SET VOLUME: 18

DAY 6

UPPER #3	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BARBELL INCLINE PRESS	3	8	65%	2-3MIN					KEEP YOUR ELBOWS OUT	
NEUTRAL-GRIP PULL-UP / NEGATIVE NEUTRAL-GRIP PULL-U	3	AMRAP/2	RPE8	2-3MIN					RPE8 AMRAP, THEN DO 2 FORCED NEGATIVES	
DIP	3	10	RPE8	2-3MIN					KEEP YOUR SCAPULAE RETRACTED AND DEPRESSED	
SEATED T-BAR ROW	3	12	RPE8	2-3MIN					PULL VIA SHOULDER ADDUCTION	
BARBELL OVERHEAD PRESS	3	12	RPE8	1-2MIN					SQUEEZE YOUR GLUTES TO KEEP YOUR TORSO UPRIGHT	
MYO REPS FLOOR SKULL CRUSHER	3	12	RPE9	1-2MIN					8 REPS, REST 5 SECONDS, 2 REPS, REST 5 SECONDS, 2 REPS	
UPPER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 15

UPPER/LOWER
PROGRAM

WEEK

2

DAY 1

LOWER #1	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BACK SQUAT	3	5	75%	3-4MIN					SIT BACK AND DOWN, 15° TOE FLARE, DRIVE YOUR KNEES OUT LATERALLY	
ECCENTRIC-ACCENTUATED STIFF LEG DEADLIFT	3	10	RPE8	2-3MIN					4-SECOND LOWERING PHASE. KEEP YOUR HIPS HIGH	
CONSTANT-TENSION LEG PRESS	2	20	RPE8	2-3MIN					DON'T STOP IN BETWEEN REPS	
GOOD MORNING	3	8	RPE8	1-2MIN					KEEP YOUR SPINE NEUTRAL	
ECCENTRIC-ACCENTAUTED/ CONSTANT-TENSION STANDING CALF RAISE	4	6	RPE9	1-2MIN					PRESS ONTO YOUR TOES	
CABLE CRUNCH	3	30	RPE8	1-2MIN					ROUND YOUR BACK AS YOU CRUNCH	

TOTAL SET VOLUME: 18

DAY 2

UPPER #1	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BARBELL BENCH PRESS	3	7	70%	2-3MIN					ELBOWS AT A 45° ANGLE. KEEP YOUR SCAPULAE RETRACTED AND DEPRESSED	
LAT PULLDOWN	3	10	RPE8	2-3MIN					PULL YOUR ELBOWS DOWN AND IN	
PAUSE DUMBBELL INCLINE PRESS	3	8	RPE8	2-3MIN					3-SECOND PAUSE	
PENDLAY ROW / BARBELL BENT OVER ROW	3	10/10	RPE9	2-3MIN					10 REPS PENDLAY ROW, 10 REPS BENT OVER ROW	
CONSTANT-TENSION MACHINE SHOULDER PRESS	2	12	RPE9	1-2MIN					DON'T STOP IN BETWEEN REPS	
MACHINE LATERAL RAISE	3	12/12	RPE9	1-2MIN					DROPSET	
UPPER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 17

DAY 3

LOWER #2	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
DEADLIFT	3	5	80%	3-5MIN					BRACE YOUR LATS, CHEST TALL, HIPS HIGH, PULL THE SLACK OUT OF THE BAR PRIOR TO MOVING IT OFF THE GROUND	
FRONT SQUAT	3	9	65%	3-4MIN					KEEP YOUR TORSO UPRIGHT	
BARBELL HIP THRUST	3	12	RPE8	2-3MIN					FULLY EXTEND YOUR HIPS	
CONSTANT-TENSION LYING LEG CURL	3	20	RPE8	1-2MIN					FLEX YOUR HAMSTRINGS	
UNILATERAL ECCENTRIC-OVERLOADED LEG EXTENSION	3	12	RPE8	1-2MIN					12 REPS EACH LEG. BILATERAL CONCENTRIC, UNILATERAL ECCENTRIC	
LOWER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 15

DAY 4

UPPER #2	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BARBELL OVERHEAD PRESS	3	4	75%	2-3MIN					SQUEEZE YOUR GLUTES TO KEEP YOUR TORSO UPRIGHT	
WIDE-GRIP PULL-UP	4	6	RPE8	2-3MIN					PULL WITH YOUR CHEST TO THE BAR	
BARBELL CLOSE GRIP BENCH PRESS	3	11	60%	2-3MIN					SHOULDER WIDTH GRIP	
CABLE CLOSE-GRIP ROW	3	15	RPE9	2-3MIN					PULL VIA SHOULDER EXTENSION	
CABLE FLYE 21S	3	7/7/7	RPE8	1-2MIN					7 REPS TOP HALF OF ROM, 7 REPS BOTTOM HALF OF ROM, 7 REPS FULL ROM	
MACHINE CHEST-SUPPORTED ROW W/ BAND	2	20	RPE8	1-2MIN					FOCUS ON PROTRACTION/RETRACTION	
SUPINATED DUMBBELL CURL	3	15	RPE9	1-2MIN					SUPINATE AGAINST THE DUMBBELL	
UPPER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 21

DAY 5

LOWER #3	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BACK SQUAT	3	8	70%	3-4MIN					SIT BACK AND DOWN, 15° TOE FLARE, DRIVE YOUR KNEES OUT LATERALLY	
DUMBBELL WALKING LUNGE	3	15	RPE8	2-3MIN					15 STEPS PER LEG	
A1: SEATED LEG CURL	3	15	RPE9	0MIN					FOCUS ON SQUEEZING YOUR HAMSTRINGS	
A2: CABLE PULL-THROUGH	3	15	RPE9	1-2MIN					FOCUS ON SQUEEZING YOUR QUADS	
MACHINE HIP ABDUCTION	3	15	RPE8	1-2MIN					SQUEEZE YOUR GLUTES	
WEIGHTED CRUNCH	3	10	RPE7	1-2MIN					ROUND YOUR BACK AS YOU CRUNCH	

TOTAL SET VOLUME: 18

DAY 6

UPPER #3	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BARBELL INCLINE PRESS	3	8	65%	2-3MIN					KEEP YOUR ELBOWS OUT	
NEUTRAL-GRIP PULL-UP / NEGATIVE NEUTRAL-GRIP PULL-U	3	AMRAP/2	RPE8	2-3MIN					RPE8 AMRAP, THEN DO 2 FORCED NEGATIVES	
DIP	3	10	RPE8	2-3MIN					KEEP YOUR SCAPULAE RETRACTED AND DEPRESSED	
SEATED T-BAR ROW	3	12	RPE8	2-3MIN					PULL VIA SHOULDER ADDUCTION	
BARBELL OVERHEAD PRESS	3	12	RPE8	1-2MIN					SQUEEZE YOUR GLUTES TO KEEP YOUR TORSO UPRIGHT	
MYO REPS FLOOR SKULL CRUSHER	3	10	RPE9	1-2MIN					FOCUS ON SQUEEZING YOUR TRICEPS	
UPPER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 15

UPPER/LOWER
PROGRAM

WEEK

3

DAY 1

LOWER #1	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BACK SQUAT	3	6	75%	3-4MIN					SIT BACK AND DOWN, 15° TOE FLARE, DRIVE YOUR KNEES OUT LATERALLY	
ECCENTRIC-ACCENTUATED STIFF LEG DEADLIFT	3	10	RPE9	2-3MIN					4-SECOND LOWERING PHASE. KEEP YOUR HIPS HIGH	
CONSTANT-TENSION LEG PRESS	2	20	RPE9	2-3MIN					DON'T STOP IN BETWEEN REPS	
GOOD MORNING	3	8	RPE8	1-2MIN					KEEP YOUR SPINE NEUTRAL	
ECCENTRIC-ACCENTAUTED/ CONSTANT-TENSION STANDING CALF RAISE	4	6	RPE9	1-2MIN					PRESS ONTO YOUR TOES	
CABLE CRUNCH	3	30	RPE9	1-2MIN					ROUND YOUR BACK AS YOU CRUNCH	

TOTAL SET VOLUME: 18

DAY 2

UPPER #1	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BARBELL BENCH PRESS	3	8	70%	2-3MIN					ELBOWS AT A 45° ANGLE. KEEP YOUR SCAPULAE RETRACTED AND DEPRESSED	
LAT PULLDOWN	3	10	RPE9	2-3MIN					PULL YOUR ELBOWS DOWN AND IN	
PAUSE DUMBBELL INCLINE PRESS	3	8	RPE9	2-3MIN					3-SECOND PAUSE	
PENDLAY ROW / BARBELL BENT OVER ROW	3	10/10	RPE9	2-3MIN					10 REPS PENDLAY ROW, 10 REPS BENT OVER ROW	
CONSTANT-TENSION MACHINE SHOULDER PRESS	2	12	RPE9	1-2MIN					DON'T STOP IN BETWEEN REPS	
MACHINE LATERAL RAISE	3	12/12	RPE9	1-2MIN					DROPSET	
UPPER BODY WEAK POINT 1	2 OR 3	15-20	RPE10	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 17

DAY 3

LOWER #2	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
DEADLIFT	4	5	80%	3-5MIN					BRACE YOUR LATS, CHEST TALL, HIPS HIGH, PULL THE SLACK OUT OF THE BAR PRIOR TO MOVING IT OFF THE GROUND	
FRONT SQUAT	3	10	65%	3-4MIN					KEEP YOUR TORSO UPRIGHT	
BARBELL HIP THRUST	3	12	RPE9	2-3MIN					FULLY EXTEND YOUR HIPS	
CONSTANT-TENSION LYING LEG CURL	3	20	RPE10	1-2MIN					FLEX YOUR HAMSTRINGS	
UNILATERAL ECCENTRIC-OVERLOADED LEG EXTENSION	3	12	RPE8	1-2MIN					12 REPS EACH LEG. BILATERAL CONCENTRIC, UNILATERAL ECCENTRIC	
LOWER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 16

