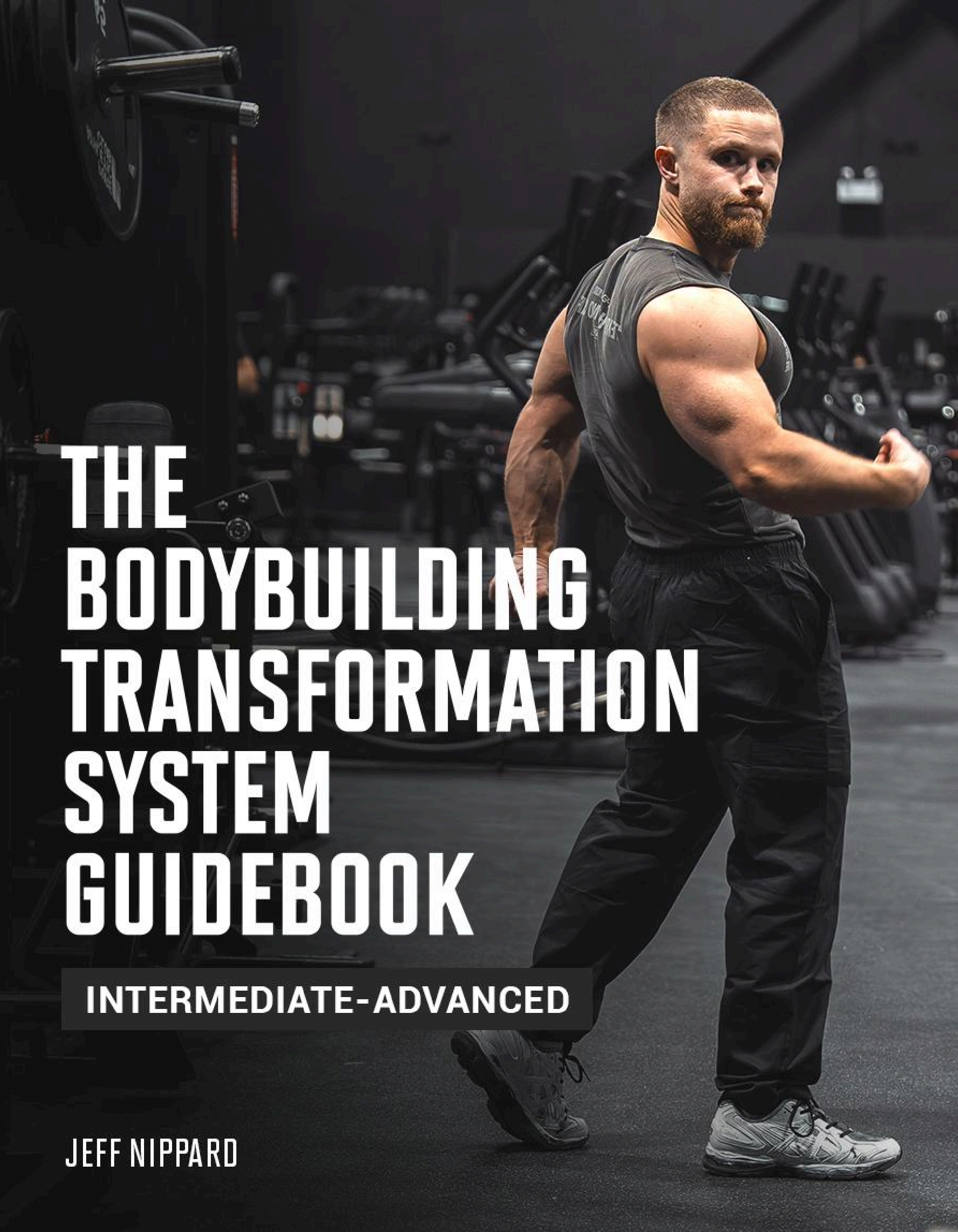




# THE BODYBUILDING TRANSFORMATION SYSTEM GUIDEBOOK

INTERMEDIATE-ADVANCED

JEFF NIPPARD

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# WELCOME TO THE BODYBUILDING TRANSFORMATION SYSTEM

I want to start things off by saying thank you for purchasing the Bodybuilding Transformation System! A lot of time and effort went into the project that inspired this program, and I truly appreciate your support.

Before diving into the specifics, I want to cover the fundamental principles that should guide any bodybuilding program. If you've recently completed either of my Pure Bodybuilding programs, this will be familiar territory, so feel free to skip ahead to What's New in the Bodybuilding Transformation System. However, if you haven't run those programs—or if it's been a while—I highly recommend reading this section, as it highlights the key pillars of an effective bodybuilding program.





A man with a beard and short hair is flexing his biceps and chest muscles. He is wearing a dark, possibly black, tank top. In the background, another person is partially visible, also flexing their muscles. The background is a gym setting with various pieces of equipment like weights and racks. The overall image has a dark, blue-tinted overlay.

# THE TRANSFORMATION PRINCIPLES

In this handbook, you will find simple summaries of the most important factors for building muscle. As we progress through the program, we'll be putting these 6 key principles to use.

## 1. TENSION OVER EVERYTHING

Tension remains undisputed as the main driver of hypertrophy [1]. Without tension, very little muscle growth can occur. Tension is the force created within a muscle as it is pulled and stretched during lifting, kind of like a rope in a tug of war.

When the muscle senses tension, a bunch of anabolic signals are sent, telling the muscle it needs to get bigger.

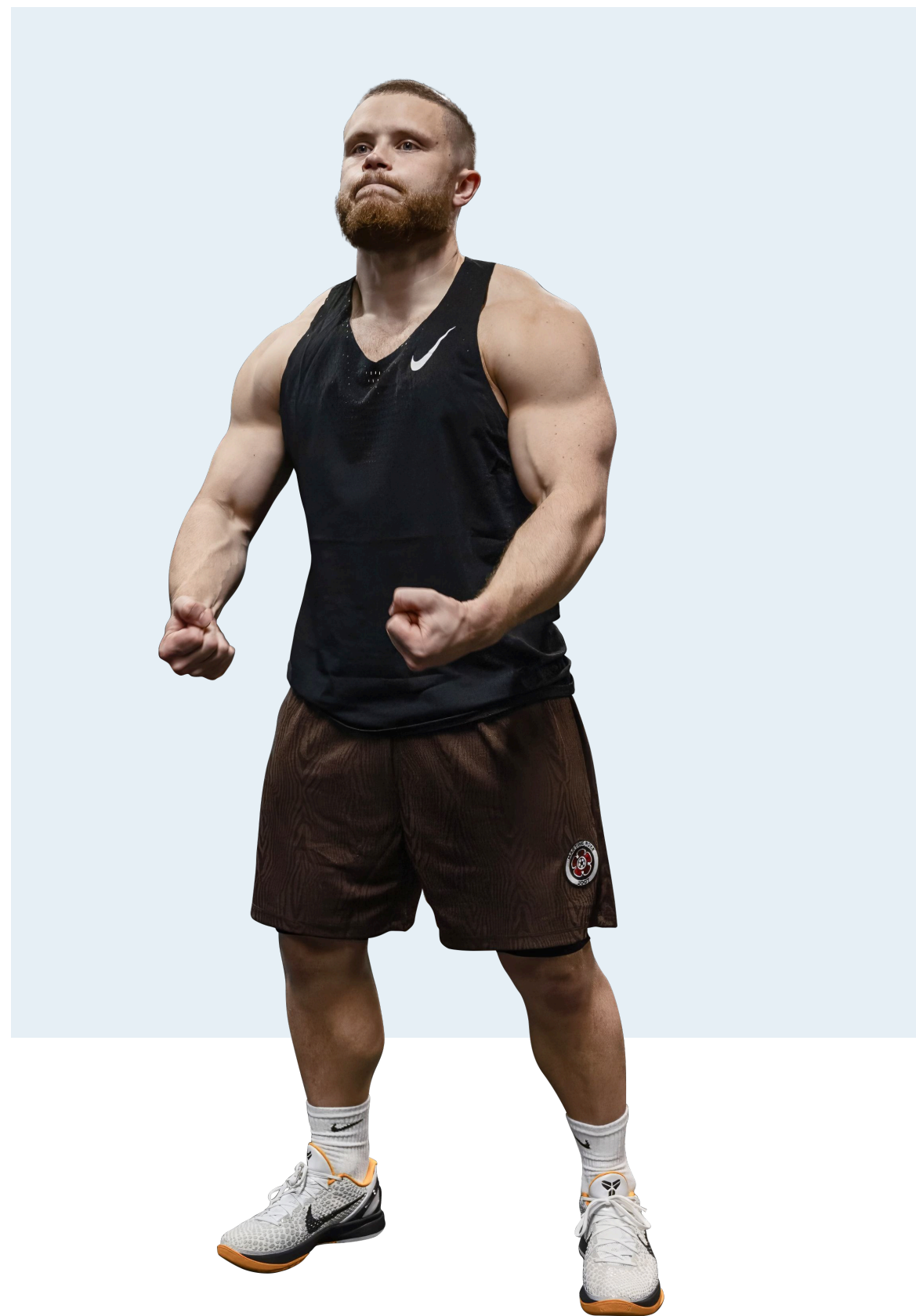
So how do we maximize tension on a muscle? Answering that question leads us into the remaining 5 principles:

## 2. TECHNIQUE

In order to ensure that tension is being applied to the muscle, we need to perform exercises with good and consistent technique. There are detailed videos demonstrating proper technique for every exercise included in the program sheets but, for now, here are a few important things we'll be focusing on:

### The Negative

A controlled, slightly slower negative is a pillar of good technique. I was at the gym today, looked around, and noticed how many people just let the weight fall during the negative. Most people seem much more concerned with "getting the weight up" than they are with lowering it back down under control. This is significant because getting the weight up is most likely less important than lowering it back down. Research indicates that the eccentric (negative) phase is more important for hypertrophy than the concentric (positive) phase of a lift. So, if you're one of those people who tends to just let the weight free fall on the negative, in this program, really focus on resisting the weight on its way down.





Generally speaking, we'll be using a 2-4 second negative on most exercises. That's a fairly slow negative compared to what most people do, but it's not super slow. New research on rep tempo suggests that: "the most favorable [tempo for muscle hypertrophy] is a combination of slower eccentric movements, paired with faster concentric movements" [2]. In other words, on most exercises, we'll be moving the weight slower on the negative and more explosively on the positive. A few exercises, such as cable reverse flyes for the rear delts and cable triceps kickbacks, don't lend themselves as well to an explosive positive, so on these, we'll use a smoother positive. If you're confused about what your tempo should look like for each exercise, pay attention to my rep tempo in the video demos for each exercise. A safe general assumption, though, would be a 2-4 second negative and a forceful positive.

Another good cue I like to think about on the negative is treating it as if it were a "failed positive." On every rep, you're not just lowering the weight, you're resisting it. It's kind of like you're trying to push the weight up, but it still keeps moving down against your might. The idea is to really feel the muscle streeetttchhhhhhhh as you lower the weight back down. This will create much more eccentric tension than just allowing the weight to free fall.

## **The Range of Motion**

More and more research is pointing toward the idea that full range of motion isn't always better per se, but rather getting to the deepest, most-stretched aspect of the range of motion is what really matters [3]. In other words, the stretch is, for the most part, more important than the squeeze. The bottom half of a squat is more important than the top half of a squat. The bottom half of a cable curl is more important than the top half of a cable curl. You need to get the muscle stretched while lifting. When performing the exercises in this program, regularly ask yourself if you're getting a deep stretch at the bottom. If not, you may be missing out on some gains!

## **Momentum**

Another thing I've been noticing a lot at the gym is that most people do quite a lot of cheating on their form – too much cheating. Again, it seems as if they just want to get the weight up. It's as if the lifters are thinking that as long as they can get the weight from A to B, it's mission accomplished. The problem, though, is that you can get the weight from A to B without actually applying much tension to the target muscle. Take bicep curls, for example. If I "curl" the weight up while leaning forward and backward (see: Bro Jeff), I'm most definitely taking loads of tension away from the biceps and dispersing it onto the lower back. This isn't ideal. On each exercise, we want to always be in control of the weight. This generally means minimizing momentum and swinging while keeping our target muscle in mind.

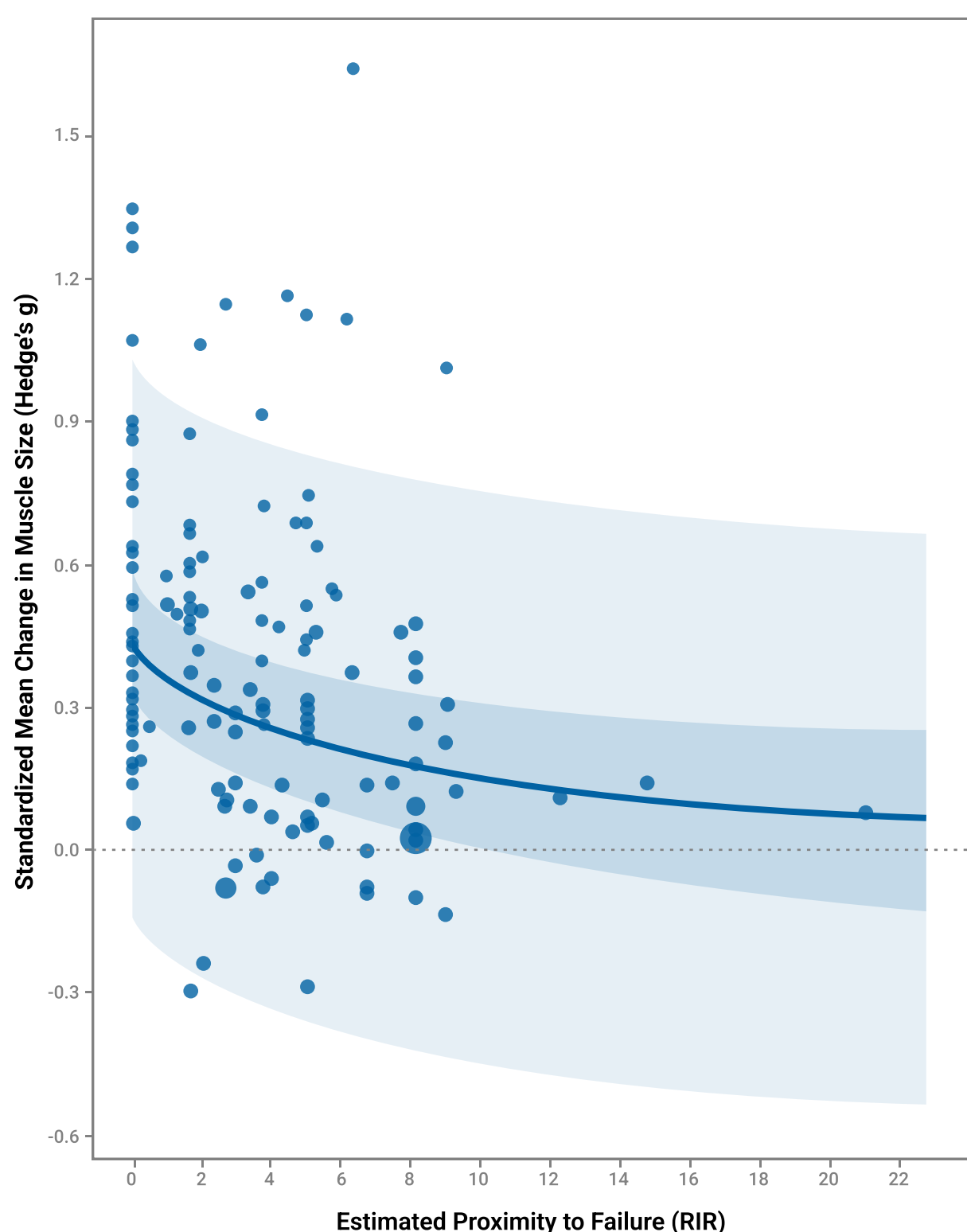
## **Form Consistency**

Another point worth mentioning is that you should do your absolute best to keep your form consistent from week to week. As you add weight or reps, it will be tempting to alter your form for the sake of "progression." This is a kind of fake progression though. If you just got other muscles involved by cheating the weight up, you didn't actually apply any additional tension to the target muscle. It's better to keep the form in check than increase the weight at all costs. We're putting technique over weight in this program... always.

