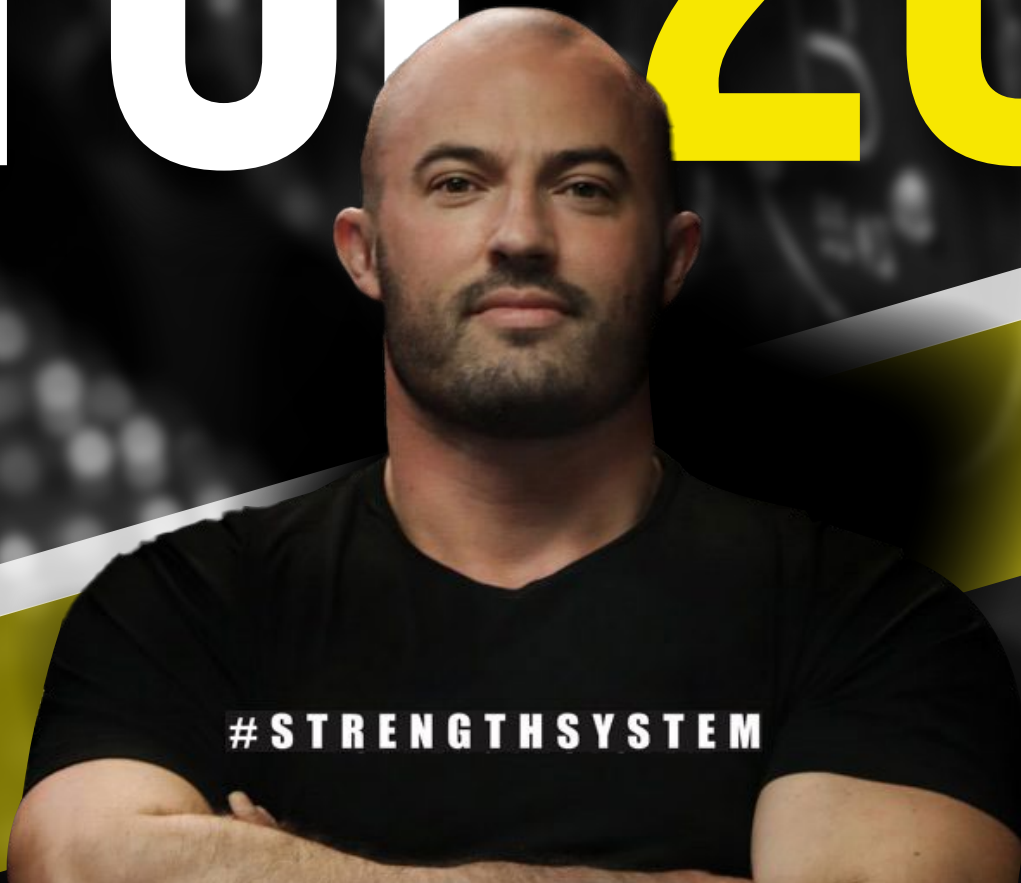


SEBASTIAN OREB'S

TOP20



COMMANDMENTS FOR GETTING
YOUR CLIENTS INSANELY STRONG



STRENGTH
SYSTEM



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TOP 20

COMMANDMENTS FOR GETTING YOUR CLIENTS INSANELY STRONG!

BY SEBASTIAN OREB

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ABOUT SEBASTIAN OREB

Since 2003, Sebastian Oreb has been responsible for the success of some of the strongest athletes in the world, first as a personal trainer and then later as a Strength Coach.

He has coached multiple world champions in Rugby League, Professional Powerlifting and Strongman such as Thor aka the Mountain from Game of Thrones and Hattie Boyle, WBFF Pro Fitness Model and World champion.



Today, he actively competes as a professional powerlifter. He is also the founder of Base Gym in Sydney, one of Australia's leading performance centres for athletic conditioning and getting both general population clients and athletes strong.

Thousands worldwide have utilized Sebastian's online coaching guides to get themselves strong and injury-free.

As an educator, he has lectured to over 10,000 personal trainers in workshops and seminars, teaching his methodology 'The Strength System' and is a founding member of the Clean Health Academic Advisory Board.

For more information on Sebastian, you can follow him at:

www.strengthsystem.com



ABOUT CLEAN HEALTH

Our goal is to prepare you for a successful fitness career by blending the latest science with real-world results that you can use in your business instantly.

Established in 2008, Clean Health is one of the world's leading online fitness educators, having taught more than 50,000 students in over 80 countries.

