



THE RULES



OF WEIGHT TRAINING

INTRO



STRENGTH

Weight training has been the object of attention ever since the early 20th century and has become recognized for its ability to change the body inside and out.

AESTHETICS

The development of the human body has progressed from the aesthetic, pleasing to look at physiques of the golden era, to the mass-freak bodybuilders we see in the year 2021.



POWER

But what is it that you should be doing, if you don't have competitive goals and rather look to create the best version of your body possible?

In this short guide, we'll give you the essential insights on weight training, that will help you create your own, individual plan of action towards your goal, whatever it may be.





IT'S NOT ABOUT PRODUCTS

As you probably notice, fitness has become a big business where people offer a variety of seemingly easy solutions that promise quick results.

The fact of the matter however, is that most of those products can't really compensate for the lack of a method-based approach to training and nutrition.

So let's start by saying that before you go to the gym, you have to know what you're doing and more importantly, why you're doing it.

Understanding Your Workout

A weighted workout is essentially a bunch of different variables that represent a given stimulus to the musculature.

Depending on the ratios of those variables, the stimulus will be different and this in turn will create a different end result.

Knowing this, we can conclude that if you know how to set up your training variables, you can design a training split that will be JUST RIGHT for your goals.



3 MAIN VARIABLES :

1. Intensity
2. Volume
3. Density

By definition, intensity represents the weight you are lifting - The heavier you lift, the higher the intensity.

Volume on the other hand, represents the total amount of weight lifted for a given set, exercise or a workout.

Volume is measured by taking your working weight and multiplying it by the numbers of sets and repetitions (i.e 100 kg x 3 sets x 10 reps = 3000 kg total volume for all three sets)

Finally, density represents your volume, referred to the total time needed for completion, including rests, and is calculated by using this formula -
 $\text{Volume} \div \text{Total completion time} = \text{Density (kg/min)}$

For instance, if it takes you 3 minutes to complete the above-mentioned volume of 3000 kg, that would be a density of 1000 kg/min.



WHICH OF THE 3 DRIVES GROWTH?

Now that you know what actually makes up a workout and what it really is on the backend of the process, you may ask yourself “Well then, should I focus on intensity, volume, or density?”.

But if you break this down into bits, you’d realize that all 3 of those variables are intricately connected.

For instance, if you train at peak intensity (90-100%), you’d only be able to do a couple of repetitions and thus, the total volume is reduced.

If however you train at moderately high intensity, you’d be able to do more than 6 repetitions at high exertion.

Finally, if you focus on high density, you might compromise on the quality of your volume (i.e lifting a lot of total weight but at a lesser exertion due to poor rest times).

The truth here is that, there isn’t really a correct approach, if you don’t put it into context.



CHEAT SHEET

Below is a cheat sheet, which can tell you more about the levels of intensity you should train at (depending on the goal), along with the rest times between sets you should utilize, to maximize performance from set to set.

| Goal | Intensity | Rep range | Rest times |
|-----------------------------|------------------------|------------------|--------------|
| Increase maximum strength | 85-100% of one rep max | 1-5 reps | 5-15 minutes |
| Increase bulk muscle growth | 70-85% of one rep max | 6-15 repetitions | ~3 minutes |



WHAT DO REST TIMES DEPEND ON?

At first, the 10 minute gap in the rest times, recommended for increasing maximum strength, may be a bit confusing.

But the reason why it is so, is that it depends on the intensity you're at for the given exercise.

Follow this general rule of thumb: The higher the working weight, the longer the rest times between sets.

Because intensity is more strenuous to the nervous system by nature, loads close to your maximum strength capabilities require longer rest times, in order to be sustained from set to set.

WHAT ABOUT THE NUMBER OF SETS?

Another frequently asked question is "how many sets should one do to maximize progress?"

And, well, what we know so far is that a total of 10-20+ challenging working sets, per muscle group, per week, seems to be effective.

Maximizing strength and muscle growth is about nailing the ratios of your training intensity and volume (number of sets).

Next page you find a cheat sheet you can use to determine the volume you would progress well at.



CHEAT SHEET

| Level | Volume |
|--------------|---|
| Beginner | 6-10 challenging working sets, per muscle group, per week. |
| Intermediate | 10-15 challenging working sets, per muscle group, per week. |
| Advanced | 15-20+ challenging working sets, per muscle group, per week. |



WHAT DOES 'A CHALLENGING SET' MEANS?

During intense muscular activity, there is a point where you cannot continue muscular contraction.

This point is referred to as “muscular failure” and comes when you cannot do more repetitions unassisted, as we already mentioned.

A challenging set would then represent a high-exertion set of any given exercise, that is taken close to failure.