### 3. EFFORT

You need to push sets hard to maximize muscle growth. And, unfortunately, research consistently shows that most people simply don't push sets hard enough to do that [4]. It's common to see people at the gym going year after year but making no noticeable progress. In most cases, this isn't because they've maxed out their natural muscular potential. Rather, it's because they simply aren't pushing their sets close enough to failure to stimulate new hypertrophy. Beyond the beginner stage, triggering muscle growth will be uncomfortable. You can't just go through the motions. You need to really grind some reps out. Of course, "just showing up" to the gym will reap all kinds of wonderful mental health benefits, may increase strength, improve metabolic health, and prevent muscle wasting. That's great, but this is a bodybuilding program and "just showing up" won't be enough to build new tissue. For that, you need to really make the muscle work. And it needs to be hard.

So how hard is hard enough? The answer to that question isn't black-and-white because, to some extent, it depends on the specific exercise you're doing and how much volume you're doing. But one more-or-less fool-proof way to ensure that you're training hard enough is to push most sets either to failure or about one rep shy of failure. In fact, a new meta-analysis suggested that as one gets closer to failure, one tends to see more hypertrophy [5]. This trend can be seen in the figure below, where there is a clear increase in growth as you get closer and closer to 0 reps in reserve (0 RIR).



Reps in reserve (RIR) and muscle size according to Robinson et al, 2023

Some people are using this study as definitive proof that failure training is king, and I can sympathize with why. The results look quite convincing. However, a little context is necessary before jumping to conclusions. Just as one example, this other meta-analysis of 15 studies on failure vs non-failure training came to a different conclusion: "There is no evidence to support that resistance training performed to momentary muscular failure is superior to non-failure resistance training for muscle hypertrophy" [6].

What's going on here? It seems that depending on how you run the statistics, you can either walk away from the current body of literature concluding that going all the way to failure really is better for muscle growth, OR that going all the way to failure doesn't actually offer a meaningful benefit over stopping a few reps shy.

The evidence on failure is mixed and conflicting. So, practically speaking, what should we do?

Let's see what experts and high-level bodybuilding coaches are saying.

You'll hear two main lines of reasoning from experts in this area.

One camp argues against failure. They say that going to failure often isn't worth it because it limits the amount of volume you can do. Failure training is very fatiguing and imposes a greater recovery demand. Because of this, if you constantly go to failure, you simply won't be able to recover from as much volume as if you left a rep or two in the tank. Also, studies do consistently show that volume matters for muscle growth, up to a point. All else being equal, increasing volume usually increases muscle growth, up to a point [7, 8]. If the research on failure is mixed, but the research on volume is clearly positive, it seems that maybe we should prioritize volume over failure after all.

Hmmmm...

Another camp of experts would dispute this. They would argue that, sure, volume does matter, but failure matters more. It's better to push your sets to failure and let the volume naturally land at a level that allows you to still recover. In other words, rather than letting volume be the driver, let intensity (effort) be the driver. Don't sacrifice intensity for volume, they would say.

There isn't any real universal consensus amongst experts either.

So where does this leave us?

Well, this program offers at least one potential solution that gets the best of both worlds. The philosophy we'll be using around failure in this program is explained below.

The fact that there is high-quality evidence showing that failure is substantially better than non-failure training for muscle growth, we'd better make sure we have at least some failure training in our program. If we never ever go to failure, we'd almost certainly be leaving gains on the table. But, does this mean every single set must be all the way to failure? I don't think so. I think there's also some merit to the argument that too much failure training can impair volume tolerance. Too much failure training may also impose an unnecessary injury risk, especially on certain exercises. So here's the solution:

We're going to break down all of our working sets into "Early Sets" and "Last Sets". Early Sets refer to every working set other than the very last set.

If an exercise calls for 3 sets, sets 1 and 2 are the Early Sets and set 3 is the Last Set. If an exercise calls for 4 sets, sets 1, 2 and 3 would be the Early Sets and set 4 would be the Last Set. If an exercise calls for 2 sets, set 1 would be the Early Set and set 2 would be the Last Set. If an exercise calls for 1 set, you'll see that there is no Early Set RPE listed, as the first set will also be the last set, so just follow the Last Set RPE. It's worth mentioning that Early Sets are NOT warm-up sets. Warm-up sets are separate and to be done before the Early Sets. Dividing working sets into Early Sets and Last Sets is simply a way for us to apply different intensity levels to different working sets.



Here’s how that will look in practice.

For the Early Sets, we’ll generally avoid going all the way to failure, usually stopping with ~1-2 rep left in the tank. In the program, I’ll refer to this as an RPE of ~8-9, which simply means that you didn’t quite get all the way to failure and you might have had 1-2 more reps in the tank, but certainly no more than that.

In case anyone is confused, let me back-up and explain RPE in a little more detail. Here’s a very quick primer on RPE.

RPE stands for Rating of Perceived Exertion. It may sound fancy, but it’s extremely simple once we break the acronym down. RPE is your rating of how you perceived your exertion on a set. In other words, you rate how hard the set felt on the scale of 1-10, and that’s your RPE. Usually, to make the scale a bit more objective, coaches will set up the RPE scale based on how many reps you think you had left in the tank. For example, if you think you had 0 reps left in the tank, that would correspond to an RPE of 10. If you think you had 1 rep left in the tank, that would correspond to an RPE 9. And so on down the line. I’ll break it down in more detail in the table below. Even if you’re very familiar with RPE, I’d recommend reading through the table as some of the information is unique to this program.

| RPE  | Meaning                                                                                                                                                                        |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10   | You reached failure. You actually tried and failed to get the weight all the way up.                                                                                           |
| 9-10 | You didn’t actually reach failure, but you were very close. You might have been able to add a little more weight, but you definitely didn’t leave more than 1 rep in the tank. |
| 9    | You could’ve done one more rep if you really tried. This is still a hard set.                                                                                                  |
| 8-9  | You could’ve done 1 or 2 more reps if you really tried. It wasn’t a brutal set, but you’re still pretty close to failure here.                                                 |
| 8    | You probably had 2 reps left in the tank. It wasn’t a super hard set, but will still certainly stimulate hypertrophy.                                                          |
| 7-8  | There are 2 or 3 reps in the tank here. Depending on the exercise, this is usually not going to feel like a truly hard set.                                                    |
| 7    | You have 3 reps left in the tank. On most exercises, this would feel like something between a tough warm up set and an easy working set.                                       |
| 6-7  | You have 3 or maybe 4 reps left in the tank.                                                                                                                                   |

| RPE | Meaning                                                                      |
|-----|------------------------------------------------------------------------------|
| 6   | You could've done 4 more if you really tried.                                |
| 5   | You could've done 5 more if you really tried.                                |
| 1-4 | More than 5 reps left in the tank. These are warm-up sets, not working sets. |

For this program, the last set of every exercise will be taken to failure.

You may also notice that in the program I use a “~” sign before most RPE ratings to imply that your RPE estimates will never be perfectly accurate. This sign denotes that being off by about 1 RPE unit is totally normal. Just do your best to be within +/- 1 RPE of the assigned RPE. Also, you can use the Last Set of most exercises to see how accurate you were with your Early Set RPEs by sending it all the way to failure and comparing it to how many reps you got for the previous sets.

#### 4. PROGRESSIVE OVERLOAD

The simplest explanation of progressive overload is when you increase some training variable over time. It's widely accepted that progressive overload is crucial for ensuring continued progress because you need to continually provide the muscle with a new stimulus to adapt to. Without overload, the muscle will reach the current challenge level and have no real reason to continue growing.

There are a large number of ways to apply progressive overload. Here are the main ones we'll be emphasizing in this program:





|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Adding reps</b>                          | This will be the main method of overload on exercises that give a rep range, instead of a fixed rep count. For example, if the program calls for 2 sets of 10-12 reps on Cable Crunches (as it does), you'll pick a weight that will sufficiently challenge you for either 10, 11, or 12 reps. Let's say you get 10 reps on both sets in Week 3. In Week 4, you will try to add a rep to at least one of those sets. Over the coming few weeks, try to max out the rep range by getting 12 reps on both sets. Only once you've maxed out the rep range you should add some weight and then reduce reps back down to the bottom of the range. Coaches refer to this as double progression since we are progressing both reps and weight, in that order. |
| <b>Adding weight</b>                        | For all exercises within the program, only add weight once you've maxed out the top end of the rep range, as explained above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Improving form</b>                       | Even if you can't add some reps or weight during a given week, you can always do minor things to improve your technique. Improvements in technique cues, especially improvements in controlling the negative, can increase tension on the target muscle and totally counts as progressive overload!                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Improving the mind-muscle connection</b> | If you can't add reps or weight, you can focus on feeling the muscle working better. Improving the mind-muscle connection is most likely not as effective as adding reps, weight or improving form at increasing tension, but <u>research has shown</u> that the mind-muscle connection can increase hypertrophy in some cases [9]. It's certainly worth keeping in mind as an overload option, especially on isolation exercises where adding reps and weight may become impractical at a certain point of strength development.                                                                                                                                                                                                                      |

## 5. HIGH-TENSION EXERCISES

You'll quickly notice that this program is not a powerbuilding/strength program. There are many machine-based and cable-based exercises and only a select few free-weight movements. Even the over-hated and under-appreciated Smith Machine makes a number of appearances over a free weight barbell option (gasp!).

Why is this?

Well, first of all, the best evidence shows that machines are at least equally effective as free weights in stimulating hypertrophy [10], and in some cases, may be superior [11].

That shouldn't be surprising as machines and cables have a few clear advantages to free weights when it comes to bodybuilding. Here's a short list of a few:

- Generally, you can push sets to failure more safely on machines. If you fail a rep on a machine, the weight is usually safely supported by the machine after you fail a rep. On the other hand, if you fail with free weights, there is less support for the failed attempt, which may come with a higher risk of injury.
- Good machines are also generally designed to have good resistance profiles. Free weight exercises tend to have much more variable resistance profiles, meaning that the exercise may feel very hard at one point in the range of motion, but very easy at another point in the range of motion. Machines tend to apply resistance more evenly, which is a good thing because as you approach failure, the muscle won't fail just because it hit a tough spot in the free weight's resistance profile. Instead, it'll be because the muscle has reached exhaustion. Let's compare the standing dumbbell curl versus the Bayesian cable curl, for example. With the dumbbell curl, your biceps experience the highest level of tension when the elbow is at 90 degrees and virtually zero tension when the bicep is fully stretched at the bottom. Wouldn't it be nice if there was a way to keep even tension on the biceps throughout the entire range of motion? Luckily, there is a way! It's called a Bayesian cable curl. Unlike dumbbells, cables offer much more continuous tension on the biceps throughout the entire range of motion.



- Machines also tend to offer higher stability than free weight exercises. Unstable exercises are not ideal for hypertrophy. Think about doing a squat on a Bosu ball. You're so challenged with trying to keep your balance that you aren't able to properly apply tension to the quads. Increasing the stability of an exercise, generally speaking, increases the efficiency of the force transfer to the target muscle. This is why, for hypertrophy purposes, getting "locked in" on an exercise is smart. The less locked in you are, the more opportunities there are for tension to leak – which is not great. Since machines usually offer very high stability, there is minimal leakage of tension.
- Machines also generally require fewer warm-up sets. This means you can get to your working sets faster without wasting time and energy doing as many non-stimulative warm up sets. For example, when I do barbell back squats, I usually need to do 4-5 warm-up sets before I feel ready to hit my first working set. However, on Hack Squats or Smith Machine Squats, I feel ready to tackle my working sets after only 2-3 warm-up sets. That means less time and energy spent doing work that isn't helping with muscle growth and more time and energy spent on the good stuff.



Despite these advantages, I don't want to overstate the supremacy of machine-based exercises. Remember that research indicates that both machines and free weights are effective for building muscle. And free weights have advantages too. They're more accessible, they tend to have better strength carryover, they may activate smaller stabilizers better, and they're more versatile (you can do a lot more exercises with a barbell than you can with a hack squat).

But when it comes to our main goal with this program specifically, which is to build muscle, I do believe that machines have a slight edge in most instances. That said, free weight exercises are still included throughout the program. But overall, you will notice that machines and cables are emphasized.

However, just in case you don't have access to machines and cables, for every exercise, I've included at least one free weight substitution option. Making these substitutions will absolutely allow you to still get the job done and make great gains while running this program with minimal equipment.

Beyond an emphasis on exercises that have high stability and good tension profiles, this program also prioritizes exercises with a long length muscle bias. This means we'll be focusing on exercises that load the muscle while it is being stretched. Examples of very long-length biased exercises include Bayesian cable curl, DB Bulgarian split squat, pendlay deficit row, and bottom-half DB flies.