DAY 4

UPPER #2	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BARBELL OVERHEAD PRESS	4	4	75%	2-3MIN					SQUEEZE YOUR GLUTES TO KEEP YOUR TORSO UPRIGHT	
WIDE-GRIP PULL-UP	5	6	RPE9	2-3MIN					PULL WITH YOUR CHEST TO THE BAR	
BARBELL CLOSE GRIP BENCH PRESS	3	12	60%	2-3MIN					SHOULDER WIDTH GRIP	
CABLE CLOSE-GRIP ROW	3	15	RPE9	2-3MIN					PULL VIA SHOULDER EXTENSION	
CABLE FLYE 21S	3	7/7/7	RPE9	1-2MIN					7 REPS TOP HALF OF ROM, 7 REPS BOTTOM HALF OF ROM, 7 REPS FULL ROM	
MACHINE CHEST-SUPPORTED ROW W/ BAND	2	20	RPE9	1-2MIN					FOCUS ON PROTRACTION/RETRACTION	
SUPINATED DUMBBELL CURL	3	15	RPE10	1-2MIN					SUPINATE AGAINST THE DUMBBELL	
UPPER BODY WEAK POINT 1	2 OR 3	15-20	REP10	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 23

DAY 5

LOWER #3	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BACK SQUAT	3	8	70%	3-4MIN					SIT BACK AND DOWN, 15° TOE FLARE, DRIVE YOUR KNEES OUT LATERALLY	
DUMBBELL WALKING LUNGE	3	15	RPE9	2-3MIN					15 STEPS PER LEG	
A1: SEATED LEG CURL	3	15	RPE9	0MIN					FOCUS ON SQUEEZING YOUR HAMSTRINGS	
A2: CABLE PULL-THROUGH	3	15	RPE9	1-2MIN					FOCUS ON SQUEEZING YOUR QUADS	
MACHINE HIP ABDUCTION	3	15	RPE9	1-2MIN					SQUEEZE YOUR GLUTES	
WEIGHTED CRUNCH	3	10	RPE8	1-2MIN					ROUND YOUR BACK AS YOU CRUNCH	

TOTAL SET VOLUME: 18

DAY 6

UPPER #3	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BARBELL INCLINE PRESS	3	8	65%	2-3MIN					KEEP YOUR ELBOWS OUT	
NEUTRAL-GRIP PULL-UP / NEGATIVE NEUTRAL-GRIP PULL-U	3	AMRAP/2	RPE10	2-3MIN					AMRAP, THEN DO 2 FORCED NEGATIVES	
DIP	3	10	RPE9	2-3MIN					KEEP YOUR SCAPULAE RETRACTED AND DEPRESSED	
SEATED T-BAR ROW	3	12	RPE9	2-3MIN					PULL VIA SHOULDER ADDUCTION	
BARBELL OVERHEAD PRESS	3	12	RPE8	1-2MIN					SQUEEZE YOUR GLUTES TO KEEP YOUR TORSO UPRIGHT	
MYO REPS FLOOR SKULL CRUSHER	3	10	RPE9	1-2MIN					FOCUS ON SQUEEZING YOUR TRICEPS	
UPPER BODY WEAK POINT 1	2 OR 3	15-20	RPE10	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 15

UPPER/LOWER
PROGRAM

WEEK

4

DAY 1

LOWER #1	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BACK SQUAT	3	4	77.5%	3-4MIN					SIT BACK AND DOWN, 15° TOE FLARE, DRIVE YOUR KNEES OUT LATERALLY	
DEFICIT DEADLIFT	2	6	70%	2-3MIN					2" DEFICIT, CAN USE 35 LB PLATES TO CREATE DEFICIT	
A1: LEG PRESS	2	15	RPE8	2-3MIN					LOW FOOT POSITIONING	
A2: LEG EXTENSION	2	15	RPE8	1-2MIN					KEEP YOUR SPINE NEUTRAL	
CONSTANT-TENSION SEATED CALF RAISE	2	20	RPE8	1-2MIN					PRESS ONTO YOUR TOES	
HANGING LEG RAISE	3	12	RPE8	1-2MIN					ROUND YOUR BACK AS YOU CRUNCH	

TOTAL SET VOLUME: 14

DAY 2

UPPER #1	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BARBELL BENCH PRESS	3	6	72.5%	2-3MIN					ELBOWS AT A 45° ANGLE. KEEP YOUR SCAPULAE RETRACTED AND DEPRESSED	
LAT PULLDOWN	3	10	RPE8	2-3MIN					PULL YOUR ELBOWS DOWN AND IN	
MACHINE CHEST PRESS	3	15	RPE7	2-3MIN					FOCUS ON SQUEEZING YOUR CHEST	
ECCENTRIC-ACCENTUATED CABLE ROW	3	15	RPE8	2-3MIN					2-SECOND LOWERING PHASE	
MACHINE SHOULDER PRESS	2	12	RPE8	1-2MIN					DON'T STOP IN BETWEEN REPS	
DB FRONT RAISE/LATERAL RAISE	3	15/15	RPE9	1-2MIN					15 REPS FRONT RAISE, 15 REPS LATERAL RAISE	
UPPER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 17

DAY 3

LOWER #2	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
DEADLIFT	2	5	82.5%	3-5MIN					BRACE YOUR LATS, CHEST TALL, HIPS HIGH, PULL THE SLACK OUT OF THE BAR PRIOR TO MOVING IT OFF THE GROUND	
FRONT SQUAT	3	8	67.5%	3-4MIN					KEEP YOUR TORSO UPRIGHT	
BULGARIAN SPLIT SQUAT	3	15	RPE8	2-3MIN					ELEVATE YOUR BACK FOOT 12"	
A1: LEG EXTENSION	3	20	RPE8	1-2MIN					FLEX YOUR QUADS	
A2: LEG CURL	3	20	RPE8	1-2MIN					FLEX YOUR HAMSTRINGS	
LOWER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 14

DAY 4

UPPER #2	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BARBELL OVERHEAD PRESS	2	4	77.5%	2-3MIN					SQUEEZE YOUR GLUTES TO KEEP YOUR TORSO UPRIGHT	
WIDE-GRIP PULL-UP	3	6	RPE7	2-3MIN					PULL WITH YOUR CHEST TO THE BAR	
BARBELL CLOSE GRIP BENCH PRESS	3	10	62.5%	2-3MIN					SHOULDER WIDTH GRIP	
BANDED CHEST-SUPPORTED T-BAR ROW	3	12	RPE8	2-3MIN					FOCUS ON SCAPULAR RETRACTION	
PEC DECK	3	15	RPE8	1-2MIN					SQUEEZE YOUR PECS	
DUMBBELL ROW	2	12	RPE8	1-2MIN					PULL VIA SHOULDER EXTENSION	
EZ BAR CURL 21S	3	7/7/7	RPE8	1-2MIN					7 REPS BOTTOM HALF OF ROM, 7 REPS TOP HALF OF ROM, 7 REPS FULL ROM	
UPPER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 19

DAY 5

LOWER #3	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BACK SQUAT	3	8	72.5%	3-4MIN					SIT BACK AND DOWN, 15° TOE FLARE, DRIVE YOUR KNEES OUT LATERALLY	
DUMBBELL WALKING LUNGE	3	15	RPE8	2-3MIN					15 STEPS PER LEG	
A1: SEATED LEG CURL	3	15	RPE9	0MIN					FOCUS ON SQUEEZING YOUR HAMSTRINGS	
A2: CABLE PULL-THROUGH	3	15	RPE9	1-2MIN					FOCUS ON SQUEEZING YOUR QUADS	
MACHINE HIP ABDUCTION	3	15	RPE8	1-2MIN					SQUEEZE YOUR GLUTES	
WEIGHTED CRUNCH	3	10	RPE7	1-2MIN					ROUND YOUR BACK AS YOU CRUNCH	

TOTAL SET VOLUME: 18

DAY 6

UPPER #3	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BARBELL INCLINE PRESS	3	8	67.5%	2-3MIN					KEEP YOUR ELBOWS OUT	
NEUTRAL-GRIP PULL-UP / NEGATIVE NEUTRAL-GRIP PULL-U	3	AMRAP/2	RPE8	2-3MIN					RPE8 AMRAP, THEN DO 2 FORCED NEGATIVES	
DIP	3	10	RPE8	2-3MIN					KEEP YOUR SCAPULAE RETRACTED AND DEPRESSED	
BARBELL SUPINATED ROW	3	15	RPE8	2-3MIN					PULL VIA SHOULDER EXTENSION	
BARBELL PUSH PRESS	3	6	RPE8	1-2MIN					CONTROL THE NEGATIVE	
CABLE TRICEPS KICKBACK	3	15	RPE9	1-2MIN					FOCUS ON SQUEEZING YOUR TRICEPS	
UPPER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 15

UPPER/LOWER
PROGRAM

WEEK

5

DAY 1

LOWER #1	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BACK SQUAT	3	5	77.5%	3-4MIN					SIT BACK AND DOWN, 15° TOE FLARE, DRIVE YOUR KNEES OUT LATERALLY	
DEFICIT DEADLIFT	2	6	RPE8	2-3MIN					2" DEFICIT, CAN USE 35 LB PLATES TO CREATE DEFICIT	
A1: LEG PRESS	2	15	RPE8	2-3MIN					LOW FOOT POSITIONING	
A2: LEG EXTENSION	2	15	RPE8	1-2MIN					KEEP YOUR SPINE NEUTRAL	
CONSTANT-TENSION SEATED CALF RAISE	2	20	RPE9	1-2MIN					PRESS ONTO YOUR TOES	
HANGING LEG RAISE	3	12	RPE8	1-2MIN					ROUND YOUR BACK AS YOU CRUNCH	