Our range of online, easy-to-access courses are developed and created by the very best in the industry, across nutrition, sports science, fitness business and strength and conditioning.



Clean Health was founded by personal trainer and company CEO Daine McDonald (@dainemcdonald) as a personal training organization focused on getting results based on the science of lifestyle, nutrition, and training.

Our first performance-based gym was opened in 2012, and by 2015 we had 3 locations and were on our way to completing over 250,000 sessions before we closed our gyms down for good in 2020 to go all-in on online education

We have been featured in numerous media publications and TV shows, including the Sydney Morning Herald, Yahoo Finance, GQ Magazine, Men's Muscle & Health, Men's Fitness, Australian Women's Health & Fitness, Oxygen Magazine and more.

Our experts have presented at some of the most significant health and fitness events globally, including FILEX, MEFIT Summit, and the Australian Fitness Expo.



Our mission is to raise the level of knowledge and industry standards for 500,000 fitness professionals worldwide by 2030.

For more information on us, visit us via the channels below.



INTRODUCTION

Dear PT or Strength Coach,

My name is Sebastian Oreb, and I want to thank you for picking up this eBook.

I created this FREE guide because I wanted to share with you the foundational knowledge that every single PT or Strength Coach needs to understand to help their clients develop a strong physique that looks great, moves well, and is free from injury.

As a coach, the temptation is always there to reinvent the wheel and develop the best and newest elaborate training strategies.

There is pressure to sell in this industry, and many people think that having a marketable product requires using advanced or complicated training strategies.

But the reality is, we can boil it down to a few factors that make the best coaches in the world so good at what they do. First, great coaches do the basics better.

So, forget all these advanced strategies initially, as most of your athletes will get most of their results from consistently applying the fundamentals of strength training over time. Learn how to do the basics better!

Another thing is that for those few instances where the basics aren't enough, a great coach will have a broader toolkit of advanced strategies that they can use, which you can only get from two places – education or experience.

A great coach will understand that these advanced strategies should only be called upon for those few times when the basics are not enough.

INTRODUCTION

Finally, in my opinion, a good coach will distinguish themselves by practising what they preach. Now that doesn't mean you need to train yourself up to be at the level of an Olympic athlete or a professional physique athlete, but you do need to embody what this industry is all about.

As a PT or Strength Coach, the reality is that if you're not an expert on the core fundamentals of strength training, you won't be very good at applying the more advanced strategies that I teach in my Strength System International Certification program.

So, this guide is designed to help you master the basics as a coach, just like I did.

Now I know you are eager to get into it – so let's not waste any more time and jump straight into our first topic!

Yours in strength,

Sebastian Orsb



COMMANDMENT 1:

UNDERSTAND THE CONCEPT OF STRUCTURAL BALANCE

Simply put, structural balance is strength and muscle mass that is evenly distributed from front to back, top to bottom, left to right, push to pull, and internal to external rotation.

This approach to training is not new and was popularised by one of my mentors, the late Strength Coach Charles Poliquin.

Research has shown that by training in a way that balances the load, forces and muscle mass around each joint and each body segment, we can dramatically improve our strength, build a balanced and aesthetically pleasing physique, move better, and drastically reduce our risk of injury [1].

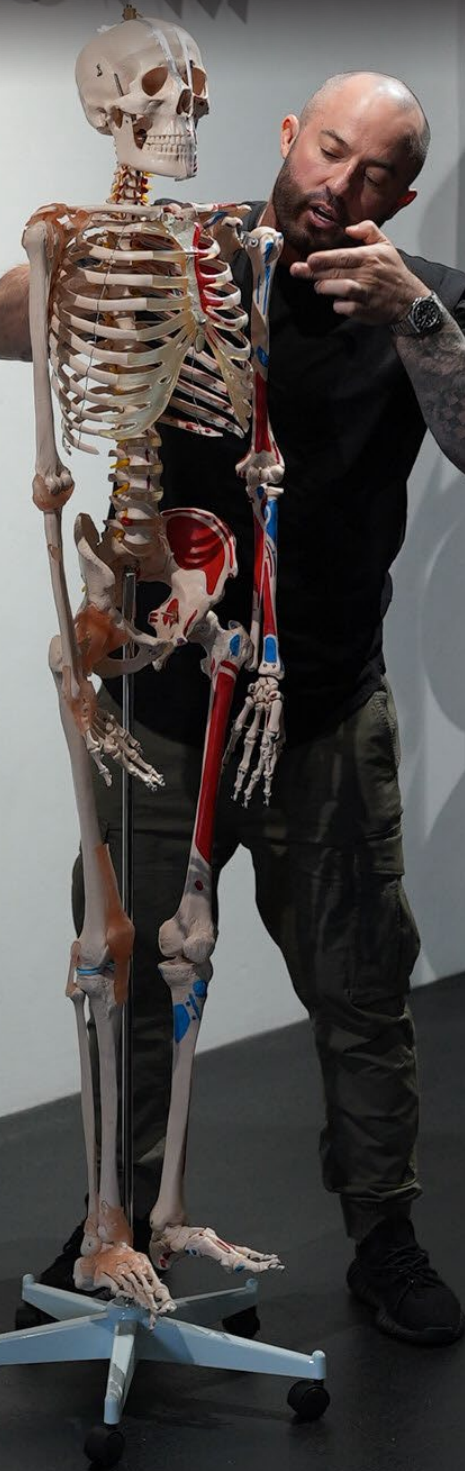
However, in my experience of working with athletes of all shapes, sizes, and proportions, everyone will present with different optimal strength ratios.