6. INTENSITY TECHNIQUES

Intensity techniques are also a big part of this program. In fact, there is a full column in the program dedicated to the intensity technique we'll be using on the last set of each exercise.

| WEEK 1                 | EXERCISE                                | LAST-SET INTENSITY TECHNIQUE | WARM-UP SETS | WORKING SETS | RPPs | TRACKING LOAD AND REPS |       |       |       | EARLY SET RPE | LAST SET RPE | REST     | SUBSTITUTION OPTION 1                   | SUBSTITUTION OPTION 2     | NOTES                                                                                                                                                                                                                                                                                                                        |
|------------------------|-----------------------------------------|------------------------------|--------------|--------------|------|------------------------|-------|-------|-------|---------------|--------------|----------|-----------------------------------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        |                                         |                              |              |              |      | SET 1                  | SET 2 | SET 3 | SET 4 |               |              |          |                                         |                           |                                                                                                                                                                                                                                                                                                                              |
| UPPER (STRENGTH FOCUS) | 45° Incline Bench Press                 | Failure                      | 2-3          | 3            | 6-8  |                        |       |       |       | -8-9          | 10           | 3-5 min  | 45° Incline DB Press                    | 45° Incline Machine Press | 1 second pause at the bottom of each rep while maintaining tension on the pectorals                                                                                                                                                                                                                                          |
|                        | Cable Crossover Lat Pulldown            | Failure                      | 1-2          | 2            | 8-10 |                        |       |       |       | -8-9          | 10           | 1-2 min  | Flat Deck                               | Bottom Half DB Fly        | Do one set with low cable position, one set with medium-height cable position, and one height with a high cable position. If you only have one or two sets, choose the one or two cable positions you prefer.                                                                                                                |
|                        | Wide-Grip Pullup                        | Failure                      | 1-2          | 3            | 8-10 |                        |       |       |       | -8-9          | 10           | 2-3 min  | Wide-Grip Lat Pulldown                  | Dual-Handle Lat Pulldown  | 1.5x shoulder width overhand grip. Slow 2-3 second negative. Feel your lats pulling apart on the way down.                                                                                                                                                                                                                   |
|                        | High-Cable Lat Raise                    | Failure                      | 1-2          | 2            | 8-10 |                        |       |       |       | -8-9          | 10           | +1-2 min | High-Cable Cuffed Lat Raise             | Lean-In DB Lateral Raise  | Focus on expanding your lateral delt to move the weight.                                                                                                                                                                                                                                                                     |
|                        | Pendlay Deficit Row                     | Failure + LLPs (Extend set)  | 1-2          | 2            | 6-8  |                        |       |       |       | -8-9          | 10           | 2-3 min  | Smith Machine Row                       | Single-Arm DB Row         | Stand on a bumper plate. Focus on getting a big stretch and touch your stomach/chest on each rep!                                                                                                                                                                                                                            |
|                        | Overhead Cable Triceps Extension (Rear) |                              | 1            | 2            | 8-10 |                        |       |       |       | -8-9          | 10           | +1-2 min | Overhead Cable Triceps Extension (Rear) | DB Skull Crusher          | Optionally pause for 0.5-1 second in the stretched aspect of each rep.                                                                                                                                                                                                                                                       |
|                        | Bayesian Cable Curl                     | Failure                      | 1            | 2            | 8-10 |                        |       |       |       | -8-9          | 10           | +1-2 min | Seated Super-Bayesian High-Cable Curl   | Incline DB Stretch Curl   | If you have a left-right bicep size imbalance, do these 1 arm at a time, starting with the weaker arm. Take the weaker arm to an RPE of 9-10. Then match the reps with the other arm (stop once you've matched the reps, even if the RPE is lower). If you don't have a size imbalance, do these both arms at the same time. |
|                        |                                         | Failure                      |              |              |      |                        |       |       |       |               |              |          |                                         |                           |                                                                                                                                                                                                                                                                                                                              |



Here's a list of the ones we'll be using:

## Failure

As mentioned before, we will be taking the last set of every exercise to failure (except during the intro/deload weeks). This means that you attempted and failed to get the weight all the way up. I like this approach for a few reasons:

- It reinforces what "all out" truly means, helping you better estimate sub-maximal RPEs.
- It standardizes effort scientifically. Instead of relying on subjective estimates (i.e., RPEs below 10), this ensures you're training with the intended effort.
- Given the mixed evidence on the benefits of training to failure, I'd rather err on the side of pushing to failure.

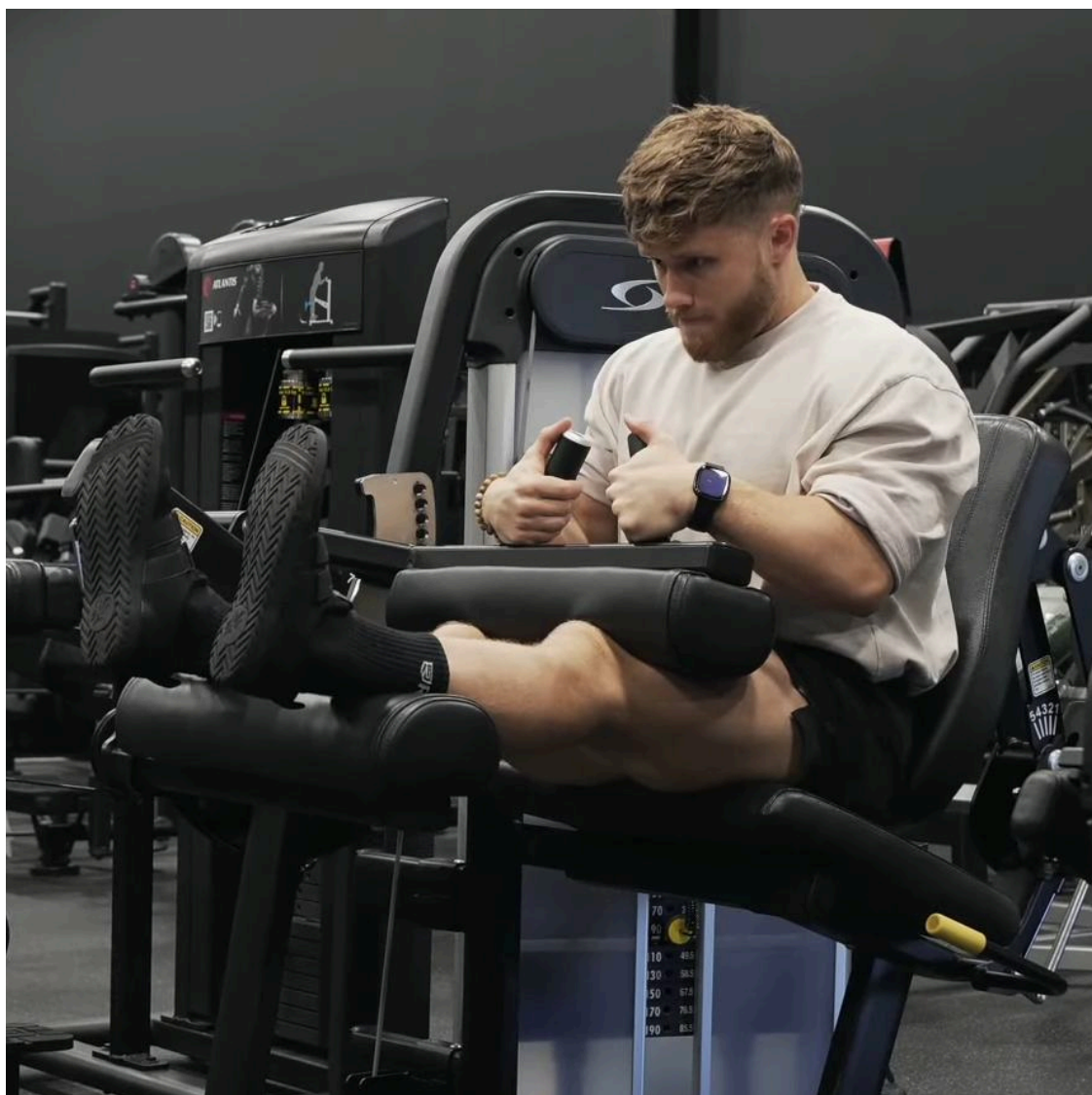
## Long-Length Partial (LLPs)

A lengthened partial is simply a partial rep in the stretched aspect of the lift. For example, if we're doing lengthened partials on pendlay deficit rows we would come about half way up, doing partial reps in the bottom part of the row.





As another example, if we're doing lengthened partials on a seated leg curl, we would do partial reps in the top half of the curl, where the leg is more straight rather than more bent.



More and more research is showing that the stretched/lengthened aspect of the lift is better for hypertrophy than the squeezed/shortened aspect of the lift [3]. Lengthened partials allow us to spend more time in the most hypertrophic aspect of the range of motion.

IMPORTANT! Lengthened partials are used in a variety of ways within this program. Most often, exercises will use lengthened partials to extend the last set of the exercise beyond failure. For example, for Seated Leg Curls in Week 2, immediately after reaching the failure with a full range of motion, you'll then switch to lengthened partials and continue to failure again. You'll also find some exercises with a prefix of "bottom-half", like the "Bottom-Half DB Flye". This indicates that all reps and sets are to be performed as lengthened partials.

## Static Stretches

Static stretching is when you hold a stretch in a fixed position. In this program, we'll be holding specific stretches for certain muscles after the last set of an exercise. For example, in Week 2, after finishing 2 sets of 6-8 reps on standing calf raises, we'll hold a 30 second static stretch for each calf, like so:



This 2019 study and this 2022 study both found that inter-set stretching can enhance muscle growth for the quads and calves, respectively [12, 13]. This makes sense, given what we know about the value of the stretch for inducing hypertrophy. However, research is mixed in this area. Not all studies show a benefit for muscle growth. For example, this 2023 study found no benefit of inter-set stretching on bicep growth [14]. Looking at the research broadly, I suspect the effect of stretching is likely muscle specific. The studies that do show an effect found a benefit in the quads and calves, and we'll be focusing on static stretching for just the calves in this program.

Oh, and don't worry – we're only static stretching after the last set of an exercise. By doing so, you won't need to worry about it negatively impacting your performance. Besides, research shows that static stretching only seems to hurt performance when you hold the stretch for longer than 60 seconds [15]. The 30 second holds we'll be doing are well within the safe zone.



## Myo-reps

Myo-reps are when you extend a set beyond failure by taking short mini-rests and cranking out a few extra reps in between mini-rests. For example, this is how we'll be using myo-reps on the cable crunch in this program:

When the program calls for “Leg Extensions 2 sets of 10-12 reps (+ Myo-reps)”

- Do sets 1 as normal
- On set 2: do 10-12 reps (reach failure)
- Then rest for ~5 seconds
- Do another 3-4 reps
- Then rest for another ~5 seconds
- Do another 3-4 reps
- Repeat until you can no longer get at least 3 reps
- At this point, the set is finished

Myo-reps are great because they allow you to squeeze out some extra reps while the muscle is near full exhaustion. The reps close to the end of a set are more “effective” for muscle growth than reps toward the beginning of a set. Myo-reps allow us to get in more of these “effective reps”.



# UNDERSTANDING THE PROGRAM



The program is laid out in a PDF and an Excel spreadsheet. Below is a brief explanation of what each column in the program means.

1

2

3

4

5

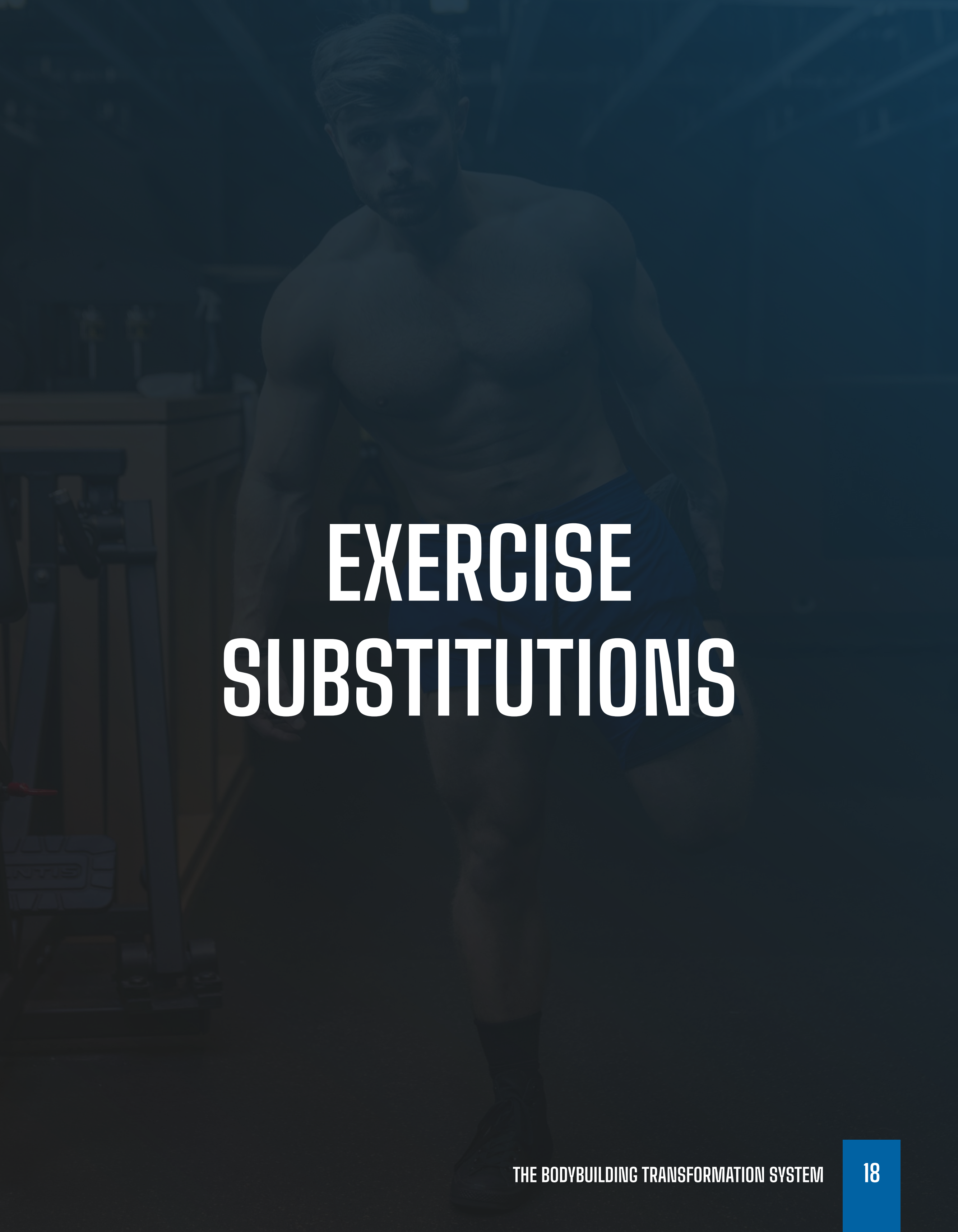
6

7

8

| WEEK 2                 | EXERCISE                               | LAST-SET INTENSITY TECHNIQUE | WARM-UP SETS | WORKING SETS | REPS | TRACKING LOAD AND REPS |       |       |       | EARLY SET RPE | LAST SET RPE | REST     | SUBSTITUTION OPTION 1                   | SUBSTITUTION OPTION 2     | NOTES                                                                                                                                                                                                                                                                                                                        |
|------------------------|----------------------------------------|------------------------------|--------------|--------------|------|------------------------|-------|-------|-------|---------------|--------------|----------|-----------------------------------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        |                                        |                              |              |              |      | SET 1                  | SET 2 | SET 3 | SET 4 |               |              |          |                                         |                           |                                                                                                                                                                                                                                                                                                                              |
| UPPER (STRENGTH FOCUS) | 45° Incline Barbell Press              | Failure                      | 2-3          | 3            | 6-8  |                        |       |       |       | ~8-9          | 10           | 3-5 min  | 45° Incline DB Press                    | 45° Incline Machine Press | 1 second pause at the bottom of each rep while maintaining tension on the pecs                                                                                                                                                                                                                                               |
|                        | Cable Crossover Ladder                 | Failure                      | 1-2          | 2            | 8-10 |                        |       |       |       | ~8-9          | 10           | 1-2 min  | Pec Deck                                | Bottom-Half DB Flye       | Do one set with low cable position, one set with medium-height cable position, and one height with a high cable position. If you only have one or two sets, choose the one or two cable positions you prefer.                                                                                                                |
|                        | Wide-Grip Pull-Up                      | Failure                      | 1-2          | 3            | 8-10 |                        |       |       |       | ~8-9          | 10           | 2-3 min  | Wide-Grip Lat Pulldown                  | Dual-Handle Lat Pulldown  | 1.5x shoulder width overhand grip. Slow 2-3 second negative. Feel your lats pulling apart on the way down.                                                                                                                                                                                                                   |
|                        | High-Cable Lateral Raise               | Failure                      | 1-2          | 2            | 8-10 |                        |       |       |       | ~8-9          | 10           | ~1-2 min | High-Cable Cuffed Lateral Raise         | Lean-In DB Lateral Raise  | Focus on squeezing your lateral delt to move the weight.                                                                                                                                                                                                                                                                     |
|                        | Pendlay Deficit Row                    | Failure + LLPs (Extend set)  | 1-2          | 2            | 6-8  |                        |       |       |       | ~8-9          | 10           | 2-3 min  | Smith Machine Row                       | Single-Arm DB Row         | Stand on a bumper plate. Focus on getting a big stretch and touch your stomach/chest on each rep!                                                                                                                                                                                                                            |
|                        | Overhead Cable Triceps Extension (Bar) | Failure                      | 1            | 2            | 8-10 |                        |       |       |       | ~8-9          | 10           | ~1-2 min | Overhead Cable Triceps Extension (Rope) | DB Skull Crusher          | Optionally pause for 0.5-1 second in the stretched aspect of each rep                                                                                                                                                                                                                                                        |
|                        | Bayesian Cable Curl                    | Failure                      | 1            | 2            | 8-10 |                        |       |       |       | ~8-9          | 10           | ~1-2 min | Seated Super-Bayesian High Cable Curl   | Incline DB Stretch Curl   | If you have a left-right bicep size imbalance, do these 1 arm at a time, starting with the weaker arm. Take the weaker arm to an RPE of 9-10. Then match the reps with the other arm (stop once you've matched the reps, even if the RPE is lower). If you don't have a size imbalance, do these both arms at the same time. |

1. Each exercise has a clickable demo link.
2. Intensity techniques to be done after the last set only.
3. Warm-up sets should be light and easy.
4. Record the weight you used for each set here.
5. Early set RPEs are often a touch lower than last set RPE. See handbook for an explanation of RPE.
6. Rough guidelines for how long to rest between sets.
7. Two substitution options for each exercise. If you can't do the exercise listed feel free to swap it for either one of these.
8. Here you will find exercise-specific coaching cues. Always read the notes before doing your warm-up sets so you can practice any new cues.