TOTAL SET VOLUME: 14

DAY 2

UPPER #1	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BARBELL BENCH PRESS	3	7	72.5%	2-3MIN					ELBOWS AT A 45° ANGLE. KEEP YOUR SCAPULAE RETRACTED AND DEPRESSED	
LAT PULLDOWN	3	10	RPE8	2-3MIN					PULL YOUR ELBOWS DOWN AND IN	
MACHINE CHEST PRESS	3	15	RPE8	2-3MIN					FOCUS ON SQUEEZING YOUR CHEST	
ECCENTRIC-ACCENTUATED CABLE ROW	3	15	RPE9	2-3MIN					2-SECOND LOWERING PHASE	
MACHINE SHOULDER PRESS	2	12	RPE9	1-2MIN					DON'T STOP IN BETWEEN REPS	
DB FRONT RAISE/LATERAL RAISE	3	15/15	RPE9	1-2MIN					15 REPS FRONT RAISE, 15 REPS LATERAL RAISE	
UPPER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 17

DAY 3

LOWER #2	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
DEADLIFT	3	5	82.5%	3-5MIN					BRACE YOUR LATS, CHEST TALL, HIPS HIGH, PULL THE SLACK OUT OF THE BAR PRIOR TO MOVING IT OFF THE GROUND	
FRONT SQUAT	3	9	67.5%	3-4MIN					KEEP YOUR TORSO UPRIGHT	
BULGARIAN SPLIT SQUAT	3	15	RPE8	2-3MIN					ELEVATE YOUR BACK FOOT 12"	
A1: LEG EXTENSION	3	20	RPE8	1-2MIN					FLEX YOUR QUADS	
A2: LEG CURL	3	20	RPE8	1-2MIN					FLEX YOUR HAMSTRINGS	
LOWER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 15

DAY 4

UPPER #2	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BARBELL OVERHEAD PRESS	3	4	77.5%	2-3MIN					SQUEEZE YOUR GLUTES TO KEEP YOUR TORSO UPRIGHT	
WIDE-GRIP PULL-UP	4	6	RPE8	2-3MIN					PULL WITH YOUR CHEST TO THE BAR	
BARBELL CLOSE GRIP BENCH PRESS	3	11	62.5%	2-3MIN					SHOULDER WIDTH GRIP	
BANDED CHEST-SUPPORTED T-BAR ROW	3	12	RPE9	2-3MIN					FOCUS ON SCAPULAR RETRACTION	
PEC DECK	3	15	RPE8	1-2MIN					SQUEEZE YOUR PECS	
DUMBBELL ROW	2	12	RPE8	1-2MIN					PULL VIA SHOULDER EXTENSION	
EZ BAR CURL 21S	3	7/7/7	RPE9	1-2MIN					7 REPS BOTTOM HALF OF ROM, 7 REPS TOP HALF OF ROM, 7 REPS FULL ROM	
UPPER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 21

DAY 5

LOWER #3	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BACK SQUAT	3	8	72.5%	3-4MIN					SIT BACK AND DOWN, 15° TOE FLARE, DRIVE YOUR KNEES OUT LATERALLY	
DUMBBELL WALKING LUNGE	3	15	RPE8	2-3MIN					15 STEPS PER LEG	
A1: SEATED LEG CURL	3	15	RPE9	0MIN					FOCUS ON SQUEEZING YOUR HAMSTRINGS	
A2: CABLE PULL-THROUGH	3	15	RPE9	1-2MIN					FOCUS ON SQUEEZING YOUR QUADS	
MACHINE HIP ABDUCTION	3	15	RPE8	1-2MIN					SQUEEZE YOUR GLUTES	
WEIGHTED CRUNCH	3	10	RPE7	1-2MIN					ROUND YOUR BACK AS YOU CRUNCH	

TOTAL SET VOLUME: 18

DAY 6

UPPER #3	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BARBELL INCLINE PRESS	3	8	67.5%	2-3MIN					KEEP YOUR ELBOWS OUT	
NEUTRAL-GRIP PULL-UP / NEGATIVE NEUTRAL-GRIP PULL-U	3	AMRAP/2	RPE8	2-3MIN					RPE8 AMRAP, THEN DO 2 FORCED NEGATIVES	
DIP	3	10	RPE8	2-3MIN					KEEP YOUR SCAPULAE RETRACTED AND DEPRESSED	
BARBELL SUPINATED ROW	3	15	RPE8	2-3MIN					PULL VIA SHOULDER EXTENSION	
BARBELL PUSH PRESS	3	6	RPE8	1-2MIN					CONTROL THE NEGATIVE	
CABLE TRICEPS KICKBACK	3	15	RPE9	1-2MIN					FOCUS ON SQUEEZING YOUR TRICEPS	
UPPER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 15

UPPER/LOWER
PROGRAM

WEEK

6

DAY 1

LOWER #1	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BACK SQUAT	3	6	77.5%	3-4MIN					SIT BACK AND DOWN, 15° TOE FLARE, DRIVE YOUR KNEES OUT LATERALLY	
DEFICIT DEADLIFT	3	10	RPE9	2-3MIN					2" DEFICIT, CAN USE 35 LB PLATES TO CREATE DEFICIT	
A1: LEG PRESS	2	20	RPE9	2-3MIN					LOW FOOT POSITIONING	
A2: LEG EXTENSION	3	8	RPE8	1-2MIN					KEEP YOUR SPINE NEUTRAL	
CONSTANT-TENSION SEATED CALF RAISE	4	6	RPE9	1-2MIN					PRESS ONTO YOUR TOES	
HANGING LEG RAISE	3	30	RPE9	1-2MIN					ROUND YOUR BACK AS YOU CRUNCH	

TOTAL SET VOLUME: 18

DAY 2

UPPER #1	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BARBELL BENCH PRESS	3	8	72.5%	2-3MIN					ELBOWS AT A 45° ANGLE. KEEP YOUR SCAPULAE RETRACTED AND DEPRESSED	
LAT PULLDOWN	3	10	RPE9	2-3MIN					PULL YOUR ELBOWS DOWN AND IN	
MACHINE CHEST PRESS	3	8	RPE9	2-3MIN					FOCUS ON SQUEEZING YOUR CHEST	
ECCENTRIC-ACCENTUATED CABLE ROW	3	10/10	RPE9	2-3MIN					2-SECOND LOWERING PHASE	
MACHINE SHOULDER PRESS	2	12	RPE9	1-2MIN					DON'T STOP IN BETWEEN REPS	
DB FRONT RAISE/LATERAL RAISE	3	12/12	RPE9	1-2MIN					15 REPS FRONT RAISE, 15 REPS LATERAL RAISE	
UPPER BODY WEAK POINT 1	2 OR 3	15-20	RPE10	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 17

DAY 3

LOWER #2	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
DEADLIFT	4	5	82.5%	3-5MIN					BRACE YOUR LATS, CHEST TALL, HIPS HIGH, PULL THE SLACK OUT OF THE BAR PRIOR TO MOVING IT OFF THE GROUND	
FRONT SQUAT	3	10	67.5%	3-4MIN					KEEP YOUR TORSO UPRIGHT	
BULGARIAN SPLIT SQUAT	3	12	RPE9	2-3MIN					ELEVATE YOUR BACK FOOT 12"	
A1: LEG EXTENSION	3	20	RPE10	1-2MIN					FLEX YOUR QUADS	
A2: LEG CURL	3	12	RPE8	1-2MIN					FLEX YOUR HAMSTRINGS	
LOWER BODY WEAK POINT 1	2 OR 3	15-20	RPE10	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 16

DAY 4

UPPER #2	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BARBELL OVERHEAD PRESS	4	4	77.5%	2-3MIN					SQUEEZE YOUR GLUTES TO KEEP YOUR TORSO UPRIGHT	
WIDE-GRIP PULL-UP	5	6	RPE9	2-3MIN					PULL WITH YOUR CHEST TO THE BAR	
BARBELL CLOSE GRIP BENCH PRESS	3	12	62.5%	2-3MIN					SHOULDER WIDTH GRIP	
BANDED CHEST-SUPPORTED T-BAR ROW	3	15	RPE9	2-3MIN					FOCUS ON SCAPULAR RETRACTION	
PEC DECK	3	7/7/7	RPE9	1-2MIN					SQUEEZE YOUR PECS	
DUMBBELL ROW	2	20	RPE9	1-2MIN					PULL VIA SHOULDER EXTENSION	
EZ BAR CURL 21S	3	15	RPE10	1-2MIN					7 REPS BOTTOM HALF OF ROM, 7 REPS TOP HALF OF ROM, 7 REPS FULL ROM	
UPPER BODY WEAK POINT 1	2 OR 3	15-20	REP10	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 23

DAY 5

LOWER #3	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BACK SQUAT	3	8	72.5%	3-4MIN					SIT BACK AND DOWN, 15° TOE FLARE, DRIVE YOUR KNEES OUT LATERALLY	
DUMBBELL WALKING LUNGE	3	15	RPE9	2-3MIN					15 STEPS PER LEG	
A1: SEATED LEG CURL	3	15	RPE9	0MIN					FOCUS ON SQUEEZING YOUR HAMSTRINGS	
A2: CABLE PULL-THROUGH	3	15	RPE9	1-2MIN					FOCUS ON SQUEEZING YOUR QUADS	
MACHINE HIP ABDUCTION	3	15	RPE9	1-2MIN					SQUEEZE YOUR GLUTES	
WEIGHTED CRUNCH	3	10	RPE8	1-2MIN					ROUND YOUR BACK AS YOU CRUNCH	