Now I will say that being too rigid with percentages can be like trying to fit a square peg in a round hole; however, it is also good to have some guidelines to work by.

Every strength athlete I've met really wants to get the most out of their training, and as a strength athlete myself, it is easy to push the less exciting exercises, like structural balance training, to the side and just focus on the heavy lifts.

But one excellent example we can draw from is the “power-builder” approach, which has been on the rise over the last decade. In short, this is the merging of strength and bodybuilding training, where the athlete aims to build the muscle of a bodybuilder while having the strength of a powerlifter.

Their training is built around gaining strength in the major compound lifts, but there is an equal focus on muscle hypertrophy, proportionality, and bodybuilding-style training.



COMMANDMENT 1:

UNDERSTAND THE CONCEPT OF STRUCTURAL BALANCE

Although they want to get strong, they are equally concerned with building muscle and creating a symmetrical physique, so they will also spend a lot of time focusing on hypertrophying smaller muscle groups and performing isolation training.

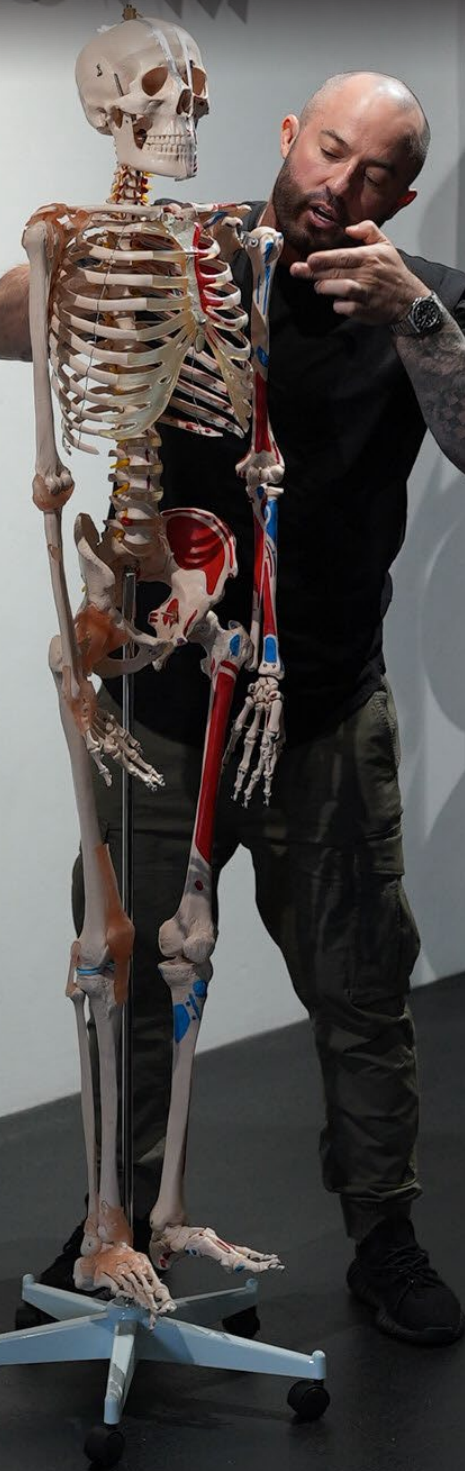
These athletes have shown us that a well-balanced physique not only looks good but has a massive amount of strength potential [2]. Something very interesting that I've noticed as a strength coach is when a bodybuilder comes to me and says they want to get stronger or compete in strength sports, it's typically a straightforward transition.

All the background work has been done already, and I just have to teach them how to channel that muscle mass that they've previously built into a stronger and more efficient movement pattern.