A muscular man with short blonde hair is standing in a gym, shirtless and wearing blue shorts. He is looking directly at the camera with a serious expression. The background is slightly blurred, showing gym equipment and a wooden bench. The overall tone is dark and moody, with a blue tint.

# EXERCISE SUBSTITUTIONS



For each exercise, there are two alternative substitution options given. Here is a list of suitable reasons for making a substitution:

- You don't have access to the main exercise
- The main exercise causes you pain
- You really dislike the main exercise (but love one of the substitutions)
- You just don't “feel” the main exercise working at all, even after giving it an honest shot for several weeks (and you do “feel” one of the substitutions really well)

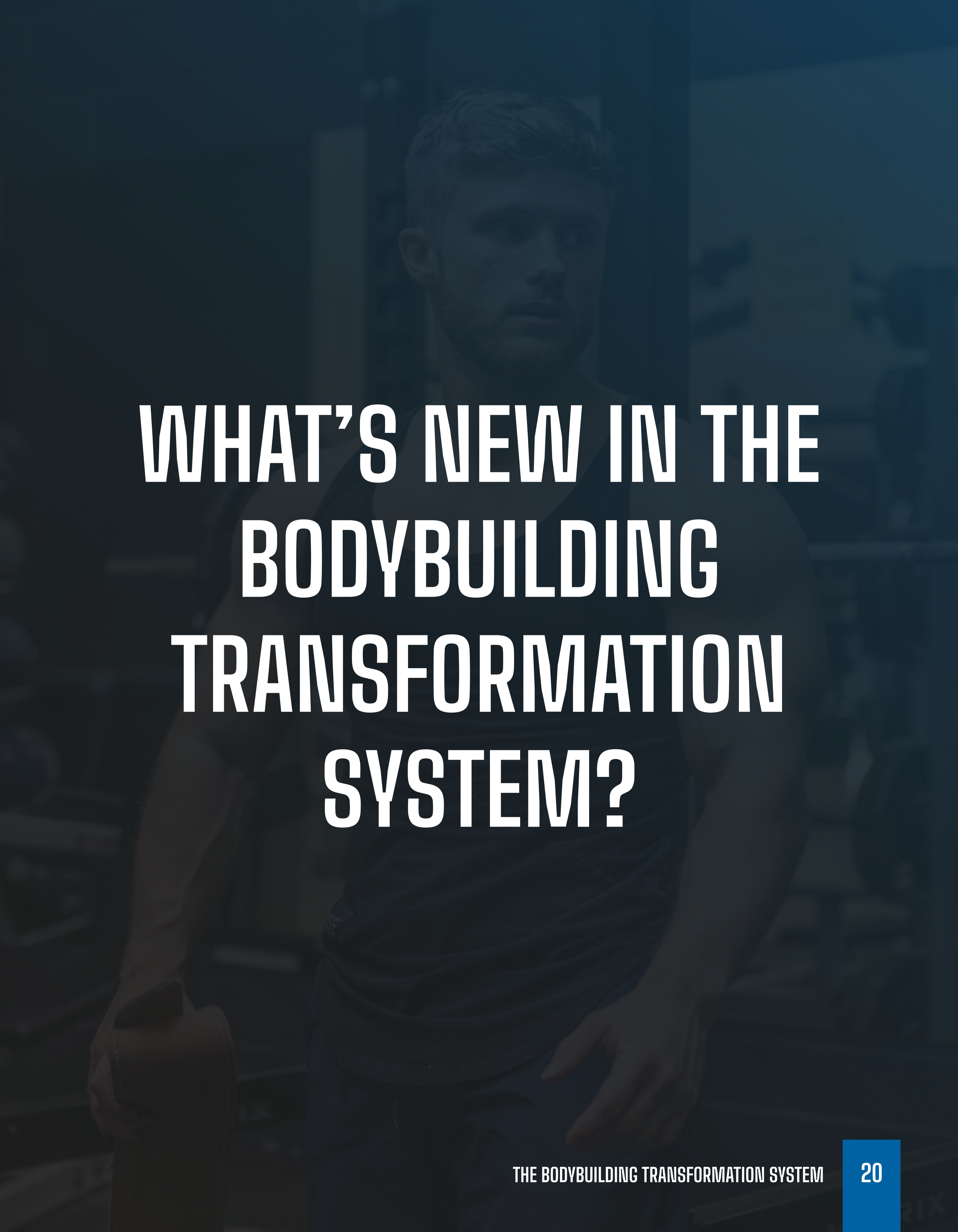
Here is a list of less suitable reasons for making a substitution:

- You haven't done the main exercise before (no better time than now to learn! Watch the exercise demo and give it a shot!)
- Someone at your gym is using the main exercise (instead of swapping, move onto a different exercise and come back to it later. If it's still unavailable and that's derailing your workout, then you can feel free to make the swap).
- The main exercise is harder than one of the subs. Don't be tempted to always go for the easiest exercise option! Your hard work will pay off.

You can substitute either Option 1 or Option 2. They aren't arranged so that Option 1 is necessarily better than Option 2. They are just different options!

| WEEK 3                 | EXERCISE                               | LAST-SET INTENSITY TECHNIQUE | WARM-UP SETS | WORKING SETS | REPS | TRACKING LOAD AND REPS |       |       |       | EARLY SET RPE | LAST SET RPE | REST     | SUBSTITUTION OPTION 1                   | SUBSTITUTION OPTION 2     | NOTES                                                                                                                                                                                                                                                                                                                         |
|------------------------|----------------------------------------|------------------------------|--------------|--------------|------|------------------------|-------|-------|-------|---------------|--------------|----------|-----------------------------------------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        |                                        |                              |              |              |      | SET 1                  | SET 2 | SET 3 | SET 4 |               |              |          |                                         |                           |                                                                                                                                                                                                                                                                                                                               |
| UPPER (STRENGTH FOCUS) | 45° Incline Barbell Press              | Failure                      | 2-3          | 3            | 6-8  |                        |       |       |       | -8-9          | 10           | 3-5 min  | 45° Incline DB Press                    | 45° Incline Machine Press | second pause at the bottom of each rep while maintaining tension on the bars                                                                                                                                                                                                                                                  |
|                        | Cable Crossover Lateral                | Failure                      | 1-2          | 2            | 8-10 |                        |       |       |       | -8-9          | 10           | 1-2 min  | Pec Deck                                | Bottom-Half DB Flye       | do one set with low cable position, one set with medium-height cable position, and one height with a high cable position. If you only have one or two sets, choose the one or two cable positions you prefer.                                                                                                                 |
|                        | Wide-Grip Pull-Up                      | Failure                      | 1-2          | 3            | 8-10 |                        |       |       |       | -8-9          | 10           | 2-3 min  | Wide-Grip Lat Pulldown                  | Dual-Handle Lat Pulldown  | Use shoulder width overhand grip. Slow 2-3 second negative. Feel your lats pulling apart on the way down.                                                                                                                                                                                                                     |
|                        | High-Cable Lateral Raise               | Failure                      | 1-2          | 2            | 8-10 |                        |       |       |       | -8-9          | 10           | -1-2 min | High-Cable Cuffed Lateral Raise         | Lean-In DB Lateral Raise  | Focus on squeezing your lateral delt to move the weight.                                                                                                                                                                                                                                                                      |
|                        | Parallel Deficit Row                   | Failure + LLPh (Extend set)  | 1-2          | 2            | 6-8  |                        |       |       |       | -8-9          | 10           | 2-3 min  | Smith Machine Row                       | Single-Arm DB Row         | Stand on a bumper plate. Focus on getting a big stretch and touch your stomach/chest on each rep!                                                                                                                                                                                                                             |
|                        | Overhead Cable Triceps Extension (Bar) | Failure                      | 1            | 2            | 8-10 |                        |       |       |       | -8-9          | 10           | -1-2 min | Overhead Cable Triceps Extension (Rope) | DB Skull Crusher          | Optionally pause for 0.5-1 second in the stretched aspect of each rep.                                                                                                                                                                                                                                                        |
|                        | Broom/Cable Curl                       | Failure                      | 1            | 2            | 8-10 |                        |       |       |       | -8-9          | 10           | -1-2 min | Seated Super-Bayesian High Cable Curl   | Incline DB Stretch Curl   | If you have a left/right bicep size imbalance, do these 1 arm at a time, starting with the weaker arm. Take the weaker arm to an RPE of 9-10. Then switch the rope with the other arm (stop once you've matched the rope, even if the RPE is lower). If you don't have a size imbalance, do these both arms at the same time. |
|                        |                                        |                              |              |              |      |                        |       |       |       |               |              |          |                                         |                           |                                                                                                                                                                                                                                                                                                                               |





# WHAT'S NEW IN THE BODYBUILDING TRANSFORMATION SYSTEM?



## THE BEST TRAINING SPLIT

This program follows an Upper/Lower/Pull/Push/Legs split. While there are plenty of effective training splits, this one is my personal favorite.

### Why 5x Per Week?

I find that training five days per week strikes the ideal balance between volume and recovery. A 4x per week split can make it tough for intermediate-advanced lifters to fit in enough volume without extending workouts well beyond an hour. On the other hand, a 6x per week split allows for more volume but can be harder to stick to and only provides one full rest day.

### Choosing the Right 5x Split

Even within a 5x per week framework, there are several common options:

- Upper/Lower/Upper/Lower/Upper
- Full Body 5x
- Chest/Back/Shoulders/Arms/Legs (Bro Split)

To narrow it down, research suggests that training muscle groups twice per week is beneficial once volume exceeds ~6–8 sets per session. That makes once-per-week splits (like the Bro Split) less effective for intermediate-advanced lifters, eliminating it from consideration.

At the other extreme, the Full Body 5x split can be a fun change of pace but tends to be more taxing than other splits, making it better suited for advanced lifters.

That leaves us with Upper/Lower/Upper/Lower/Upper and Upper/Lower/Pull/Push/Legs. While they hit upper and lower body equally, breaking two Upper sessions into Pull and Push days makes each workout feel distinct and more engaging. There's a reason the Bro Split remains popular—focusing on specific muscle groups is fun. While Pull/Push workouts aren't quite as isolated, they provide a similar satisfaction without sacrificing training volume.

**Pull/Push/Legs vs. Push/Pull/Legs**

You might be wondering why I chose Pull/Push/Legs instead of Push/Pull/Legs. Honestly, this is personal preference—I find my chest and shoulders benefit more from an extra day of recovery compared to my back. If you prefer to swap them, go for it!

| Week Day  | Workout                  |
|-----------|--------------------------|
| Monday    | Upper (Strength Focus)   |
| Tuesday   | Lower (Strength Focus)   |
| Wednesday | Rest                     |
| Thursday  | Pull (Hypertrophy Focus) |
| Friday    | Push (Hypertrophy Focus) |
| Saturday  | Legs (Hypertrophy Focus) |
| Sunday    | Rest                     |

**TRAINING BLOCKS**

This program is divided into two training blocks: the Foundation Block and the Ramping Block. The Foundation Block lasts 5 weeks, while the Ramping Block lasts 7 weeks. Both blocks share the same overarching goal—maximum hypertrophy—but differ in two key ways.

**1. Exercise Selection**

Most exercises will change between blocks. To account for this, both blocks begin with an intro/deload week, allowing you to familiarize yourself with the new exercises and rep ranges before increasing volume and intensity.

**2. Training Volume**

The Foundation Block maintains a consistent volume after its intro week. This establishes a baseline to build from in the Ramping Block while encouraging meticulous tracking of performance (e.g., weights, RPE).

In the Ramping Block, volume progressively increases after the intro week.