TOTAL SET VOLUME: 18

DAY 6

UPPER #3	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BARBELL INCLINE PRESS	3	8	67.5%	2-3MIN					KEEP YOUR ELBOWS OUT	
NEUTRAL-GRIP PULL-UP / NEGATIVE NEUTRAL-GRIP PULL-U	3	AMRAP/2	RPE10	2-3MIN					RPE8 AMRAP, THEN DO 2 FORCED NEGATIVES	
DIP	3	10	RPE9	2-3MIN					KEEP YOUR SCAPULAE RETRACTED AND DEPRESSED	
BARBELL SUPINATED ROW	3	12	RPE9	2-3MIN					PULL VIA SHOULDER EXTENSION	
BARBELL PUSH PRESS	3	12	RPE8	1-2MIN					CONTROL THE NEGATIVE	
CABLE TRICEPS KICKBACK	3	10	RPE9	1-2MIN					FOCUS ON SQUEEZING YOUR TRICEPS	
UPPER BODY WEAK POINT 1	2 OR 3	15-20	RPE10	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 15

UPPER/LOWER
PROGRAM

WEEK

7

DAY 1

LOWER #1	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BACK SQUAT	3	4	80%	3-4MIN					SIT BACK AND DOWN, 15° TOE FLARE, DRIVE YOUR KNEES OUT LATERALLY	
BARBELL HIP THRUST	2	10	RPE8	2-3MIN					SQUEEZE YOUR GLUTES	
LEG PRESS	2	15	RPE8	2-3MIN					LOW FOOT POSITIONING	
BARBELL 45° HYPEREXTENSION	3	10	RPE8	1-2MIN					KEEP YOUR SPINE NEUTRAL	
STANDING CALF RAISE	3	10	RPE8	1-2MIN					PRESS ONTO YOUR TOES	
HANGING LEG RAISE	3	12	RPE8	1-2MIN					ROUND YOUR BACK AS YOU CRUNCH	

TOTAL SET VOLUME: 16

DAY 2

UPPER #1	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BARBELL BENCH PRESS	3	6	75%	2-3MIN					ELBOWS AT A 45° ANGLE. KEEP YOUR SCAPULAE RETRACTED AND DEPRESSED	
SUPINATED LAT PULLDOWN	3	12	RPE8	2-3MIN					PULL VIA SHOULDER EXTENSION	
BARBELL FLOOR PRESS	3	10	RPE7	2-3MIN					FOCUS ON SQUEEZING YOUR CHEST	
MACHINE HIGH ROW	3	12	RPE8	2-3MIN					STRETCH YOUR LATS AT THE TOP	
ARNOLD PRESS	2	15	RPE8	1-2MIN					EXTERNALLY ROTATE WHILE YOU PRESS	
CABLE UPRIGHT ROW	3	20	RPE9	1-2MIN					PERFORM LYING BACK	
UPPER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 17

DAY 3

LOWER #2	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
DEADLIFT	2	5	85%	3-5MIN					BRACE YOUR LATS, CHEST TALL, HIPS HIGH, PULL THE SLACK OUT OF THE BAR PRIOR TO MOVING IT OFF THE GROUND	
FRONT SQUAT	3	8	70%	3-4MIN					KEEP YOUR TORSO UPRIGHT	
KNEE-BANDED LEG PRESS	3	20	RPE8	2-3MIN					KEEP YOUR KNEES OUT	
SINGLE-LEG LEG EXTENSION	3	12	RPE8	1-2MIN					12 REPS EACH LEG	
SLIDING LEG CURL	3	15	RPE8	1-2MIN					FLEX YOUR HAMSTRINGS	
LOWER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 14

DAY 4

UPPER #2	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BARBELL OVERHEAD PRESS	2	4	80%	2-3MIN					SQUEEZE YOUR GLUTES TO KEEP YOUR TORSO UPRIGHT	
WIDE-GRIP PULL-UP	3	6	RPE7	2-3MIN					PULL WITH YOUR CHEST TO THE BAR	
BARBELL CLOSE GRIP BENCH PRESS	3	10	65%	2-3MIN					SHOULDER WIDTH GRIP	
BARBELL BENT OVER ROW	3	10	RPE8	2-3MIN					PULL TO YOUR UPPER ABS	
PUSH-UP	2	AMRAP/2	RPE8	1-2MIN					SQUEEZE YOUR PECS	
BAND PULL-APART	2	30	RPE8	1-2MIN					PULL VIA SHOULDER EXTENSION	
ECCENTRIC-ACCENTUATED HAMMER CURL	3	10	RPE8	1-2MIN					3-SECOND LOWERING PHASE	
UPPER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 18

DAY 5

LOWER #3	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BACK SQUAT	3	8	75%	3-4MIN					SIT BACK AND DOWN, 15° TOE FLARE, DRIVE YOUR KNEES OUT LATERALLY	
DUMBBELL WALKING LUNGE	3	15	RPE8	2-3MIN					15 STEPS PER LEG	
DUMBBELL STEP-UP	3	12	RPE9	0MIN					SET THE BOX TO ~PARALLEL	
REVERSE HYPER	3	15	RPE9	1-2MIN					FOCUS ON SQUEEZING YOUR GLUTES	
CABLE STANDING HIP ABDUCTION	3	10	RPE8	1-2MIN					SQUEEZE YOUR GLUTES	
PLANK	3	:30	RPE7	1-2MIN					FLEX YOUR ABS	

TOTAL SET VOLUME: 18

DAY 6

UPPER #3	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BARBELL INCLINE PRESS	3	8	70%	2-3MIN					KEEP YOUR ELBOWS OUT	
SINGLE-ARM PULLDOWN	3	12	RPE8	2-3MIN					LEAN AWAY AT THE TOP, CRUNCH TOWARDS THE WORKING ARM AS YOU PULL DOWN	
CALIFORNIA PRESS	3	10	RPE8	2-3MIN					CONCENTRIC IS A CGBP, ECCENTRIC IS A SKULL CRUSHER	
CABLE CLOSE-GRIP ROW	3	20	RPE8	2-3MIN					PULL VIA SHOULDER EXTENSION	
MILITARY PRESS	3	10	RPE8	1-2MIN					FLEX YOUR DELTS	
ECCENTRIC-OVERLOADED ROPE OVERHEAD TRICEPS EXTENSION	3	10	RPE9	1-2MIN					USE YOUR NON-WORKING ARM TO ASSIST WITH THE CONCENTRIC	
UPPER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 15

UPPER/LOWER
PROGRAM

WEEK

8

DAY 1

LOWER #1	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BACK SQUAT	3	5	80%	3-4MIN					SIT BACK AND DOWN, 15° TOE FLARE, DRIVE YOUR KNEES OUT LATERALLY	
BARBELL HIP THRUST	2	10	RPE8	2-3MIN					SQUEEZE YOUR GLUTES	
LEG PRESS	2	15	RPE8	2-3MIN					LOW FOOT POSITIONING	
BARBELL 45° HYPEREXTENSION	3	10	RPE8	1-2MIN					KEEP YOUR SPINE NEUTRAL	
STANDING CALF RAISE	3	10	RPE8	1-2MIN					PRESS ONTO YOUR TOES	
HANGING LEG RAISE	3	12	RPE8	1-2MIN					ROUND YOUR BACK AS YOU CRUNCH	

TOTAL SET VOLUME: 16

DAY 2

UPPER #1	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BARBELL BENCH PRESS	3	7	75%	2-3MIN					ELBOWS AT A 45° ANGLE. KEEP YOUR SCAPULAE RETRACTED AND DEPRESSED	
SUPINATED LAT PULLDOWN	3	12	RPE8	2-3MIN					PULL VIA SHOULDER EXTENSION	
BARBELL FLOOR PRESS	3	10	RPE7	2-3MIN					FOCUS ON SQUEEZING YOUR CHEST	
MACHINE HIGH ROW	3	12	RPE8	2-3MIN					STRETCH YOUR LATS AT THE TOP	
ARNOLD PRESS	2	15	RPE8	1-2MIN					EXTERNALLY ROTATE WHILE YOU PRESS	
CABLE UPRIGHT ROW	3	20	RPE9	1-2MIN					PERFORM LYING BACK	
UPPER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 17

DAY 3

LOWER #2	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
DEADLIFT	3	5	85%	3-5MIN					BRACE YOUR LATS, CHEST TALL, HIPS HIGH, PULL THE SLACK OUT OF THE BAR PRIOR TO MOVING IT OFF THE GROUND	
FRONT SQUAT	3	9	70%	3-4MIN					KEEP YOUR TORSO UPRIGHT	
KNEE-BANDED LEG PRESS	3	20	RPE8	2-3MIN					KEEP YOUR KNEES OUT	
SINGLE-LEG LEG EXTENSION	3	12	RPE8	1-2MIN					12 REPS EACH LEG	
SLIDING LEG CURL	3	15	RPE8	1-2MIN					FLEX YOUR HAMSTRINGS	
LOWER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 15

DAY 4

UPPER #2	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BARBELL OVERHEAD PRESS	3	4	80%	2-3MIN					SQUEEZE YOUR GLUTES TO KEEP YOUR TORSO UPRIGHT	
WIDE-GRIP PULL-UP	4	6	RPE7	2-3MIN					PULL WITH YOUR CHEST TO THE BAR	
BARBELL CLOSE GRIP BENCH PRESS	3	11	65%	2-3MIN					SHOULDER WIDTH GRIP	
BARBELL BENT OVER ROW	3	10	RPE8	2-3MIN					PULL TO YOUR UPPER ABS	
PUSH-UP	2	AMRAP/2	RPE8	1-2MIN					SQUEEZE YOUR PECS	
BAND PULL-APART	2	30	RPE8	1-2MIN					PULL VIA SHOULDER EXTENSION	
ECCENTRIC-ACCENTUATED HAMMER CURL	3	10	RPE8	1-2MIN					3-SECOND LOWERING PHASE	
UPPER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 20