WHEN WE DO THIS, WE TYPICALLY SEE THEIR STRENGTH REALLY TAKE OFF!

So, I recommend that you should start to get into the habit (if you haven't already) of carefully planning your client's training so that you structure both weak point and strong point exercises into your program.

Strong point training is fun and great for morale, but we are only as strong as our weakest link, so we can't neglect weak point training either. As a result, you will help prevent future imbalances from occurring and help build your clients their strongest physique possible!



COMMANDMENT 2:

UNDERSTAND BASIC BIOMECHANICS

One of the fundamental principles in biomechanics is the idea that force has both a magnitude, i.e., the amount, and a direction [3].

The forces acting on an object can add on to each other if they're working in the same or similar directions, or they can compete (or even cancel each other out) if they're acting in opposing directions.

When we pump iron, the aim is for the sum of all our forces that our muscles produce in a particular direction to be greater than the weight on the bar so that we can move it from point A to point B.

We have our prime movers in any exercise, i.e., our agonists, which are the primary muscles used to complete the movement. Generally, these muscles act with the most direct line of force in the direction we want the weight to be moving.

Now, although the prime movers contribute a large proportion of the total force in a movement, they are not the only muscles working to move the weight.

COMMANDMENT 2:

UNDERSTAND BASIC BIOMECHANICS

Human movement is dynamic, and we have other muscles that will contribute at various points of the exercise. This includes:

Synergists – Muscles that contribute to a lesser degree to the movement

Antagonists – Opposing muscles that relax to allow movement to occur

Stabilisers – Muscles that co-contract around the joint to prevent or limit movement occurring at that joint

Our lifting technique will naturally gravitate towards using the strongest muscles, so if we neglect training our supporting muscle groups, then our technique can shift away from what is bio-mechanically optimal, which can cause our strength to suffer [4].

Additionally, our bodies have evolved for our muscles to contract in a particular way around the joints, and when this balance is thrown off, then our connective tissue ends up getting loaded in ways that it's not designed for [5].

So, as you can see, grasping this concept is vital if you are serious about helping your clients get great results and remaining injury-free!

COMMANDMENT 3:

DEVELOP STRUCTURAL BALANCE

Although covering this topic in-depth is beyond the scope of this eBook, I want to provide you with some essential guidelines to look at when improving the structural balance of the upper body, lower body, and core with your clients.

UPPER BODY

1. USE A PUSH TO PULL RATIO OF 1:1

This ratio refers to the number of sets you do for pushing and pulling movements within each training week for the upper body. You can break this down further and match the number of vertical pull movements (e.g., chin-ups) to vertical push (e.g., shoulder press) and horizontal pull (e.g., cable row) to horizontal push (e.g., bench press).

2. STRENGTHEN THE EXTERNAL ROTATORS OF THE SHOULDER

Since our primary pushing and pulling muscles, i.e., the pecs and the lats are both internal rotators, we must balance this out by training the external rotators [6].

3. STRENGTHEN THE STABILISERS OF THE SCAPULA

Because the humerus must work synergistically with whatever is happening at the scapula, if we neglect to train the scapula stabilising muscles but continue to push big weights with our upper bodies, pain or injury are likely to occur [7].

4. LEFT TO RIGHT SYMMETRY

The last guideline I want to touch on for improving structural balance is balancing the left side with the right side of the body.

COMMANDMENT 3:

DEVELOP STRUCTURAL BALANCE

If your client uses good technique and performs all their exercises with excellent symmetry, this shouldn't be an issue. However, even if they do, in my opinion, it is always a good idea to include some unilateral movements and dumbbell work in your programs to make sure left to right imbalances don't arise.

LOWER BODY

Instead of a push to pull ratio for the lower body, I like to break it up into hip- and knee-dominant squat patterns and stick to the same 1:1 ratio.

I also include some kind of hip bend/hinge pattern (e.g., deadlift) and a knee bend/flexion exercise (e.g., lying hamstring curl)

However, it is essential to keep in mind that what constitutes a hip dominant movement for one person can be a knee dominant movement for another due to differences in individual biomechanics.

In the Strength System International Certification program, I run through the three primary squat variations. In the course, you will learn how to pick up on whether a lifter is performing the movement with more hip dominance or more knee dominance.

CORE

Activate and strengthen the core as part of your warmup for all spinal loading sessions.

In summary, if you use these guidelines with your clients, you will set them up for a safer and more effective progression with their strength and body composition goals.

COMMANDMENT 4:

TECHNIQUE IS SUPERIOR TO PROGRAMMING

Good lifting technique is the closest thing to a "magic pill" in strength training.