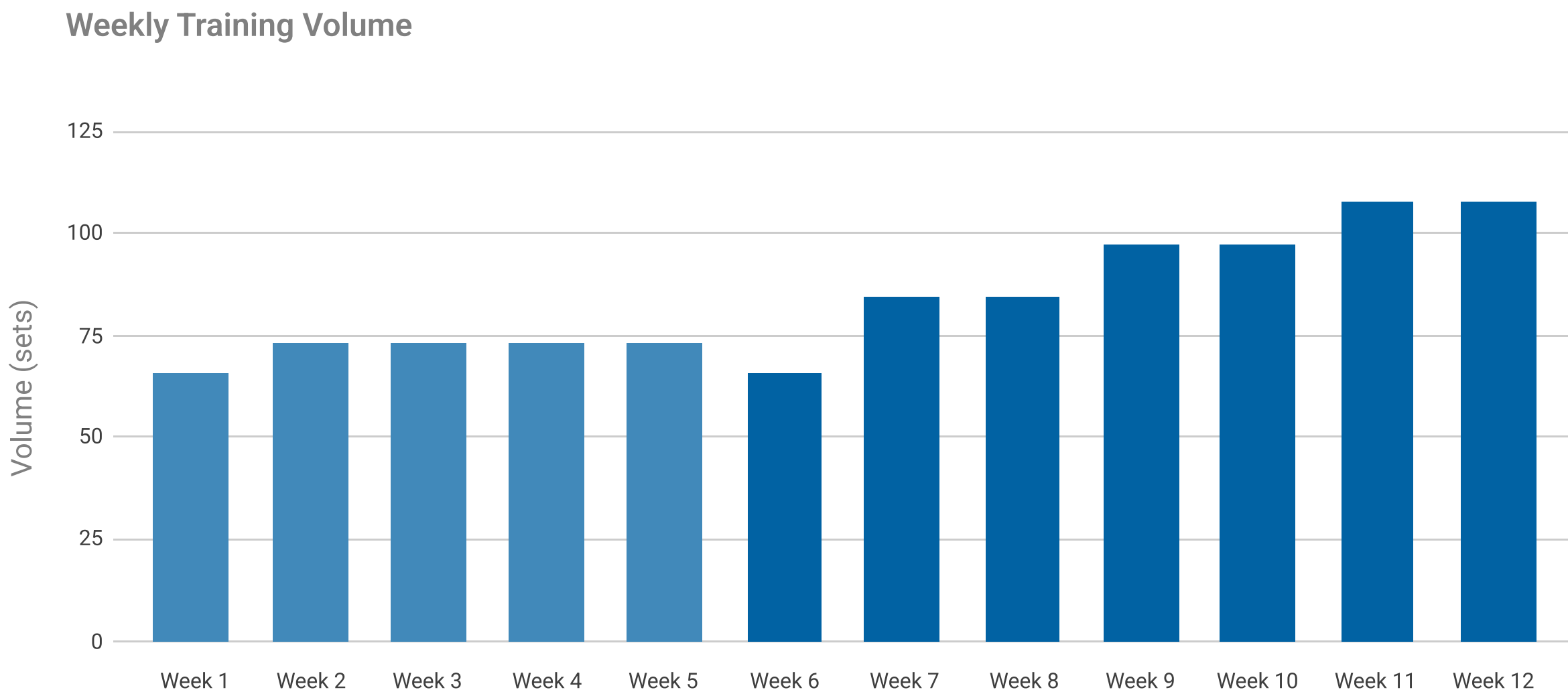
- Weeks 7–8: Volume increases from the Foundation Block baseline.
- Weeks 9–10: Volume increases again.
- Weeks 11–12: One final volume increase.

This approach is inspired by a brand-new study by [Enes et al.](#), which compared three groups of female lifters:

1. Constant volume group: Performed 22 sets per week for quads throughout the entire 12-week study.
2. Moderate ramp group: Started at 16 sets per week and increased by 2 sets every two weeks, finishing at 26 sets per week.
3. Aggressive ramp group: Started at 18 sets per week and increased by 4 sets every two weeks, finishing at 38 sets per week.

The study found that the groups who increased volume over time made the greatest gains in both muscle size and strength. What’s especially interesting is that the group that ended at 26 sets per week averaged just 21 sets per week across the entire program—one set fewer than the constant volume group, yet still achieved superior results.

This lends support to the idea that progressively increasing training volume over time may be more effective than keeping it static—even when the average volume is similar.



## Seamless Progression

Since I ran this program for a full year, I designed it to loop back seamlessly. After completing Week 12, you can jump right back into Week 1, which serves as a deload.

### LONG MUSCLE LENGTH FOCUS

This program follows an Upper/Lower/Pull/Push/Legs split. While there are plenty of effective training splits, this one is my personal favorite.

Although I briefly discussed training at long muscle lengths within The 6 Fundamental Bodybuilding Principles section, that was mostly specific to lengthened partials, where you're performing the exercise with a restricted range of motion to emphasize the aspect of the lift where the muscle is most stretched. Since my last program launched in Fall of 2023, I co-authored [a paper](#) that outlined optimal resistance training techniques. We concluded, based on the literature, that overall exercise selection should be biased towards movements that place tension on the muscle in its most stretched position. So, for this program, a particular focus has been placed on movements that achieve this.

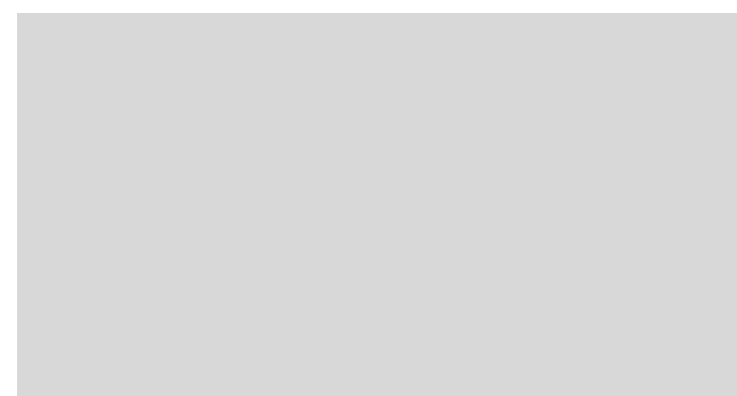
Examples:



Pendlay Deficit Row



High-Cable Lateral Raise



Smith Machine Static Lunge w/  
Elevated Front Foot



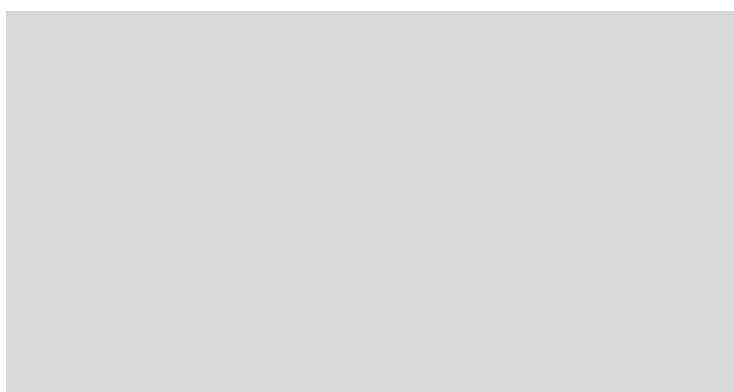
DB Bulgarian Split Squat



Overhead Cable Triceps Extension



45° Hyperextension



1-Arm 45° Cable Rear Delt Flye



## FAILURE TRAINING

While my recent bodybuilding programs have emphasized training to failure, this program takes it a step further—every exercise goes to failure on the last set. There are several reasons for this, which I touched on earlier, but I'll reiterate them here:

- It reinforces what "all out" truly means, helping you better estimate sub-maximal RPEs.
- It standardizes effort scientifically. Instead of relying on subjective estimates (i.e., RPEs below 10), this ensures you're training with the intended effort.
- Given the mixed evidence on the benefits of training to failure, I'd rather err on the side of pushing to failure.

## METICULOUS TRACKING OF WEIGHTS (DO THIS)

In the past, I've been a bit more relaxed with tracking my weights. I'd focus on strength progression for a few key compound lifts while relying on effort and intensity for the rest. But for this project, I committed to tracking everything—and after a year of doing so, I have to say, it makes a big difference.

Having this feedback, even on smaller movements, can be a great motivator when things are going well. And when progress stalls, it's a clear signal that something might need adjusting. You can absolutely make great progress without tracking everything, but I encourage you to give it a shot.

A man is shown from the chest up, wearing large black headphones and a light-colored t-shirt. The t-shirt has some text on it, including "Wisdom" and "The body of knowledge and principles developed through experience and good judgement; the quality of being wise." The background is a blurred indoor setting. The overall image has a dark blue overlay.

# SUGGESTED TRAINING GEAR



In the table below, you will find a list of training gear that can help you make the most out of this program. None of this training gear is required and there is a level of importance column that will help you decide which items you may want to consider more than others.

Please note that all of the Amazon links and Rise links below are affiliate links. I will get a small commission if you purchase any items from these links. While I greatly appreciate that support, I want to emphasize that these are all supplemental items and are absolutely not needed in order to make great progress while running this program. That said, I personally use all of the items on the list and I do find they make a difference (some more than others). If you only get two items on this list, I would get liquid chalk and lifting straps over anything else.

As an  I earn from qualifying purchases.

Recommended





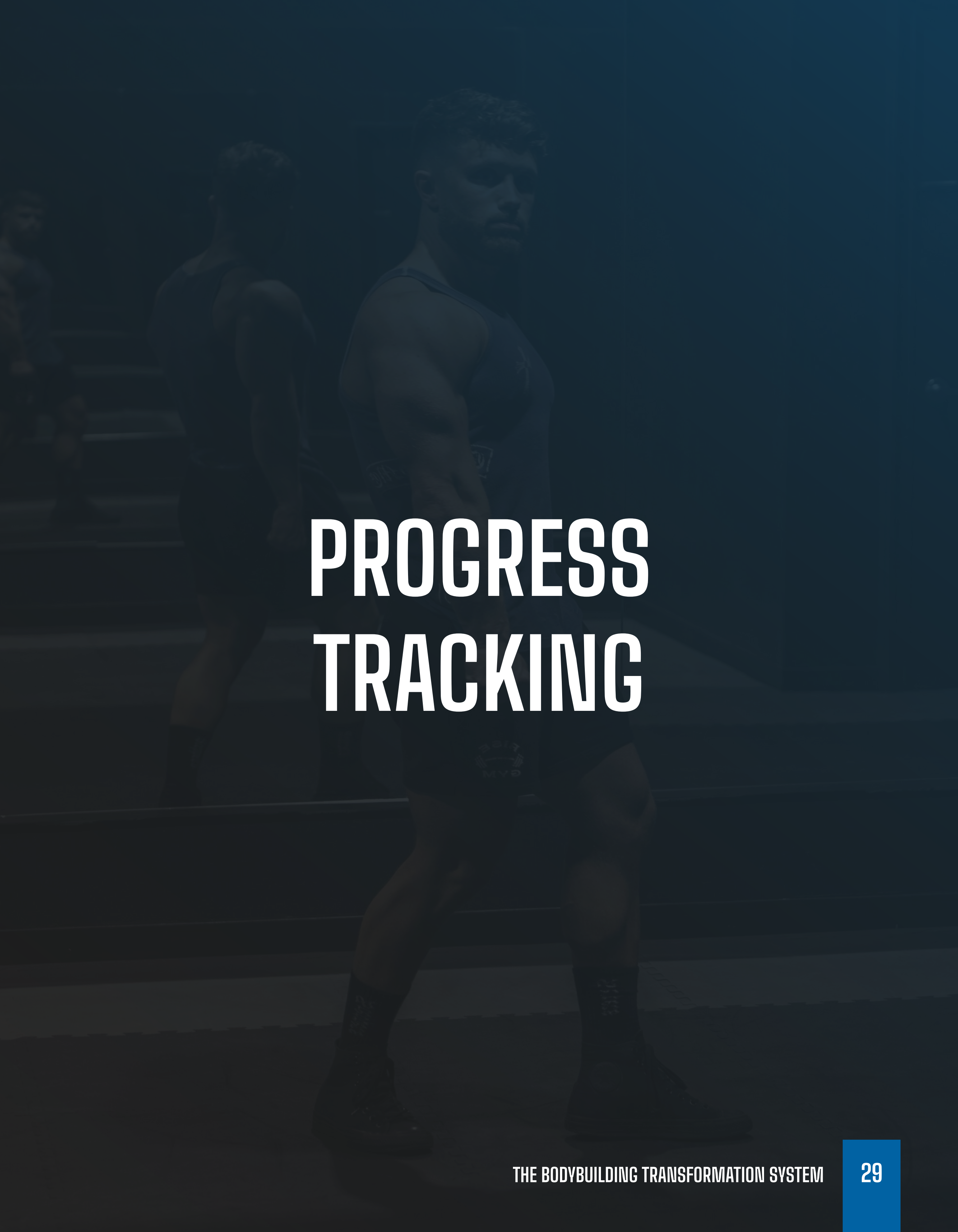
LARA STAR Pull Up  
Handles Grips...

 Shop Now

| Gear              | Link                 | Why                                                                                                                                     | Level of importance | Exercises to use on                                                                                  |
|-------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------------------------------------------------------------------------------------------------|
| Angles 90 Handles | <a href="#">Link</a> | Allow for more secure grip and better mind-muscle connection on pulling exercises.<br><br>A regular D-handle can be used without issue. | Low-Moderate        | Lat focused pulldowns and lat-focused rows                                                           |
| Liquid Chalk      | <a href="#">Link</a> | Prevent grip slipping from sweaty palms. Usually allows for more reps and/or increased load.                                            | Moderate-high       | Any exercise that relies on grip strength (usually pulling exercises like rows, pullups, RDLs, etc.) |
| Straps            | <a href="#">Link</a> | Prevents grip from being a limiting factor on heavy pulls, allowing you to overload the target muscles better.                          | Moderate-high       | Most back exercises and RDLs                                                                         |

| Gear              | Link                 | Why                                                                                                                                                                                                                                                   | Level of importance       | Exercises to use on                                                          |
|-------------------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------------------------------------------------------|
| Knee Sleeves      | <a href="#">Link</a> | Knee sleeves provide comfort and cushioning around the knees during squat-type movements and offer a small performance boost.                                                                                                                         | Moderate                  | Squat-type movements and leg presses                                         |
| Bodybuilding Belt | <a href="#">Link</a> | Belts are more helpful for strength/powerlifting training but can still help with bracing on some compound exercises in this program. A thicker powerlifting-style lever belt can be used if it's comfortable for you.                                | Moderate                  | Squat-type exercises and RDLs. Some find it helpful on presses.              |
| Wrist Cuffs       | <a href="#">Link</a> | These will be used for cuffed lateral raises throughout the program. The cuffs will prevent your forearms from taking over on lateral raises and often helps improve the mind-muscle connection. They can also be used to do cable hip ab/adductions. | Moderate                  | High-cable cuffed lateral raises, cable hip abductions, cable hip adductions |
| Lacrosse Balls    | <a href="#">Link</a> | Holding onto two lacrosse balls during cuffed lateral raises can improve tactile sensation and for some people makes the movement feel better than having your hands floating with nothing to hold onto.                                              | Low (personal preference) | High-cable cuffed lateral raises                                             |





# PROGRESS TRACKING

There are 3 main tools we'll be using to track progress on our bodybuilding journey: strength performance, progress photos, and bodyweight.