DAY 5

LOWER #3	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BACK SQUAT	3	8	75%	3-4MIN					SIT BACK AND DOWN, 15° TOE FLARE, DRIVE YOUR KNEES OUT LATERALLY	
DUMBBELL WALKING LUNGE	3	15	RPE8	2-3MIN					15 STEPS PER LEG	
DUMBBELL STEP-UP	3	12	RPE9	0MIN					SET THE BOX TO ~PARALLEL	
REVERSE HYPER	3	15	RPE9	1-2MIN					FOCUS ON SQUEEZING YOUR GLUTES	
CABLE STANDING HIP ABDUCTION	3	10	RPE8	1-2MIN					SQUEEZE YOUR GLUTES	
PLANK	3	:30	RPE7	1-2MIN					FLEX YOUR ABS	

TOTAL SET VOLUME: 18

DAY 6

UPPER #3	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BARBELL INCLINE PRESS	3	8	70%	2-3MIN					KEEP YOUR ELBOWS OUT	
SINGLE-ARM PULLDOWN	3	12	RPE8	2-3MIN					LEAN AWAY AT THE TOP, CRUNCH TOWARDS THE WORKING ARM AS YOU PULL DOWN	
CALIFORNIA PRESS	3	10	RPE8	2-3MIN					CONCENTRIC IS A CGBP, ECCENTRIC IS A SKULL CRUSHER	
CABLE CLOSE-GRIP ROW	3	20	RPE8	2-3MIN					PULL VIA SHOULDER EXTENSION	
MILITARY PRESS	3	10	RPE8	1-2MIN					FLEX YOUR DELTS	
ECCENTRIC-OVERLOADED ROPE OVERHEAD TRICEPS EXTENSION	3	10	RPE9	1-2MIN					USE YOUR NON-WORKING ARM TO ASSIST WITH THE CONCENTRIC	
UPPER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 15

UPPER/LOWER
PROGRAM

WEEK

9

DAY 1

LOWER #1	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BACK SQUAT	3	6	80%	3-4MIN					SIT BACK AND DOWN, 15° TOE FLARE, DRIVE YOUR KNEES OUT LATERALLY	
BARBELL HIP THRUST	2	10	RPE8	2-3MIN					SQUEEZE YOUR GLUTES	
LEG PRESS	2	15	RPE8	2-3MIN					LOW FOOT POSITIONING	
BARBELL 45° HYPEREXTENSION	3	10	RPE8	1-2MIN					KEEP YOUR SPINE NEUTRAL	
STANDING CALF RAISE	3	10	RPE8	1-2MIN					PRESS ONTO YOUR TOES	
HANGING LEG RAISE	3	12	RPE8	1-2MIN					ROUND YOUR BACK AS YOU CRUNCH	

TOTAL SET VOLUME: 16

DAY 2

UPPER #1	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BARBELL BENCH PRESS	3	8	75%	2-3MIN					ELBOWS AT A 45° ANGLE. KEEP YOUR SCAPULAE RETRACTED AND DEPRESSED	
SUPINATED LAT PULLDOWN	3	12	RPE8	2-3MIN					PULL VIA SHOULDER EXTENSION	
BARBELL FLOOR PRESS	3	10	RPE7	2-3MIN					FOCUS ON SQUEEZING YOUR CHEST	
MACHINE HIGH ROW	3	12	RPE8	2-3MIN					STRETCH YOUR LATS AT THE TOP	
ARNOLD PRESS	2	15	RPE8	1-2MIN					EXTERNALLY ROTATE WHILE YOU PRESS	
CABLE UPRIGHT ROW	3	20	RPE9	1-2MIN					PERFORM LYING BACK	
UPPER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 17

DAY 3

LOWER #2	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
DEADLIFT	4	5	85%	3-5MIN					BRACE YOUR LATS, CHEST TALL, HIPS HIGH, PULL THE SLACK OUT OF THE BAR PRIOR TO MOVING IT OFF THE GROUND	
FRONT SQUAT	3	10	70%	3-4MIN					KEEP YOUR TORSO UPRIGHT	
KNEE-BANDED LEG PRESS	3	20	RPE8	2-3MIN					KEEP YOUR KNEES OUT	
SINGLE-LEG LEG EXTENSION	3	12	RPE8	1-2MIN					12 REPS EACH LEG	
SLIDING LEG CURL	3	15	RPE8	1-2MIN					FLEX YOUR HAMSTRINGS	
LOWER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 16

DAY 4

UPPER #2	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BARBELL OVERHEAD PRESS	4	4	80%	2-3MIN					SQUEEZE YOUR GLUTES TO KEEP YOUR TORSO UPRIGHT	
WIDE-GRIP PULL-UP	5	6	RPE7	2-3MIN					PULL WITH YOUR CHEST TO THE BAR	
BARBELL CLOSE GRIP BENCH PRESS	3	11	65%	2-3MIN					SHOULDER WIDTH GRIP	
BARBELL BENT OVER ROW	3	10	RPE8	2-3MIN					PULL TO YOUR UPPER ABS	
PUSH-UP	2	AMRAP/2	RPE8	1-2MIN					SQUEEZE YOUR PECS	
BAND PULL-APART	2	30	RPE8	1-2MIN					PULL VIA SHOULDER EXTENSION	
ECCENTRIC-ACCENTUATED HAMMER CURL	3	10	RPE8	1-2MIN					3-SECOND LOWERING PHASE	
UPPER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 22

DAY 5

LOWER #3	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BACK SQUAT	3	8	75%	3-4MIN					SIT BACK AND DOWN, 15° TOE FLARE, DRIVE YOUR KNEES OUT LATERALLY	
DUMBBELL WALKING LUNGE	3	15	RPE8	2-3MIN					15 STEPS PER LEG	
DUMBBELL STEP-UP	3	12	RPE9	0MIN					SET THE BOX TO ~PARALLEL	
REVERSE HYPER	3	15	RPE9	1-2MIN					FOCUS ON SQUEEZING YOUR GLUTES	
CABLE STANDING HIP ABDUCTION	3	10	RPE8	1-2MIN					SQUEEZE YOUR GLUTES	
PLANK	3	:30	RPE7	1-2MIN					FLEX YOUR ABS	

TOTAL SET VOLUME: 18

DAY 6

UPPER #3	SETS	REPS	RPE/%1RM	REST	1	2	3	4	NOTES	LSRPE
BARBELL INCLINE PRESS	3	8	70%	2-3MIN					KEEP YOUR ELBOWS OUT	
SINGLE-ARM PULLDOWN	3	12	RPE8	2-3MIN					LEAN AWAY AT THE TOP, CRUNCH TOWARDS THE WORKING ARM AS YOU PULL DOWN	
CALIFORNIA PRESS	3	10	RPE8	2-3MIN					CONCENTRIC IS A CGBP, ECCENTRIC IS A SKULL CRUSHER	
CABLE CLOSE-GRIP ROW	3	20	RPE8	2-3MIN					PULL VIA SHOULDER EXTENSION	
MILITARY PRESS	3	10	RPE8	1-2MIN					FLEX YOUR DELTS	
ECCENTRIC-OVERLOADED ROPE OVERHEAD TRICEPS EXTENSION	3	10	RPE9	1-2MIN					USE YOUR NON-WORKING ARM TO ASSIST WITH THE CONCENTRIC	
UPPER BODY WEAK POINT 1	2 OR 3	15-20	RPE9	1-2MIN					FOCUS ON MIND-MUSCLE CONNECTION	

TOTAL SET VOLUME: 15

WEAK POINT EXERCISES TABLE

IF THIS UPPER BODY PART IS YOUR WEAK POINT:	PICK ONE OF THESE EXERCISES
CHEST	CABLE FLY DROPSET, CABLE FLY 21S
LATS	PRONATED/SUPINATED PULLDOWN (8 REPS/8 REPS), CABLE PULL-OVER DROPSET, ELBOWS OUT/ELBOWS IN ROW (8/8)
BICEPS	ECCENTRIC-OVERLOADED DUMBBELL CURL, CRONATED EZ BAR CURL/SUPINATED EZ BAR CURL (8/8), ASSYMMETRICAL DB CURL (SCREW THE LATERAL DUMBBELL HEAD OFF)
TRICEPS	CABLE KICKBACK 21'S, CALIFORNIA PRESS, FORCED NEGATIVE SKULL CRUSHER
DELTOIDS	CABLE LATERAL RAISE 21S, SHRUG/LATERAL RAISE SUPERSET, FRONT RAISE/LATERAL RAISE/BENT REAR DELT RAISE TRI-SET
TRAPS	BARBELL SHRUG, TS/YS/IS, FACE PULL/ELBOWS OUT ROW
FOREARMS	HAMMER CURL, PRONATED EZ BAR CURL, DUMBBELL WRIST CURL, FARMER CARRY
NECK	PLATE NECK FLEXION, PLATE LATERAL FLEXION
IF THIS LOWER BODY PART IS YOUR WEAK POINT:	**PICK ONE OF THESE EXERCISES**
QUADS	LEG EXTENSION, UNILATERAL LEG PRESS, SISSY SQUAT, CONSTANT-TENSION GOBLET SQUAT
HAMSTRINGS	LYING LEG CURL, GLUTE-HAM RAISE, SWISS BALL LEG CURL, ENHANCED-ECCENTRIC SEATED LEG CURL
GLUTES	BANDED HIP THRUST, CONSTANT-TENSION HIP THRUST, WALKING LUNGE, MACHINE HIP ABDUCTION DROPSET
CALVES	STANDING CALF RAISE, SEATED CALF RAISE
ABS	BICYCLE CRUNCH, HANGING LEG RAISE, V SIT-UP,

PROGRAM EXPLAINED

This program uses rapid wave loading as the primary progression scheme to drive size and strength gains forward while managing fatigue. Because research suggests that you should train reasonably close to failure to activate a full spectrum of motor units and maximize hypertrophy, it is important that we take sets adequately close to failure in this program. In fact, some exercises will have you pushing beyond the typical failure point through the use of specialized intensity techniques. Granted, because high effort training can take a toll on one's ability to recover properly, it is important to manage effort appropriately from week to week. For this reason, we are "waving" effort in 3 week minicycles. Week 1 will function as a mini-deload and intensity increases in Weeks 2 and 3 before returning to baseline in Week 4.