In other words, if you utilize the above-mentioned training volumes and always take them 2-5 repetitions shy from failure, you will create sufficient stimulus for muscular growth.



STICK TO THE BASICS

Alright, we already cleared up the following:

- 1. Training at 85-100% intensity results in max. strength gains**
- 2. Training at 70-85% intensity results in more bulk growth and less max. strength gains**
- 3. Optimal volume forms between 6 and 20+ challenging working sets per muscle group, per week, depending on your level of training**

And though these are the very essential fundamentals of weight training, there are other principles to consider and rely on.

Let's discuss the 3 very important principles, whether you're trying to increase strength, gain muscle or increase overall fitness.



#1 PROGRESSIVE OVERLOAD

When you start training, you are basically exposing the body to new, previously unknown stress.

Entering the workout, your muscles have a certain working capacity and contractile ability.

After the workout, your body starts recovering the musculature in preparation for a GREATER load than it was previously exposed to.

This is what we call... Gains.

In order for you to continue progressing further and further, you have to progressively expose the body to new, previously unknown stress, so that it can adapt and improve.

This is also referred to as “progressive overload” and is a fundamental principle in any training discipline.



#1 PROGRESSIVE OVERLOAD

Here's how you can realize the principle of progressive overload:

- **Increase working weight** - Try and progressively increase the weight on the bar, avoid big jumps and instead go for small increases.
- **Increase the number of sets** - Especially for the goal of gaining mass, increasing the number of sets is crucial for realizing a greater training volume of good quality
- **Increase the number of repetitions** - Are you used to doing 5 reps at a given weight? Push yourself a bit further and add a couple of repetitions here and there.



#2 EXERCISE EXECUTION

One of the MAIN goals of training is to not only improve your physical capabilities, but to also sustain those improvements and bring fitness into your older years.

In that context, utilizing proper exercise execution is an important, injury-prevention tool.

And not only that, going through the full range of motion that each of your muscles is capable of, will result in a greater stimulus and thus, better overall development.

This healthy exercise execution then works in synergy with the third principle we want to introduce you to.



#3 CONSTANT TENSION

If you think about it, your muscles don't recognize the weight on the bar, but the tension that the weight creates.

Maintaining constant tension throughout the full range of motion of each exercise is important, if you're trying to give every bit of stimulus to the muscles.

The reason why it is so important is that during exercise, the tension that the muscles go through, leads to micro damage, referred to as "muscle protein breakdown".

That micro damage happens on BOTH parts of the range of motion (i.e both when you curl your arm up, and when it comes down before the next repetition).

As a matter of fact, MOST of the micro damage occurs on the second portion, when the weight is coming down.

For this reason, constant tension, combined with full range of motion, is important when you are trying to achieve the best stimulus possible.



FOCUS ON COMPOUND MOVEMENTS

Besides setting up your intensity, sets, reps and rest times, exercise choice is another crucial factor.

When it comes to weight training, there are two main types of exercises:

1. **Compound exercises**
2. **Isolated exercises**

Compound exercises engage multiple muscle groups at once, while isolated exercises primarily target one specific muscle group.

By default, compound exercises allow you to increase and maximize your training intensity and volume, because many, major muscle groups work in synergy to help you lift a bigger load, for more repetitions.

For this reason, compound exercises should be at the core of your workouts, while isolated ones can be implemented as a tool to:

1. **Finish off a muscle group**
2. **Specifically target a lacking muscle group**
3. **Bring out details in the musculature**
4. **Develop static strength**



RECOVER. RECOVER WELL!

Achieving sustainable results with your training is a matter of nailing the ratios between the stimulus and the rest times.

As we already mentioned, intensity by nature is strenuous and requires you to rest, before you can perform at your best the next training session.

Optimal recovery times form at 48-96 hours for each muscle group.

Depending on the training stimulus and exertion, your muscles and their energy reserves will be at peak recovery around 2 to 4 days after your workout.

This is EXACTLY when you can train the given muscle group again, in order to stack as much quality volume as possible in time.



TAKE-HOME MESSAGE

Achieving sustainable results is about following simple principles, applying methods and most importantly, recovering well and staying consistent in time.

If we had to sum up the essence of weight training in 7 simple rules, here's what the list would look like:

- 1. Train at a moderately high/high intensity**
- 2. Focus on compound exercises (squat, bench, deadlift, overhead press, etc.)**
- 3. As a beginner, start with 5+ challenging working sets, per muscle group, per week**
- 4. As you progress in training, increase that number to 15-20+ challenging working sets**
- 5. Progressively increase the weight you're using on any given exercise**
- 6. Progressively increase the repetitions you're doing with a given weight**
- 7. The heavier you lift, the longer the rest times between sets**
- 8. Allow each muscle group to rest 2-4 days before you train it again**