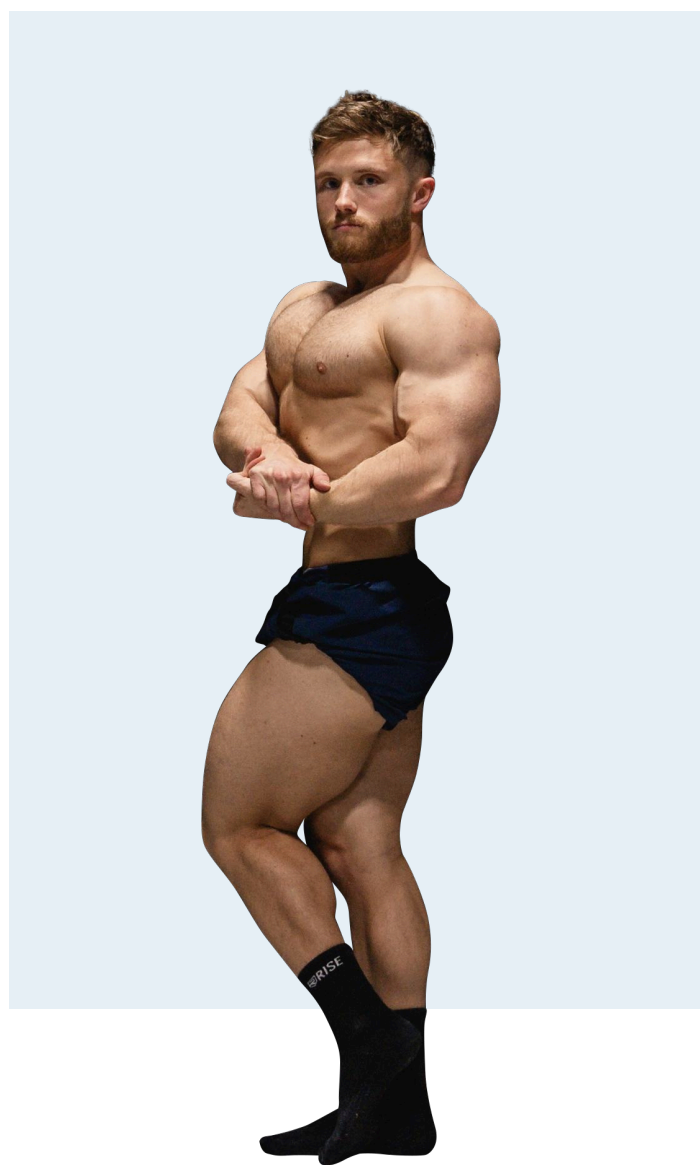
## 1. STRENGTH PERFORMANCE (PROGRESSIVE OVERLOAD)

The single best indicator that you're gaining muscle is if you're gaining strength in the gym. This doesn't mean your 1 rep max strength, but rather your strength within the rep ranges given in the program (usually around 8-15 reps). If you are either lifting more weight or doing more reps at the same weight within the rep ranges given in the program, you're most likely adding muscle. This is why it's really important that you track your weight and reps used for as many exercises as possible while running the program. Not only will tracking your performance keep you accountable to "beat the logbook," it will serve as a reliable proxy for physique progress (which can be harder to gauge visually, especially as you get more advanced).

## 2. PROGRESS PHOTOS

Since getting more jacked is the goal, progress photos will be the most direct method of measuring progress. However, depending on your level of advancement, you may not notice visual progress in photos as easily or quickly as you will strength progress in the gym. For this reason, I suggest taking progress roughly once every 2-3 months and ideally no more than once a week.

When taking progress photos, ensure that you use the same camera, background and lighting whenever possible. Remember to take at least one photo from the front, side and rear.





### 3. BODYWEIGHT

Bodyweight is a surprisingly useful tool for tracking progress when used in combination with the other two. On its own, it can be deceptive because it doesn't tell you if you're gaining weight from fat, water, or muscle. However, when used alongside the other two tools, some common sense reasoning can give you a very good idea of what type of tissue you're gaining. For example, if you're getting stronger, you're looking more jacked in your photos, and your bodyweight is increasing at an appropriate rate, you can rest assured that the weight you're gaining is muscle. However, if you aren't getting stronger, you're looking significantly softer/flatter in your pics, and your weight is increasing rapidly, then you're most likely gaining fat.

Gaining roughly 1-2% of your bodyweight per month will ensure that you are gaining mostly muscle. For example, if you currently weigh 170 lbs (77 kg), gaining ~1.7-3.4 lbs (0.7-1.5 kg) per month will ensure that most will be lean mass. Generally speaking, the slower you gain, the leaner it will be.

If you have simultaneous fat loss goals while running this program, you will need to be either in a caloric deficit or at caloric maintenance. Generally speaking, for fat loss, I suggest losing weight no faster than 0.5-1% of your bodyweight per week. For example, if you currently weigh 220 lbs (100 kg), as you cut, aim to lose 1.1-2.2 lbs (0.5-1 kg) per week to retain as much muscle as possible. If your goal is body recomposition, aim to roughly maintain your body weight while using progress photos and strength gain as your main guide for progress.

While tracking your weight, be careful not to get too consumed with individual weigh-ins. Single weigh-ins can be impacted by water fluctuations, digestion changes, sleep disruptions, how late you ate the night before and a number of other short-term factors. Instead, observe weekly trends. If you take more than one weigh in per week, get the weekly average and compare weekly averages for a more accurate representation of how your weight is trending.

There is a much more detailed explanation of body recomposition in my [nutrition guide](#) on the topic.

While other tools for tracking body composition such as calipers, DEXA scans and other bodyfat testing devices can be useful in some situations, given their low accuracy and high error margins, I generally don't recommend using them for tracking progress [16]. The three tools outlined above will be plenty for getting the job done and fully informing you on whether or not you're moving in the right direction.

A muscular man is shown from the waist up, holding two dumbbells. He is wearing black shorts with a logo that says 'RISK GYM'. The background is a gym with a tiled wall. The title 'MUSCLE ANATOMY' is written in large, bold, white capital letters across the center of the image.

# MUSCLE ANATOMY

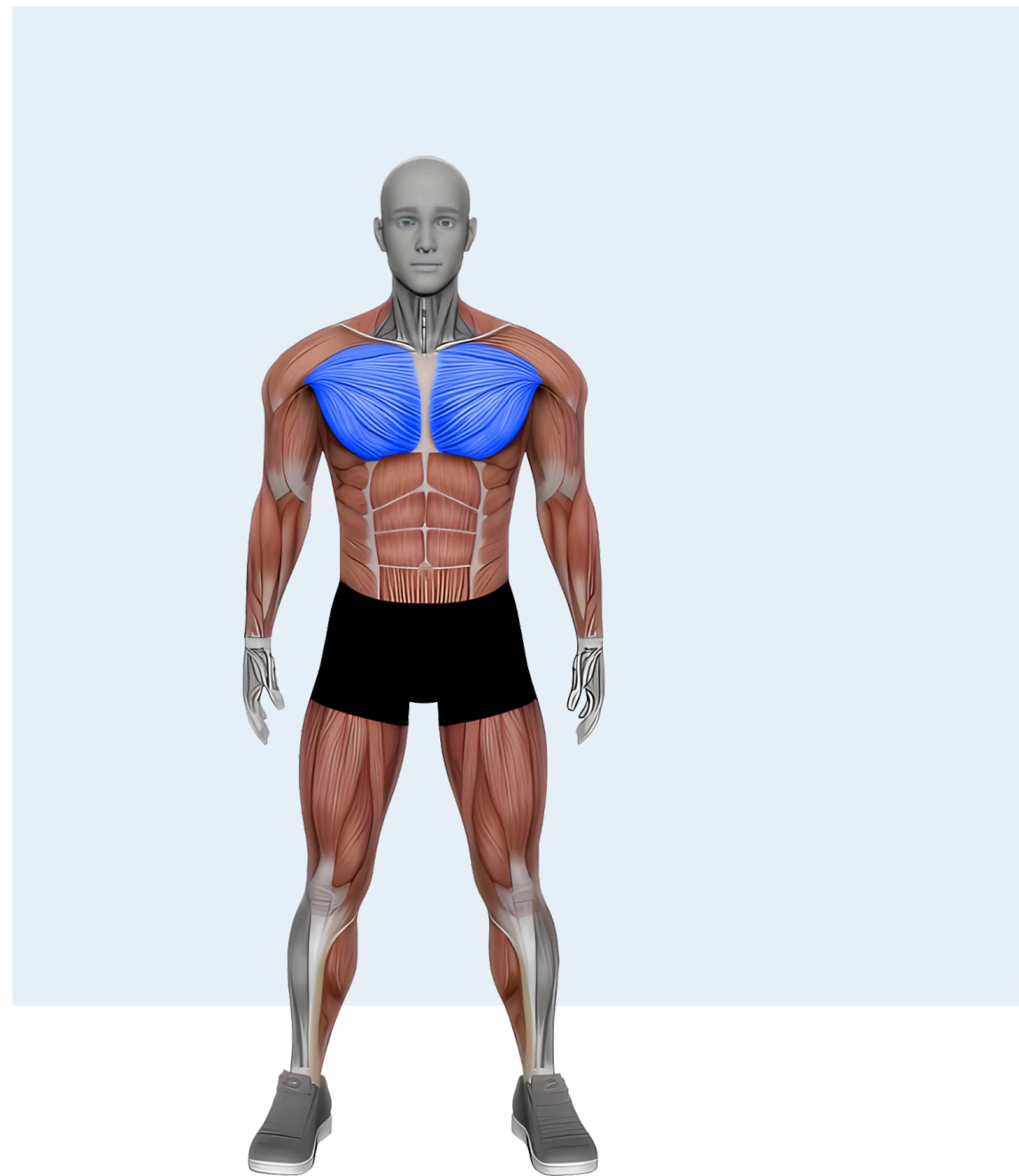


Below, you will find a description of how we plan on hitting each muscle in this program.

## CHEST

The chest is worked with any exercise that pushes the arm across the body. This includes movements such as presses, flyes, dips, and push-ups. The pecs can be split into a clavicular (upper) head and a sternal (mid & lower head). All exercises in this program will target both heads. However, incline presses and closer-grip pushes tend to emphasize the upper pecs slightly more, while decline presses and dips tend to emphasize the mid and lower pecs slightly more.

Here is a list of exercises we'll be using in this program to target the chest: 45° Incline Barbell Press, Cable Crossover Ladder, Barbell Bench Press, Bottom-Half DB Flye, 45° Incline DB Press, Pec Deck, Machine Chest Press, Bottom-Half Seated Cable Flye.



## LATS

The lats are worked with any exercise that pulls the arm down to the front or in from the side. The lats are often one of the hardest muscles for people to “feel” which can make them a tricky part of the back to hit. Throughout this program, we'll be using a variety of exercises and cues to maximally activate the lats.

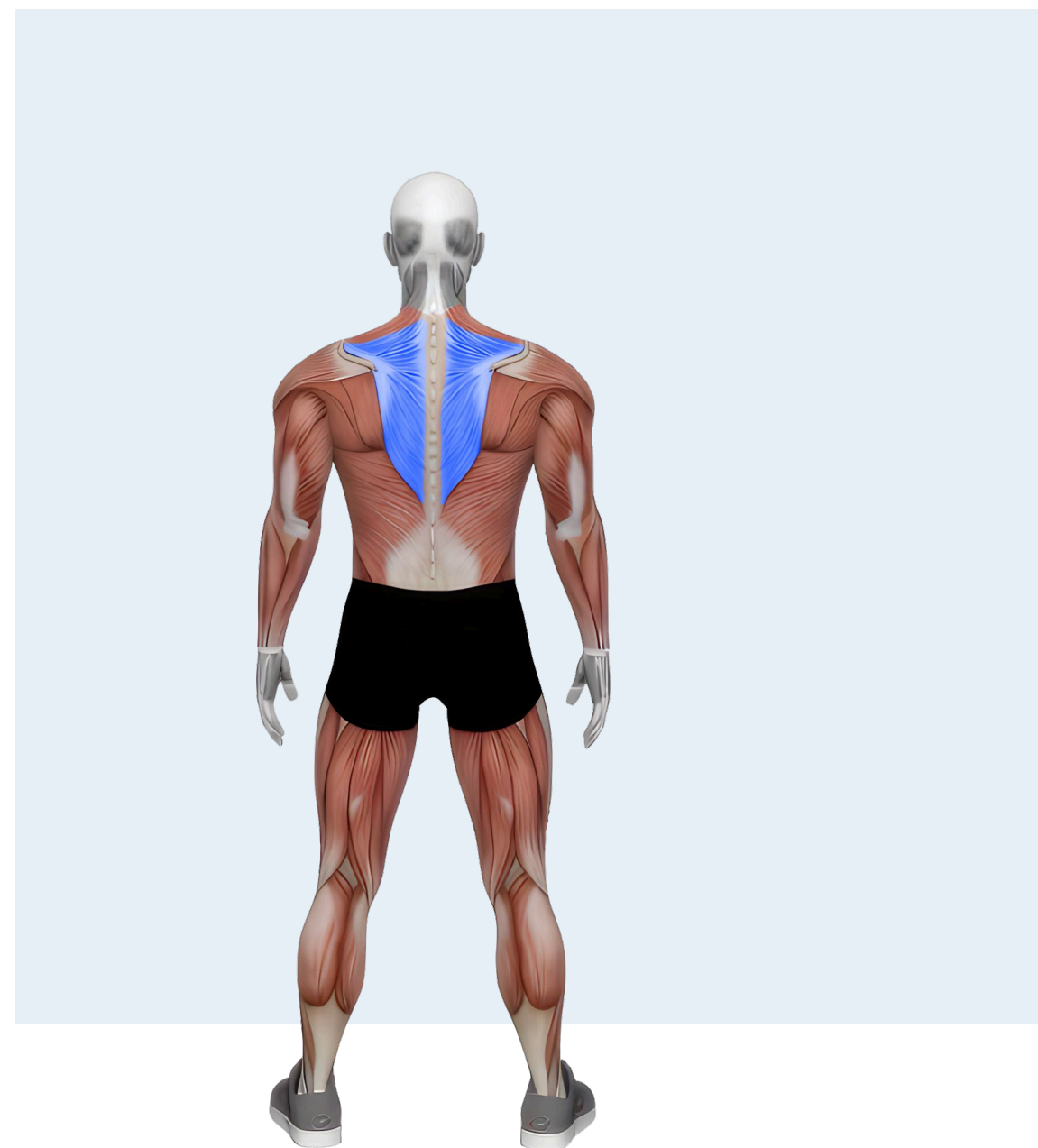
Here is a list of exercises we'll be using in this program to target the lats: Wide-Grip Pull-Up, Pendlay Deficit Row, Neutral-Grip Lat Pulldown, Chest-Supported Machine Row, Neutral-Grip Seated Cable Row, Dual-Handle Lat Pulldown, Smith Machine Row, Lean-Back Lat Pulldown, Chest-Supported T-Bar Row, Dual-Handle Elbows-Out Cable Row.



## MID BACK

The mid-back muscles, such as the mid-traps and rhomboids, are worked with any exercise that squeezes the shoulder blades together, like various kinds of rows and face pulls. Given the number of muscles that make up the mid-back, we'll use a variety of exercises to ensure well-rounded development.

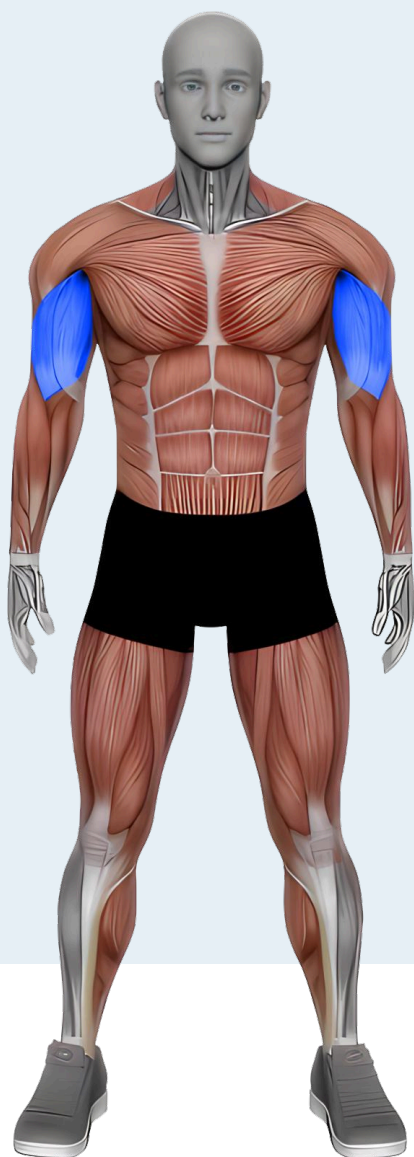
Here is a list of exercises we'll be using in this program to target the mid-back: Pendlay Deficit Row, Chest-Supported Machine Row, Neutral-Grip Seated Cable Row, 1-Arm 45° Cable Rear Delt Flye, Smith Machine Row, Chest-Supported T-Bar Row, Dual-Handle Elbows-Out Cable Row.