It is important that proper technique and good lifting habits are established in Week 1 so they can be carried through the remainder of the program. For this reason, weights in Week 1 may feel a bit lighter than what you're used to, but will build

in the subsequent weeks as technique and adjustment to the higher frequency is prioritized initially.

There are also adjustable bodypart weak point exercises included in the program so you can prioritize and develop your specific weak areas. I personally plan on adding additional volume for my biceps and neck on the upper body days and additional volume for my calves on lower body days. Before starting the program, I'd recommend choosing 2 or 3 bodyparts and be consistent with training them as your "weak points" so you aren't tempted to train muscles you simply enjoy training more part way through. Also, to be totally clear, you are NOT doing all exercises in one day, you are simply choosing one exercise for one body part and doing 2 or 3 sets for that exercise, as indicated in the program.

PROGRESSION

This program follows a double progression scheme for primary exercises. This means that you will be adding one rep from session to session until you reach a certain rep threshold in Week 3. In Week 4 you will return to the lower end of the rep range with a weight increase. Generally we will be adding 2.5% 1RM each wave, which may feel like a conservative increase, however, if you were to run this program over the entire year, it would result in 85 lbs being added to each lift in a moderate-heavy rep range! That would translate to enormous 1 rep max gains. Once you get past the "newbie phase" continued progression really becomes a balancing act of continuing to make steady progress without risking an overtraining episode or injury. My best word of advice when it comes to progressing on this program is this: take it slow and steady with the primary compound lifts while keeping your form 100% and use the secondary and tertiary exercises to push yourself harder and have some fun.

This program will start out modestly, allowing you to get a full training cycle in

with relatively lighter loads to ensure technique is fully mastered first. Still, this shouldn't be an excuse to treat training as a bore: simply going through the motions. Rather, you should be putting extra emphasis on technique mastery, mind-muscle connection and acclimating yourself to new exercises and intensity techniques.

WHY IS TECHNIQUE SO IMPORTANT?

The progressive overload principle should be thought of as not just adding more weight to the bar, but adding more tension onto the muscle itself. Dr. Brad Schoenfeld refers to this as the mechanical tension mechanism of hypertrophy [12]. "Overloading" a movement by allowing form to break down does not necessarily imply that more tension has been added to the muscle since the use of excessive momentum and the involvement of assisting muscles can help "move the weight". So, while I think it is acceptable to allow for controlled "cheating" on some secondary and tertiary exercises, primary exercises should be purposefully mastered and controlled on every single rep. There are two main reasons for this: safety and results.

1.) SAFETY

Strength training can be dangerous. A questionnaire of Swedish sub-elite powerlifters found that 87% of the participants had experienced an injury within the past year [13] – primarily in the lumbopelvic, shoulder, and anterior hip regions. Since building muscle and increasing strength is a time-consuming process, it's important to stay as healthy as possible for as long as possible. Consistently practicing perfect technique on light work will ensure that you have engrained the proper lifting habits when lifting the really heavy stuff.

2.) RESULTS

Not only does good technique minimize injury risk, it also loads the targeted muscles more effectively, while decreasing the loading of synergistic and stabilizing muscles [14]. A large degree of strength development is directly tied to technique development and because of the primacy of the progressive overload principle, it's safe to say that a focus on getting stronger in the rep zones included in this program will lead to greater muscle gains. This all begins with good technique.

HOW DO YOU KNOW IF YOU HAVE "GOOD FORM"?

Some trainers take the extreme stance that zero momentum or cheating should be used when lifting, regardless of how well controlled the cheating is. Others insist that because the goal is to overload, cheating is fine since it allows you to move more weight. I think they are both wrong, because it is always context dependent and in this case, exercise dependent:

Primary Exercises: Practice perfect technique on all reps (for example, squats, bench presses and deadlifts).

Secondary and Tertiary Exercises: Mild momentum is permitted to get the weight moving, but always control the weight on the eccentric.

Exactly what constitutes "good form" will depend on the specific exercise being performed and the person performing the exercise. Still, a helpful practice is to record your lifts and compare your technique to the technique demonstrated in the videos provided (page 79). You can also have a more experienced friend or coach give you feedback while keeping in mind that you should "feel exercises" in the muscle, not in tendons or ligaments. For form instruction on specific exercises, I

recommend the following few resources:

NSCA Exercise Technique Manual for Resistance Training 2nd Edition

Scott Herman's YouTube Channel (search for the specific exercise)
https://www.youtube.com/user/ScottHermanFitness

With exercise-specific technique variations aside (e.g. maintaining a neutral back during a squat, minimal swaying during a bicep curl, keeping the barbell in contact with the lower leg and thigh during a deadlift, etc.) there are three main principles that constitute "good form":

1. CONTROLLING THE NEGATIVE

Controlling the negative essentially means that you are lowering the weight under your own control, not under the control of gravity alone. This is an important concern for safety reasons, however some literature suggests that the eccentric (negative) portion of the lift is the most important for muscle growth. A 2015 meta-analysis by Schoenfeld, Ogborn, & Krieger found that rep durations between 0.5-8 sec all lead to similar amounts of hypertrophy [15]. This suggests that you should choose a tempo that is comfortable for you, while maintaining full control of the weight throughout the entire repetition. My personal recommendation is to aim for a 1-2 second negative and a 1-2 second positive on most lifts, with the main criteria being that you are consciously and actively controlling the weight using the target muscles throughout the full range of motion. For primary lifts like bench presses and squats, you should aim for a more "explosive" concentric and focus more on the movement of your entire body in three-dimensional space, rather than on a specific lifting tempo. Deadlifts are the one possible exception where the eccentric does not need to be controlled to the same degree – simply hold the bar on its way down

and maintain bar position directly over the middle of your foot, allowing the bar to descend at a speed that feels natural for you.

2. FULL RANGE OF MOTION

Although research does suggest that partial range of motion training ("half reps" or "quarter reps") can be a useful training tool for strength development [16-18], for the most part, we will benefit maximally from consistently training through a full range of motion. This basic habit across all exercises will allow for a more efficient understanding of the movement pattern and ensure roughly equal strength abilities at all points throughout the movement's range of motion.

From a safety perspective, it's also important to note that a full range of motion will usually require the use of lighter weights. Using the bench press as an example, you will be able to lift much more weight if only bring the bar half way to your chest than you will by bringing the bar all the way down to touch your chest. This "extra weight" on the bar may cause additional stress on the joints and soft-tissues without any additional benefit in terms of hypertrophy. This was highlighted in a 2013 study by Bloomquist and colleagues, which found that going through a full range of motion resulted in greater increases in muscle mass than using a partial range of motion [17]. Granted, there is counter-evidence supporting the idea that as long as intensity (relative effort) is equated, full and partial ranges of motions lead to similar hypertrophy [18, 19]

3. PROPER BREATHING

Knowing how to breathe during a lift is something many lifters struggle with. It is common to see people either holding their breath for far too long during a set or

having the pace of their breathing totally out of sync with the pace of their reps.

My simple recommendation is to inhale during the eccentric (negative) and exhale during the concentric (positive). This may feel awkward at first so I recommend paying close attention to your breathing during your warm up sets so that you can better "engrain" those proper breathing habits for your heavier sets. If your temptation is to hold your breath while lifting, consciously remind yourself to breathe and consider "marking the breath" by saying to yourself "breathing in" as you lower the weight and "breathing out" as you lift the weight back up.

In addition to ensuring proper oxygenation, research has shown that inhaling during the eccentric portion of the lift and exhaling during the concentric portion significantly lessens the increase in blood pressure associated with the more advanced "Valsalva maneuver" technique. [20, 21]. The Valsalva technique is when you forcibly exhale against a closed glottis during the concentric portion of a lift. This is a very commonly used technique amongst powerlifters and other strength athletes to increase the amount of weight being lifted by increasing pressure in the abdomen. In the intermediate-advanced stage of lifting, I would recommend experimenting with the Valsalva maneuver on primary exercises (squat, bench press and deadlift) to your own comfort levels since it will very likely help increase the weight you are using on these exercises. However, keep in mind that this breathing technique is associated with a greater increase in blood pressure, so use it at your own discretion and be particularly cautious if you are at risk of hypertension.

THE MIND-MUSCLE CONNECTION

The mind-muscle connection is a widely debated topic when it comes to movement execution and proper technique. Should you focus "internally" by thinking about what muscles you're supposed to be targeting with each exercise? Or should you

focus “externally” by thinking about using your body as a whole? As usually is the case, I think that the answer is not black and white and depends on context. Generally speaking, the mind muscle connection should only be used sparingly (if at all) on primary exercises like squats, deadlifts and overhead presses as these are highly technique-focused exercises that will activate a large muscle mass regardless of attentional focus. For these movements, it is better to focus on the movement of your entire body and simply execute the exercise with proper technique and through a full range of motion. For all tertiary exercises (isolation exercises) and any remaining compound exercises, you can use the mind-muscle connection to increase activation of the target muscle as you feel appropriate. For the record, research has shown increased muscle activation when subjects are instructed to use “internal cueing” (such as squeezing your glutes as hard as possible to get the barbell to move in a hip thrust) as opposed to “external cueing” (such as simply moving the barbell upwards) [22]. And recent data has suggested that use of a mind-muscle connection can be used to enhance muscle hypertrophy. So while it may not be appropriate for all exercises, practicing and cultivating a strong mind muscle connection is well-advised if your goal is to achieve the best muscular development possible.

In summary, our goal with training is to maximize muscular tension with relatively large training volumes and as outlined above, the best way to do that is by honing in on your technique.

FREQUENCY

WHAT IS OPTIMAL TRAINING FREQUENCY?