## BICEPS

The biceps are worked with any exercise that flexes (bends) the elbow. As such, they'll be targeted directly on any kind of bicep curl and indirectly on most back exercises, like vertical pulls and rows. Because the biceps cross both the elbow joint and the shoulder joint, they can be activated in slightly different ways by varying your arm position.

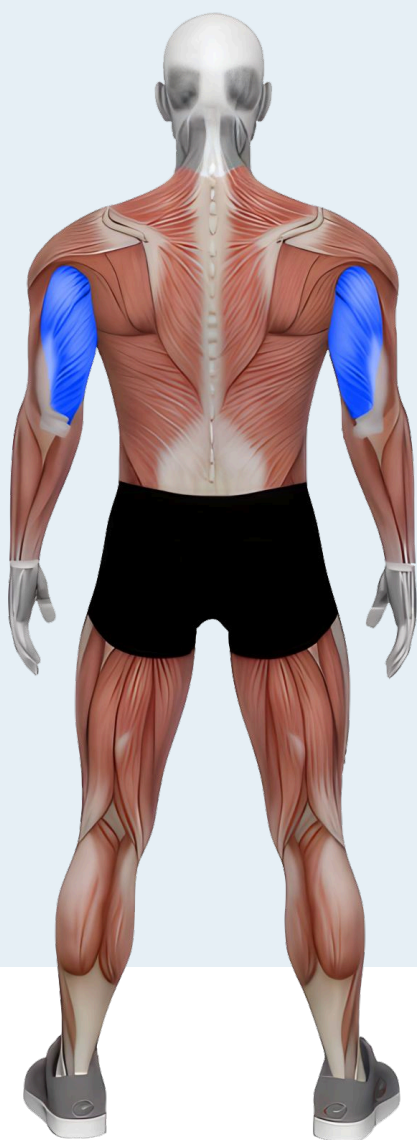
Here is a list of exercises we'll be using in this program to target the the biceps: Bayesian Cable Curl, EZ-Bar Cable Curl, Machine Preacher Curl, Cable Rope Hammer Curl, DB Concentration Curl.





## TRICEPS

The triceps are worked with any exercise that extends (straightens out) the elbow. As such, they will be targeted directly on triceps extensions, pressdowns and kickbacks, and targeted indirectly on vertical and horizontal presses. As a tiny wrinkle, the long head of the triceps will also be active to some degree on back movements like pull-ups and pullovers. Like the biceps, the triceps also cross both the elbow joint and the shoulder joint, meaning varying your arm position can impact which region of the triceps is emphasized. Because of this, we will be performing a variety of different tricep isolation movements; some with the arm held up overhead, some with the arm positioned down by the side, and some with the arm hyperextended behind the torso.



Here is a list of exercises we'll be using in this program to target the triceps: Overhead Cable Triceps Extension (Bar), Overhead Cable Triceps Extension (Bar), Cable Triceps Kickback, EZ-Bar Skull Crusher, Triceps Pressdown (Bar).

## SHOULDERS (FRONT, SIDE & REAR DELTOIDS)

For our purposes in this program, the shoulders can be split into 3 different divisions: the anterior (front) deltoids, the lateral (side) deltoids, and the posterior (rear) deltoids.

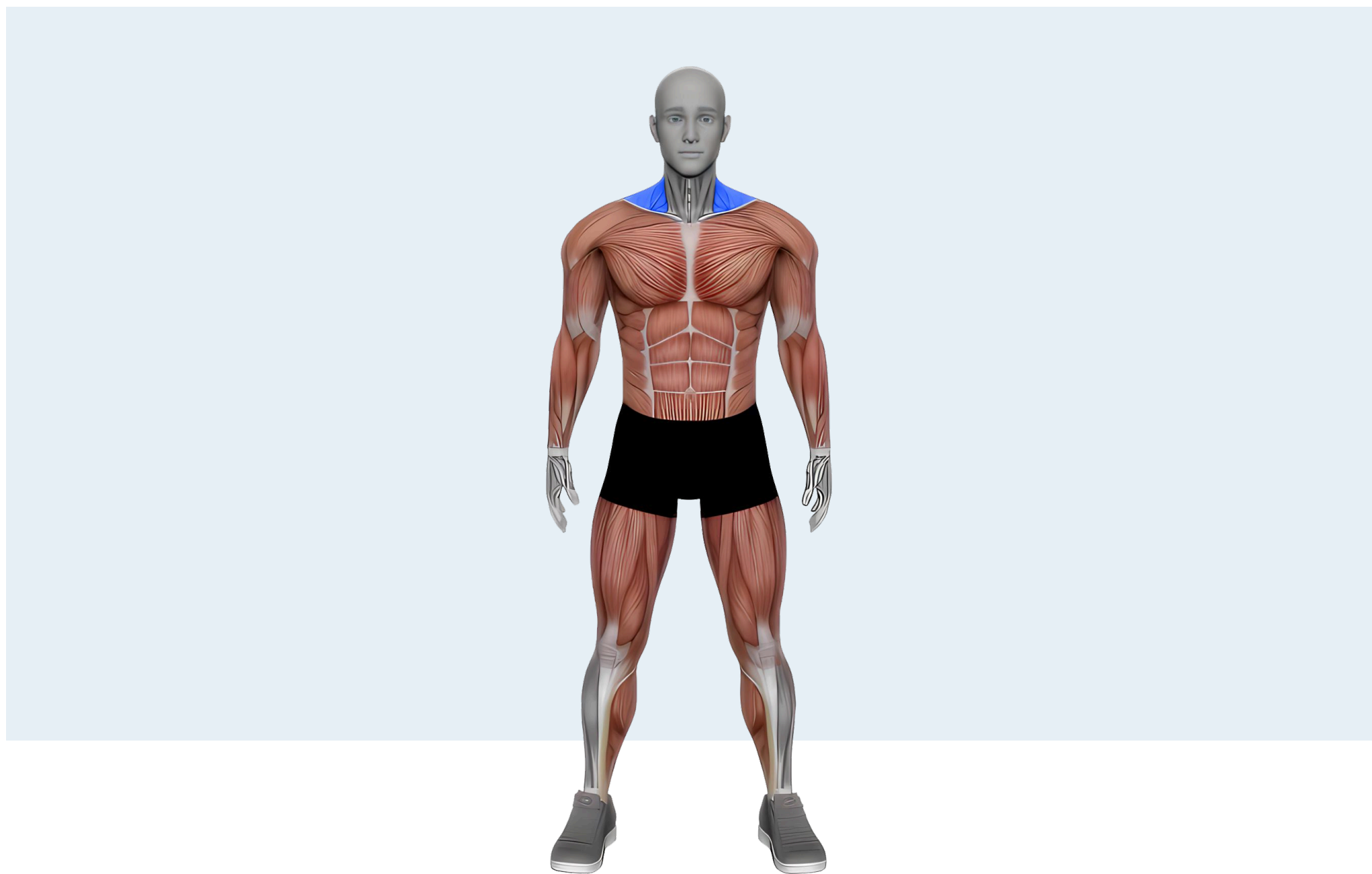
The front delts will be hit, to a very high degree, on all horizontal and vertical pressing and as such, won't be getting any isolation work in this program. The side delts will also be hit on horizontal and vertical presses, but to a lesser degree. Because of this, we'll be doing a variety of isolation exercises for the side delts. In contrast with the other two divisions, the rear delts aren't hit with pressing movements, but will instead be targeted on any horizontal and vertical pulls in the program. However, because the larger and stronger lats and mid-back muscles tend to take over on these exercises, we will be isolating the rear delts as well through the use of exercises such as 1-arm 45° cable rear delt flyes.



Here is a list of exercises we'll be using in this program to target the shoulders: 45° Incline Barbell Press, High-Cable Lateral Raise, Barbell Bench Press, 1-Arm 45° Cable Rear Delt Flye, Machine Shoulder Press, 45° Incline DB Press, Machine Chest Press, Seated DB Shoulder Press.

## UPPER TRAPS

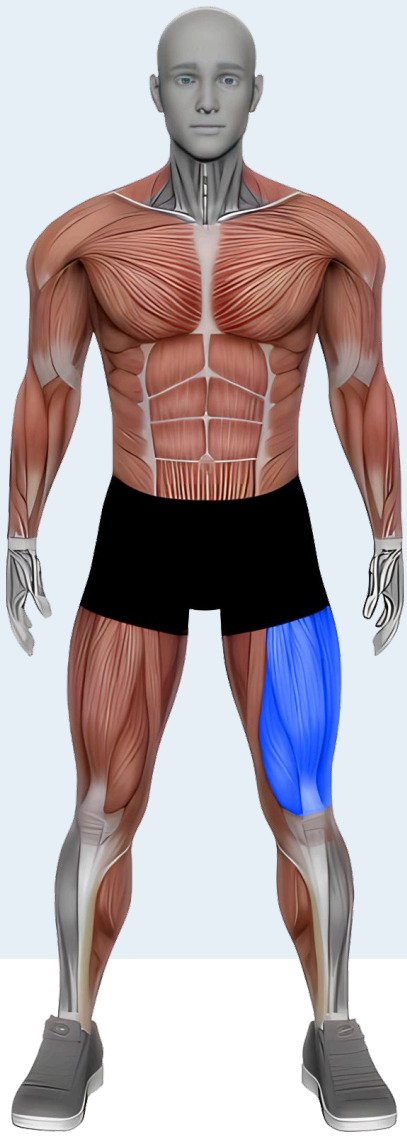
The biomechanical function of the upper traps is still the matter of ongoing scientific debate. Most experts contend that the upper traps don't actually elevate the scapula (like in a traditional shrug) because the muscle fibers of the upper traps run much more horizontally than vertically. Instead of pulling the shoulders up, they actually rotate the scapula up. The simple implication of this is that the traps would be better targeted by shrugging "up and in" instead of straight up. Of course, even if this is fully true, there are still other muscles on top of the shoulders that are responsible for shrugging the shoulders, such as the levator scapulae, and they will still grow in response to shrugging exercises. Regardless, we will be using machine shrugs and cable paused shrug-ins in this program as our main exercises for targeting the upper traps. However, it is worth keeping in mind that many of the upper trap fibers will assist with horizontal rows, lateral raises, and will be worked isometrically on Romanian deadlifts.



Here is a list of exercises we'll be using in this program to target the upper traps: Machine Shrug, Cable Paused Shrug-In.

I should note that I didn't include direct neck work in this program simply because most people aren't interested in direct neck training. However, if you are interested in incorporating direct neck training into this program, I'd recommend watching [this video](#) for suggested exercises. Even just adding 3 sets of neck extension and 3 sets of neck flexion 1-2x per week should be enough to gain muscle size in your neck, if you are new to training it or haven't been training it consistently.





## QUADS

The quads are worked with any exercise that extends (straightens out) the knee. Three heads of the quads only cross the knee, while one head (the rectus femoris) crosses both the knee joint and the hip joint. Because of this, exercises like squat variations and leg presses don't hit the rectus femoris as well as the other heads of the quads. Luckily, leg extensions and sissy squats get the pesky rectus femoris head much more involved.

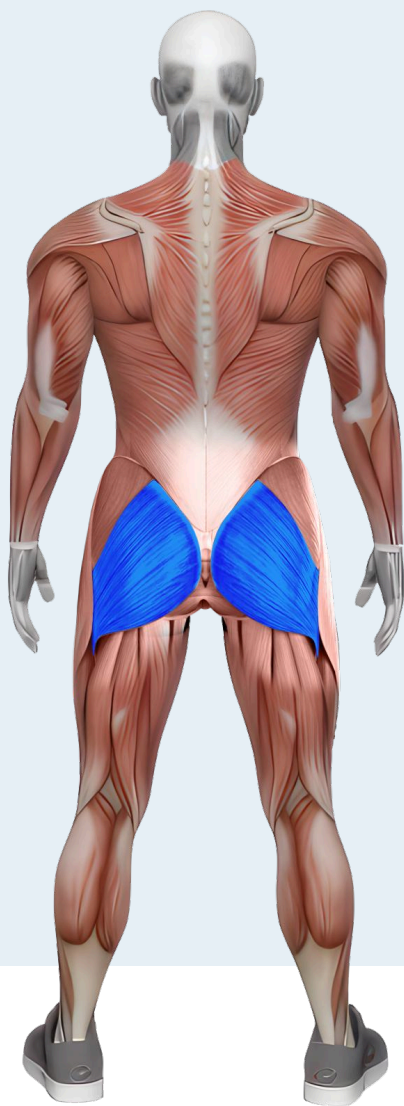
Here is a list of exercises we'll be using in this program to target the quads: Smith Machine Squat, Leg Extension, Leg Press, DB Bulgarian Split Squat, Smith Machine Static Lunge w/ Elevated Front Foot, Hack Squat, Walking Lunge.

## HAMSTRINGS

The hamstrings are worked with any exercise that flexes (bends) the knee and/or that extends (straightens out) the hips. Basically, we're talking about leg curls and hip hinges like Romanian deadlifts. Because the hamstrings cross both the hip joint and the knee joint, similar to the rectus femoris of the quads, the hamstrings aren't hit particularly well on squats or leg presses either.

Here is a list of exercises we'll be using in this program to target the hamstrings: Lying Leg Curl, Barbell RDL, Seated Leg Curl, 45° Hyperextension.





## GLUTES

The glutes are a complex web of muscles that perform many different functions, but their main action in a bodybuilding context is hip extension (straightening the hips out). This means they'll be hit on all squat variations, leg presses, lunge and deadlift variations. The glute medius is mainly responsible for hip abduction and will be targeted via any direct hip abduction work in this program, but it'll also play a big stabilizing role on virtually every lower body compound exercise.

Here is a list of exercises we'll be using in this program to target the glutes: Smith Machine Squat, Barbell RDL, Leg Press, DB Bulgarian Split Squat, Machine Hip Abduction, Smith Machine Static Lunge w/ Elevated Front Foot, 45° Hyperextension, Hack Squat, Walking Lunge.

## ADDUCTORS

The adductors run down the inner thigh and are a commonly neglected area by bodybuilders. While they will be hit to a substantial degree on squats, the adductors are crucial for adding mass to the lower body from the front and back. Because of this, we'll be including a good deal of direct hip adduction work in this program.

Here is a list of exercises we'll be using in this program to target the adductors: Smith Machine Squat, Leg Press, Machine Hip Adduction, Hack Squat, DB Bulgarian Split Squat, Smith Machine Static Lunge w/ Elevated Front Foot, Walking Lunge.







## CALVES

The calves are worked with any exercise that plantar flexes the ankle (points the feet down like in a calf raise). The gastrocnemius muscle of the calves crosses the knee joint as well as the ankle joint and as such will be indirectly targeted on leg curls where it helps out the hamstrings. Although the calves are notoriously one of the most stubborn muscles to grow, like any muscle they will respond to proper hypertrophy training by growing.