The main thing we can conclude from the scientific literature on frequency is that training each muscle twice per week is better than only training each muscle once per week [23]. One potential limitation of training frequency research is that studies are always volume equated, so the subjects are actually doing the same amount of total work. In the real world, it is less likely that volumes would be equal when frequencies are different. Higher frequency training typically allows us to do more volume within a week. To illustrate this point, just imagine doing 4 sets of squats 5 days per week compared to doing 20 sets of squats in 1 session. So frequency research really tells us that:

1. While there may be no special benefit to training a muscle more than twice per

week with the same amount of volume, practically speaking, hitting a muscle with a higher frequency almost always does allow for higher weekly volumes.

2. Training a muscle more than once per week is more optimal for hypertrophy, even when volume is the same.

This program uses a 6x per week Lower/Upper split, meaning the upper and lower body will be trained 3x per week each allowing us to see more frequent spikes in muscle protein synthesis [24, 25] (any reference for this is fine) while achieving relatively high weekly volumes to drive progress in the intermediate-advanced stage of training.

EFFORT/INTENSITY

HOW HARD SHOULD YOU PUSH EACH SET?

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.

%1RM BASED EXERCISES

Loads for primary exercises (squat, bench press, deadlift) are determined based on a percentage of your 1 rep max (1RM) for that exercise. The main advantage of using a %1RM approach is that progression is ensured in an objective manner week to week. Nothing is left up to how you're feeling that day – there is a set weight prescribed in the program, and it's your responsibility to hit it. This level of precision and structure is good for certain exercises because it allows for complete accountability.

HOW TO DETERMINE YOUR 1 REP MAX

Of course, to use a %1RM approach, you must know (or at least have a rough idea of) what your 1 rep max is for that exercise. Of course, not everyone will know what their 1RM is at any given time. It may be tempting to simply test your 1RMs – lift as heavy as possible with good form for one repetition. Although this is a seemingly simple solution, testing one rep maxes can be unnecessarily risky, and there are at least 2 better options to give you a ballpark estimate of this number.

ALWAYS USE A SPOTTER'S ASSISTANCE WHEN TESTING 1 REP MAXES!

LET'S USE THE SQUAT AS AN EXAMPLE:

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% of your estimated 1RM using a spotter for safety
    - Alternatively, you can pick a weight you think you can do about 3-5 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

2. Plug the results of a recent "tough set" taken close to failure in the 6 or lower rep range into this calculator, which will estimate your 1RM: http://www.exrx.net/Calculators/OneRepMax.html

Note: If you do the AMRAP tests before beginning the program, do them on its own day and then rest at least 2 days before beginning Week 1, Day 1.

RPE-BASED EXERCISES

In contrast to the objective nature of the %1RM-based method, the scientific literature tends to use two subjective scales for calculating effort: rate of perceived exertion (RPE) and reps in reserve (RIR). This program uses RPE to gauge effort for all secondary and tertiary exercises. The RPE scale is ranked from 1-10, with 1 implying nearly no effort was used, and 10 implying maximal effort was achieved (training to failure) [26]. I think this can be more easily conceptualized as RPE9 meaning work at about 90% of your maximal effort, RPE8 bring about 80% of maximal effort, etc. Another way to think about RPE is as the inverse of "reps in reserve" (RIR). RIR is a scale which attempts to gauge how many additional reps you would be able to complete after ending the set [27]. While research has shown that RIR is not very accurate for newer lifters [28], I think it is a good tool to understand at this point in your training career. So, to clarify, an RPE of 9 would mean you had 1 rep left in reserve. An RPE of 8 would mean you had 2 reps in reverse, etc.
In the program, the last set RPE column (LSRPE) is left blank for you to fill in. The idea here is to reflect on your last set and ask yourself how many more reps you think you could have gotten. It is a useful way to account for how hard you're working on the final set and how well it matches the target RPE.

AN IMPORTANT DISCLAIMER ABOUT TRAINING INTENSITY (EFFORT)

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.

As mentioned previously, Weeks 1, 4 and 7 (the first week of each "wave") are intended to function as "mini-deloads" where efforts are not quite as high as the

subsequent two weeks. Don't be tempted to push yourself too hard in these sessions as they are intended to lay the foundation for the upcoming wave's progression.

VOLUME:

Volume loosely refers to the total amount of work you're doing. This is often approximated as sets x reps x load, but is often simply thought of as the total number of 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, [29] however, multiple sets (3-5 sets) per muscle group are thought to be required to maximize hypertrophy [30]. It is important to remember that not all volume is created equally and more volume isn't always the answer. A study comparing 5 sets of 10 reps versus 10 sets of 10 reps on the squat actually showed greater strength responses in the 5 sets group, despite using half the volume. Additionally, the 10 x 10 group lost muscle (on average) in their legs [31], so there appears to be a volume limit past which more volume is not helpful for hypertrophy.

When it comes to per-week volume, James Krieger recommends an absolute minimum of 10 sets per week per muscle group [32], with 10-20 sets per bodypart per week being a good ballpark estimate for intermediate-advanced trainees. Because of the large degree of overlap between bodyparts on compound exercises, tracking set volume per bodypart has its complications and limitations. For this reason, we will be measuring total sets per workout. We will lump all of the upper body and all of the lower body muscles together and calculate total per-session volume, which I think is a more practical way to keep track of volume on this routine. These numbers will be instructive for you when moving on to further blocks of training or other programs so that you can have an idea of how your body responds to the per-session "upper body volume" and "lower body volume" laid out in this routine.

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 accumulates throughout each wave 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 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, so it is 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. However, 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 compliment 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=7S0NjKYlJ7I
Volume Science Explained: https://www.youtube.com/watch?v=qwv3JqOUqWs

EXERCISE SUBSTITUTIONS

LOWER BODY EXERCISES

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

BARBELL 45° HYPEREXTENSION: DB 45° hyper, reverse hyper, glute ham raise

BULGARIAN SPLIT SQUAT: Smith machine reverse lunge, dumbbell walking lunge
Cable pull-through: barbell RDL, glute kickback

CONVENTIONAL DEADLIFT: Sumo deadlift

DEFICIT DEADLIFT: Block pull (4")

DUMBBELL STEP-UP: Walking lunge, single-leg leg press

DUMBBELL WALKING LUNGE: Dumbbell step up, Bulgarian split squat

ECCENTRIC OVERLOADED LEG EXTENSION: Leg extension

FRONT SQUAT: Goblet squat, safety bar squat

GOOD MORNING: Barbell RDL, reverse hyper, glute ham raise

HIP THRUST: Glute bridge, db 45° hyperextension

KNEE-BANDED LEG PRESS: leg press, knee-banded bodyweight squat

LEG EXTENSION: sissy squat, goblet squat

LEG PRESS: Goblet squat, walking lunge

LYING LEG CURL: Seated leg curl, sliding leg curl

MACHINE HIP ABDUCTION: lateral band walk

REVERSE HYPER: glute ham raise, cable pull-through, glute kickback

SEATED LEG CURL: lying leg curl, sliding leg curl

SLIDING LEG CURL: lying leg curl, seated leg curl

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

STIFF LEG DEADLIFT: Barbell RDL, block pull (4")

SUMO DEADLIFT: Conventional deadlift

AB EXERCISES

CABLE CRUNCH: Bodyweight crunch, V sit-up, bicycle crunch

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

PLANK: Pallof press, hanging leg raise hold

WEIGHTED CRUNCH: Cable crunch, dumbbell loaded crunch

UPPER BODY EXERCISES

ARNOLD PRESS: Dumbbell seated shoulder press, machine shoulder press

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

BARBELL CLOSE-GRIP BENCH PRESS: Floor press, dumbbell close-grip bench press

BARBELL INCLINE PRESS: Dumbbell incline press, machine incline press

BARBELL OVERHEAD PRESS: Seated barbell overhead press

BARBELL PUSH PRESS: Barbell overhead press, machine shoulder press

CABLE FLYE 21S: Cable fly, dumbbell fly, pec deck

CABLE TRICEPS KICKBACK: V-bar pressdown, cable kickback

CABLE UPRIGHT ROW: Machine lateral raise, face pull

CALIFORNIA PRESS: JM press, pin press, skull crusher

CABLE CLOSE-GRIP ROW: Cable wide grip row, dumbbell row

DIP: Assisted dip, machine dip, close-grip bench press

DUMBBELL ROW: Cable single-arm row, dumbbell chest-supported row

EZ BAR CURL 21S: EZ bar curl, dumbbell curl 21s, cable curl 21s

FLOOR SKULL CRUSHER: EZ bar skull crusher, floor press, pin press, JM press

HAMMER CURL: EZ bar pronated curl, rope hammer curl

LAT PULLDOWN: Pull-up, supinated pulldown

MACHINE CHEST PRESS: Dumbbell press, push-up

MACHINE CHEST-SUPPORTED ROW W/BAND: Machine chest-supported row, dumbbell chest-supported row