Here is a list of exercises we'll be using in this program to target the calves: Leg Press Calf Press, Standing Calf Raise.

## ABS

In the context of this program, by the "abs" we're referring to the rectus abdominis, also known as the 6-pack. The main function of the 6-pack is to round the spine. This will happen in exercises that bring the upper torso down toward the legs (like in a crunch) and in exercises that bring the legs up toward the upper torso (like in a leg raise). Both are included in this program. There's also some direct work for the transverse abdominis and obliques, although these muscles will play an important stabilizing role in many exercises throughout the program.

Here is a list of exercises we'll be using in this program to target the abs: Cable Crunch, Roman Chair Leg Raise, Machine Crunch, Ab Wheel Rollout.







# BODYBUILDING NUTRITION



In this section I'm going to boil down everything there is to know about bodybuilding nutrition to the bare essentials. If you want your entire nutrition taken care of for you, I strongly recommend using the MacroFactor App. You can try it out for 2 weeks for free here (if you use code JEFF). I'm a part owner of MacroFactor and I truly believe it's the best nutrition app on the market.

If you'd rather set your nutrition up on your own, you can manually follow the steps below.

## SETTING UP YOUR CALORIES

For your best results on this program, I recommend a 5-15% caloric surplus. The bigger the surplus, the more fat you will gain alongside your muscle gain. If your goal while running this program is to lose fat while building muscle, I'd suggest putting your calories at maintenance intake. If losing fat is your main priority, then you'll want to be in a 5-15% caloric deficit. Over the long term, larger deficits tend to result in more muscle loss and less sustainable fat loss.

Being in a caloric surplus will provide the most muscle gain because it ensures that there is sufficient energy to fuel your workouts and lay down new muscle tissue. Recent evidence suggests that going beyond a ~10-15% surplus results in disproportionate fat gain, without much, if any, extra muscle gain. Therefore, I recommend a leaner bulk with a smaller surplus if you have goals related to aesthetics [17]. However, if you are cool with gaining more fat alongside muscle, feel free to bump the surplus to 15-20% and you will gain more total weight faster.

If you aren't sure how to find your maintenance calories, here is a rough guide:

### Method 1 (*faster but less accurate*)

- Multiply your weight (in lbs) by 14-18.
  - If you are more active, you may be closer to  $bw \times 18$  (or higher).
  - If you are less active, you may be closer to  $bw \times 14$  (or lower).
  - If you aren't sure,  $bw \times 16$  is usually reasonably accurate.





## Method 2 (slower but more accurate)

- Guess-and-check: Track your bodyweight and caloric intake for 2 weeks.
- Calculate your average weight and average calories for Week 1 and Week 2.
- Determine average weight gained or lost from Week 1 to Week 2.
- Find your maintenance based on the weight change.
  - If you maintained your weight, your average calories is your estimated maintenance
  - If you lost 0.5-1 lbs, your maintenance will be roughly 200-500 calories above your average calories.
  - If you gained 0.5-1 lbs, your maintenance will be roughly 200-500 calories below your average calories.
- Continue to guess-and-check for a few weeks until you find the intake at which you maintain your weight.



Let's say you find that your maintenance is 2,500 calories. To put yourself in a 5-15% surplus you would add 125 to 375 calories to 2,500. That means your lean bulking intake would be 2,625 to 2,875 calories.

For a more detailed explanation of nutrition for fat loss, I recommend watching [this video](#).

## SETTING UP YOUR PROTEIN

If you are planning to be in a caloric surplus (i.e. gaining) OR at maintenance (i.e. recomping) then you should aim to eat:

- 0.7-1 gram of protein per lb of bodyweight per day or
- 1.6-2.2 grams of protein per kg of bodyweight per day



If you are planning to be in a caloric deficit (i.e. cutting) then you should aim to eat:

- 0.8-1.2 grams of protein per lb of bodyweight per day or
- 1.8-2.7 grams of protein per kg of bodyweight per day

If you are very overweight and carrying a high level of body fat, then you can use your height instead as a rough guide for protein intake:

**Daily protein = height (in centimeters)**

For example, if you are 180 cm (5'10") tall, then 180 grams of protein is a reasonable target to aim for, whether cutting, bulking or recomping.

Note that using the height formula will still generally overestimate your true protein needs and most people will be able to build muscle just as well by eating ~20-40 grams less than what the height method predicts.

## SETTING UP YOUR FATS AND CARBS

The fat and carb numbers are much less important from a bodybuilding standpoint than your calorie and protein targets. However, if either gets too low, you can run into hormonal or performance issues.

Generally speaking, I suggest setting your fats at approximately 20-30% of your total caloric intake. For example, if you're eating 2,700 calories per day, 675 of those calories should come from fat. Since there are 9 calories in 1 gram of fat, that would equate to 75 grams of fat per day.

Carb intake will then be dictated by whatever calories are left over after figuring out your protein and fat numbers.

Again, your nutrition doesn't need to be micromanaged or meticulously tracked in order to have success on this program, but I've included this as additional information for those who are looking to line everything up.

## RECOMMENDED NUTRITION TRACKING APP

If you're looking to track your nutrition intake while running this program, again, I strongly recommend using the MacroFactor App. You can try it out for 2 weeks for free here (if you use code JEFF).

Unlike most diet apps, it isn't just a macro tracker. It's quite literally a nutrition coach that uses science-based algorithms to detect changes in your metabolism and make adjustments to your food intake at weekly check-ins. This is super helpful for accountability. Here are a few other things that set the app apart:



- It has detailed micronutrient tracking (hey, health matters too!)
- It has the fastest food logger in existence, which means tracking really won't feel like a chore once you give it a few days to get the hang of it.
- It also doesn't punish you if you miss a day here and there, so you can be more chill about your diet overall.
- It can sync data with other smart devices.
- It comes with a ton of nerdy analytics about your metabolism, goal tracking, weight trends, and plenty more.

If you try it out for 2 weeks, I'm quite certain that you'll love it and want to stick with it. There's also a very active Facebook group and subreddit, where you can ask questions or post updates. I find these communities are really helpful for accountability. If you do sign up, make sure you get in there as well.



A man with a beard, wearing a dark hoodie and shorts, is holding a white protein shaker. He is standing in a gym setting, with a glass door and some equipment visible in the background. The image is overlaid with a dark blue gradient.

# BODYBUILDING SUPPLEMENTS

Supplements will make up a tiny part of your success on this program. Here is a short list of supplements that may help you make the most of your training:

**Creatine Monohydrate**

Take 5 grams (1 tsp) per day at any time of day

**Protein Powder**

Take as needed to hit daily protein goals

**Caffeine**

Optionally take ~150-250mg ~30-60 minutes before training when you are feeling more tired than usual





# FAQ

**Q:** Did you run this program for a full year? Should I?

**A:** I did, yes. I varied the exercises using substitution options, but other than that, yeah! I just ran this program back to back to back. In hindsight, I think I could have benefitted from a little more variation, but for the case study that I used this program for, we wanted things to be as controlled and consistent as possible.

After finishing this program, you can run it back as long as you are making progress. If it starts to get stale, you can move onto one of the other programs on my website.

If you're looking for ideas, I'll be releasing a Specialization Program next, which is specifically written for more advanced trainees needing to bring up stubborn body parts. It's one of the best programs I've ever created, in my opinion, so stay tuned for that in the coming months!

**Q:** Can I include the Squat, Bench, and Deadlift?

**A:** The squat, bench, and deadlift are some of my favorite exercises and they're fantastic movements for strength development. They also activate a large amount of muscle mass and can be very effective tools for building muscle. However, there are a few things that make them less suitable for a bodybuilding program, where strength is not a priority.

Instead of barbell squats, we'll be doing smith machine squats and smith machine static lunges with an elevated front foot (except for cases when a substitution must be made due to lack of equipment access). Barbell bench press is featured in the first block of the program, but is swapped for machine chest press in block 2, due to the overall increase in volume. Instead of deadlifts from the floor, we will be doing Romanian deadlifts.

These more bodybuilding-style movements tend to offer a higher stimulus-to-fatigue ratio than the Big 3 Powerlifts. In other words, we get a similar (or higher) stimulus for less fatigue. The powerlifts are very systemically demanding and generally require more recovery. If we can get the same hypertrophic stimulus for less recovery demand, why not go for those instead? The powerlifts also require a lot of warm-up time – that's time and energy that could be spent placing tension on the muscle.

For me, it ultimately boils down to efficiency. The powerlifts certainly can be effective muscle building tools, and they're in virtually every other program of mine. However, because they're so fatiguing compared to other similar exercises, they aren't the most efficient tools for getting the job done when the goal is hypertrophy. For this reason, I would only recommend adding them into the program if you are very focused on maintaining strength with those lifts. If you choose to substitute them in, I would recommend lowering the reps to ~3-6.



**Q:** I can only train 4x per week. How should I modify the program?

**A:** To run this program on a 4x schedule, I would recommend simply carrying over the remaining workout/s into the following week. For example:

| Week 1    |       |
|-----------|-------|
| Monday    | Upper |
| Tuesday   | Lower |
| Wednesday | Rest  |
| Thursday  | Pull  |
| Friday    | Push  |
| Saturday  | Rest  |
| Sunday    | Rest  |

| Week 2    |                                                |
|-----------|------------------------------------------------|
| Monday    | Legs (carried over from Week 1 of the program) |
| Tuesday   | Upper                                          |
| Wednesday | Rest                                           |
| Thursday  | Lower                                          |
| Friday    | Pull                                           |
| Saturday  | Rest                                           |
| Sunday    | Rest                                           |

| Week 3    |                                                |
|-----------|------------------------------------------------|
| Monday    | Push (carried over from Week 2 of the program) |
| Tuesday   | Legs (carried over from Week 2 of the program) |
| Wednesday | Rest                                           |
| Thursday  | Upper                                          |
| Friday    | Lower                                          |
| Saturday  | Rest                                           |
| Sunday    | Rest                                           |

**Q:** There are no supersets within this program. Can I add them in?

**A:** Yes! You are welcome to superset isolation exercises within the program to help save time, if needed. For example, in Week 1 of the program, you could choose to superset the Overhead Cable Triceps Extensions with Bayesian Cable Curls. This would mean alternating between these two exercises with minimal rest in between. The most important thing to keep in mind when creating supersets within the program is to avoid supersetting exercises that target the same muscle group. For example, you would not want to superset Overhead Cable Triceps Extensions with Cable Triceps Kickbacks.

**Q:** The volume is lower than what I'm used to, should I add sets?

**A:** I wouldn't recommend it. I've been running this program as an advanced-elite level natural bodybuilder with over 15 years of serious lifting experience, and the volume feels perfect to me. The volumes included in this program are also in line with science-based recommendations from high level natural bodybuilding coaches. If you are more advanced than me, you can consider adding 1-2 sets per week for a specific body part that you feel needs a little extra love. However, before turning to increase the volume, I would first ensure that your intensity/effort is on point. Are you truly pushing the last set to failure on all exercises, as suggested in the program? On these sets, are you pushing yourself as hard as you possibly can, as if \$1,000,000 was on the line, and despite this maximum effort, you still can't get the weight up with good form? This should be your first course of action, before turning to a volume increase. I suspect that the volume is not too low for >99% of people running this program. If it feels too low, you may not be executing the sets to the exertion level that I've prescribed in the program.

**Q:** Can I choose to do a Substitution Option even if I can perform the original exercise?

**A:** Try to do the main exercise listed if you can. I spent a lot of time curating the main exercises in this program and I do think they have some unique advantages in terms of tension profile, long muscle-length bias, and stimulus-to-fatigue ratio. However, if you don't have access to the equipment to perform the main exercise, absolutely feel free to make a substitution. Also, if you try the main exercise for a few weeks and just aren't feeling it, try one of the substitution options instead. The program was designed so that all substitution options will elicit a very similar training effect.

**Q:** Do I need to time my rest periods in between sets?

**A:** No. Generally speaking, longer rest periods are associated with better hypertrophy because resting longer in between sets allows you to recover more and perform more volume as a result. The most important thing is that you feel recovered between sets. However, you also don't want to rest so long that you lose focus and the workout starts dragging on. You can time yourself in between sets if that helps keep you on track, but just keeping a rough eye on the clock is fine too.



**Q:** My gym is crowded. Can I switch up the exercise order?

**A:** Yes. Try not to completely scramble the workout, but switching a few exercises around won't severely interfere with your ability to recover in between exercises and complete the workout properly.

**Q:** 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 you are to your genetic limit). As a rough ballpark estimate for untrained male individuals, 1-2 lbs of muscle gain per month is reasonable (12-24 lbs of muscle gained in your first year). For early intermediates with about 1 year of lifting experience, progress will likely slow down to roughly 0.5-1 lbs of muscle gain per month (6-12 lbs of muscle gained in your second year). Beyond that, muscle gain from person to person will be highly variable, depending on how much you've already been optimizing your training and nutrition. For practical purposes, women can divide muscle gain estimates in half.

**Q:** I'm not getting sore from my workouts. Is the program not working?

**A:** Muscle soreness is not required for hypertrophy to occur and it isn't even a reliable proxy that you had an effective workout. Plenty of activities can make your muscles sore, but be wholly ineffective at building muscle, such as running a marathon or getting a "charlie horse". In fact, reduced soreness over time can be a good thing as it may indicate that your body is adapting and recovering. If you are pushing yourself hard, executing the exercises with good form and being consistent with the workouts, soreness isn't something you need to be chasing.

**Q:** I'm getting very sore from my workouts. Should I skip the gym until I'm not sore?

**A:** You may experience increased soreness when you first begin the program because it is presenting a new stress to your body. Some research shows that foam rolling can help reduce soreness [17, 18]. 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. 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 soreness, it would be wise to skip that exercise until you feel properly recovered. Otherwise, in the case of mild soreness, perform a slightly longer warm-up for each exercise and use your own discretion as to whether you should complete the exercise or leave it for another day.

**Q:** 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. Within each block, exercises are kept mostly constant to ensure both progression (by adding volume incrementally to these specific movements) and mastery of exercise form and technique. Then, after each block, the exercises are switched up to keep things fresh and novel.

**Q:** Should I add cardio to this program?

**A:** The main point of cardio from a bodybuilding standpoint is to establish a caloric deficit for fat loss. I would recommend prioritizing the deficit from your diet first, rather than relying heavily on cardio.

As a general rule, I recommend keeping cardio to an effective minimum on this program. If you wish to do cardio to achieve your fat loss goals or for general health and fitness, try to keep it to 4-5 low-moderate intensity sessions per week, around 20-30 minutes in duration. High intensity cardio should be used more sparingly, up to once or twice weekly at your own discretion. Cardio won't kill your gains, but it can interfere with your recovery if performed excessively. Monitor your own recovery, and if you're progressing fine, then whatever cardio you're doing isn't a big deal. If your progress is slowing and you feel very fatigued during or after workouts, you may want to cut back on the cardio.

**Q:** What do I do after I finish the program?

**A:** Since I ran this program for a full year, I designed it to loop back seamlessly. After completing Week 12, you can jump right back into Week 1, which serves as a deload.





# COMMENTS FROM JEFF

For customer support please visit [jeffnippard.com/contact](http://jeffnippard.com/contact). 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 **2-3 business days** for an email reply.

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





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