MACHINE HIGH ROW: Dumbbell chest-supported row, cable seated row

MACHINE SHOULDER PRESS: Seated dumbbell shoulder press

NEUTRAL-GRIP PULL-UP: Neutral-grip pulldown, chin-up

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

PEC DECK: Cable fly, dumbbell fly

PENDLAY ROW: Seated cable row, machine T-bar row

PULL-UP: Lat pulldown, neutral-grip pull-up

PUSH-UP: Dumbbell floor press, machine chest press

ROPE OVERHEAD TRICEPS EXTENSION: V-bar pressdown, rope triceps extension

SEATED T-BAR ROW: chest-supported row, cable single-arm row

SUPINATED DUMBBELL CURl: concentration curl, preacher curl

SUPINATED LAW PULLDOWN: chin-up, pronated lat pulldown

EXERCISE VIDEOS

LOWER BODY EXERCISES

BACK SQUAT: https://www.youtube.com/watch?v=bEv6CCg2BC8&t

BARBELL 45° HYPEREXTENSION: https://www.youtube.com/watch?v=GpG21_BpEfs

BULGARIAN SPLIT SQUAT: https://www.youtube.com/watch?v=2C-uNgKwPLE&t=1s

CABLE PULL-THROUGH: https://www.youtube.com/watch?v=WljI_Cg7ths

CONVENTIONAL DEADLIFT: https://www.youtube.com/watch?v=VL5Ab0T07e4&

DEFICIT DEADLIFT: https://www.youtube.com/watch?v=CpWsUsqBtN8

DUMBBELL STEP-UP: https://www.youtube.com/watch?v=NcBM4Pl0ZU8

DUMBBELL WALKING LUNGE: https://www.youtube.com/watch?v=D7KaRcUTQeE&t=1s

ECCENTRIC OVERLOADED LEG EXTENSION: https://www.youtube.com/watch?v=E_pTa-uagpE

FRONT SQUAT: https://www.youtube.com/watch?v=v-mQm_droHg

GOOD MORNING: https://www.youtube.com/watch?v=YA-h3n9L4YU

HIP THRUST: https://www.youtube.com/watch?v=xDmFkJxPzeM

KNEE-BANDED LEG PRESS: https://www.youtube.com/watch?v=7H-KpNTYw_k

LEG EXTENSION: https://www.youtube.com/watch?v=YyvSfVjQeL0&t=1s

LEG PRESS: https://www.youtube.com/watch?v=qdeF__Vs85o

LYING LEG CURL: https://www.youtube.com/watch?v=1Tq3QdYUuHs&t=2s

MACHINE HIP ABDUCTION: https://www.youtube.com/watch?v=GmRSV_n2E_0

REVERSE HYPER: https://www.youtube.com/watch?v=3d9_W--eUcI

SEATED LEG CURL: https://www.youtube.com/watch?v=ELOCsoDSmrg&t=1s

SINGLE-LEG LEG EXTENSION: https://www.youtube.com/watch?v=I1F58vIjbvc

SLIDING LEG CURL: https://www.youtube.com/watch?v=RmsTFCQ3Qig

STANDING CALF RAISE: https://www.youtube.com/watch?v=-qsRtp_PbVM

STIFF LEG DEADLIFT: https://www.youtube.com/watch?v=1uDiW5--rAE

SUMO DEADLIFT: https://www.youtube.com/watch?v=XsrD5y8EIKU&

AB EXERCISES:

CABLE CRUNCH: https://www.youtube.com/watch?v=ToJeyhydUxU

HANGING LEG RAISE: https://www.youtube.com/watch?v=hdng3Nm1x_E

PLANK: https://www.youtube.com/watch?v=pSHjTRCQxIw

WEIGHTED CRUNCH: https://www.youtube.com/watch?v=_O1xunCfYEM

UPPER BODY EXERCISES:

ARNOLD PRESS: https://www.youtube.com/watch?v=6Z15_WdXmVw

BARBELL BENCH PRESS: https://www.youtube.com/watch?v=vcBig73ojpE

BARBELL CLOSE-GRIP BENCH PRESS: https://www.youtube.com/watch?v=nEF0bv2FW94

BARBELL INCLINE PRESS: https://www.youtube.com/watch?v=jPLdzuHckI8

BARBELL OVERHEAD PRESS: https://www.youtube.com/watch?v=_RlRDWO2jfg

BARBELL PUSH PRESS: https://www.youtube.com/watch?v=ep30avTSMB0

CABLE FLYE 21S: https://www.youtube.com/watch?v=-EIhKMDSjBY

CABLE TRICEPS KICKBACK: https://www.youtube.com/watch?v=cvjnkqjxreg

CABLE UPRIGHT ROW: https://www.youtube.com/watch?v=nwkLwMRHMQo&t

CABLE CLOSE-GRIP ROW: https://www.youtube.com/watch?v=GZbfZ033f74

CALIFORNIA PRESS: https://www.youtube.com/watch?v=fCUeeaWBBSs

DIP: https://www.youtube.com/watch?v=yN6Q1UI_xkE&

DUMBBELL ROW: https://www.youtube.com/watch?v=J15nYGtf-TA

EZ BAR CURL 21S: https://www.youtube.com/watch?v=i1YgFZB6aII&t

FLOOR SKULL CRUSHER: https://www.youtube.com/watch?v=popGXI-qs98

HAMMER CURL: https://www.youtube.com/watch?v=zC3nLlEvin4&t=3s

LAT PULLDOWN: https://www.youtube.com/watch?v=CAwf7n6Luuc&

MACHINE CHEST PRESS: https://www.youtube.com/watch?v=xUm0BiZCWlQ

MACHINE CHEST-SUPPORTED ROW W/ BAND: https://www.youtube.com/

watch?v=WJIt0SQekVU

MACHINE HIGH ROW: https://www.youtube.com/watch?v=w6dxL2fmXRo

MACHINE LATERAL RAISE: https://www.youtube.com/watch?v=0FUpcwj_1z4

MACHINE SHOULDER PRESS: https://www.youtube.com/watch?v=Wqq43dKW1TU

NEUTRAL-GRIP PULL-UP: https://www.youtube.com/watch?v=Zr8hHd2Q2Eo

PAUSE DUMBBELL INCLINE PRESS: https://www.youtube.com/watch?v=0G2_XV7slIg

PEC DECK: https://www.youtube.com/watch?v=-EIhKMDSjBY

PENDLAY ROW: https://www.youtube.com/watch?v=axoeDmW0oAY&

PULL-UP: https://www.youtube.com/watch?v=Hdc7Mw6BIEE&

PUSH-UP; https://www.youtube.com/watch?v=IODxDxX7oi4

ROPE OVERHEAD TRICEPS EXTENSION: https://www.youtube.com/watch?v=38QQai2Ag9Y

SEATED T-BAR ROW: https://www.youtube.com/watch?v=sw1LwNZ3F_w

SUPINATED DUMBBELL CURL: https://www.youtube.com/watch?v=sAq_ocpRh_I

SUPINATED LAT PULLDOWN: https://www.youtube.com/watch?v=kOQt1sfmgqw

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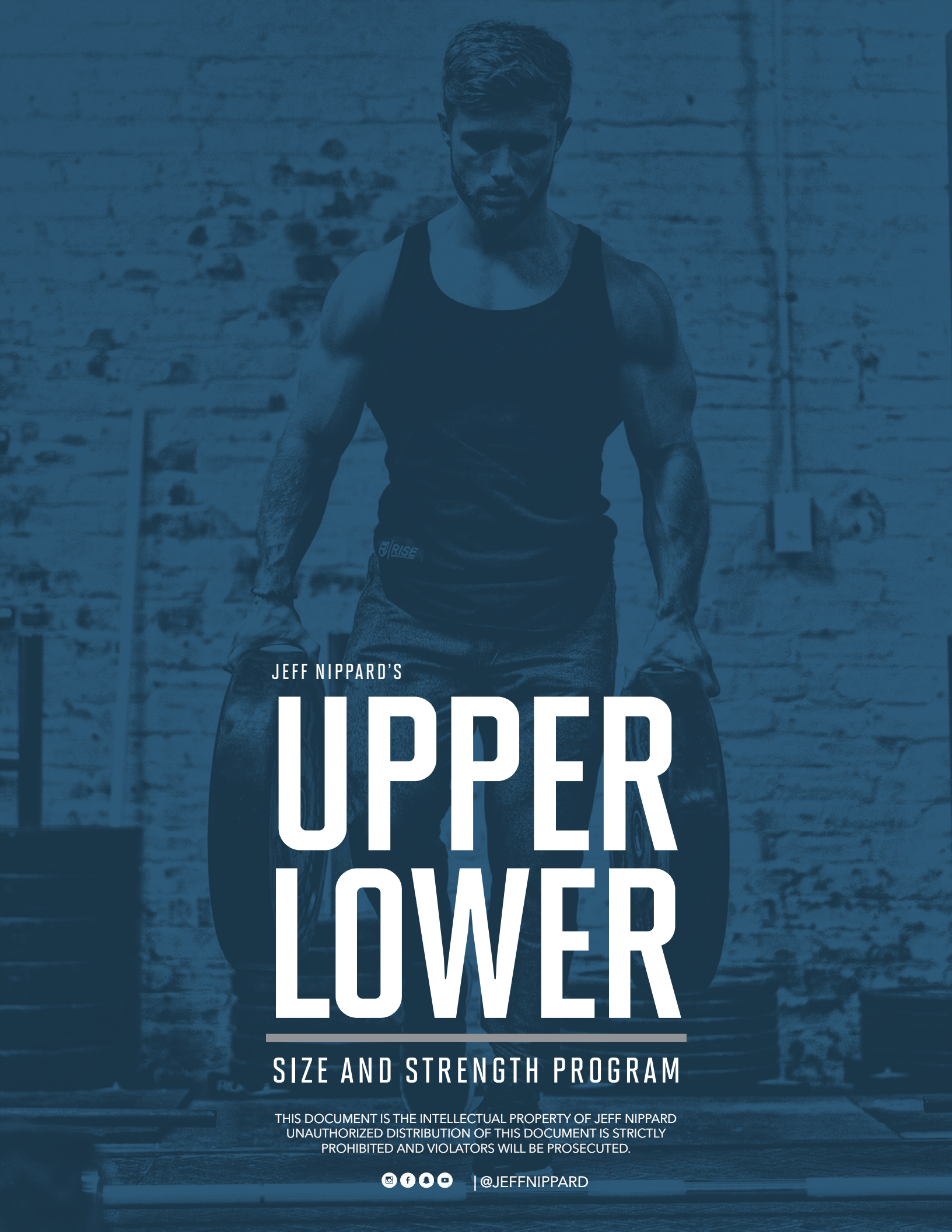

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UPPER LOWER

SIZE AND STRENGTH PROGRAM

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