Therefore, we dedicate a lot of time to this topic as part of the Strength System International Certification program.

For myself and my athletes, technique takes priority over everything else.

For example, if your client is following the absolute worst program in the world, but their technique is excellent, and they are also following the basic principles of progressive overload, they will still get great results! However, the same cannot be said about a lifter following a great program with terrible technique.

You must teach your clients to put "ego" at the door when it comes to loading up the bar when it comes to maximising their technique efficiency.

Good lifting technique will benefit performance for any sport because we are making your client's movement more efficient.

More efficient movement means that your client long-term will be able to lift more weight, which translates to better strength training results.

It will also drastically reduce your client's risk of getting injured [8], which will improve their performance because an injured athlete won't perform or train at their best.

Good technique is a bit of an arbitrary term, but generally speaking, we can define this as the most efficient way for our body to move for us to lift the weight from point A to point B.

COMMANDMENT 4:

TECHNIQUE IS SUPERIOR TO PROGRAMMING

Research has also shown that the most efficient movement pattern will also be the safest movement pattern and the technique that has the most potential for strength [8].

Since no client has the exact same proportions and levers as the client next to them, good technique will look different on everybody.

However, there are some fundamental rules that every lifter can follow to move in the most efficient and safe way for their body.

One absolute non-negotiable is that you shouldn't be experiencing pain while performing an exercise. But in terms of individual movement patterns, this will vary slightly from lifter to lifter.

Again, we go through all of this and more in the practical part of the Strength System International Certification, so if you want to grasp this concept fully, I recommend checking it out.

[MORE INFO](#)

COMMANDMENT 5:

LEARN HOW TO BENCH PRESS EFFECTIVELY

In this section, I want to provide you with some tips on how you can help your clients improve their bench press technique.

Once again, it's hard for me to do this justice within the scope of this eBook, so for a more practical video demonstration where I take one of my athletes through how to perform the bench press, check out a video of me performing it via the link below.



WATCH NOW

The first thing you need to get right is the setup, and I encourage you to practice this on yourself before implementing it with a client.

COMMANDMENT 5:

LEARN HOW TO BENCH PRESS EFFECTIVELY

LET'S USE THE FLAT BARBELL BENCH PRESS AS AN EXAMPLE.

Step 1: Start by sliding back so that your head is off the bench. The reason for going that far back is to bring your feet back into the correct position to set up the bench press properly. Also, to note here that to get the feet nice and far back, you'll need to determine the proper distance for yourself.

Step 2: From this position, push your heels downwards and maintain this pressure throughout the entire movement, from the setup all the way through to the time you put the bar back on the rack.

Step 3: While pushing your heels down, you're going to slide your body into position. Keep your heels down the entire time – throughout the setup and the set. They're not on the ground, but they're pushing downwards.

Starting off, you've got to have your eye level behind the barbell, pushing your heels down and focusing on pulling your shoulder blades back and down towards your back pockets. Setting up with your eyes slightly behind the bar means you're in a great position to un-rack the weight.

COMMANDMENT 5:

LEARN HOW TO BENCH PRESS EFFECTIVELY

Step 4: Next, you want to look at the hand position on the bar. You want to grab the barbell with a comfortable grip. The maximum legal width grip in a powerlifting competition is the index finger on the outer ring of the powerlifting bar.

Even if someone is not a competitive powerlifter, I don't recommend going wider than that because if you do, you're going to bang your hands on the uprights, and they're going to bleed.

If you're doing everything else correctly, the elbows should move in the proper position throughout the exercise. Be careful of telling people to tuck their elbows, as most lifters don't need to.

Step 5: While laying down on the bench and pushing your heels down, you're extending your hip joint, and extension at the hip joint anteriorly rotates the pelvis.

Anterior rotation of the pelvis is paired with the extension of the spine, which will naturally allow for the scapula to sit where it needs to sit, which is retracted and depressed.

Mastering this setup and position throughout the bench press will allow you (or your client) to lift the maximal weight on the bar with this movement!

COMMANDMENT 6:

SUPPLEMENTARY EXERCISES FOR THE PUSH PATTERN

I now want to go through my favourite supplementary movements to develop the push pattern.

When we perform a bench press with an arched back technique, it puts our shoulders in a healthy position and reduces our range of motion – allowing us to lift a heavier weight. However, this also means we are not taking the shoulder joint through the full range of motion.

Therefore, following the bench press, we want to strengthen the horizontal and vertical push patterns through their full range of motion. For horizontal push variations, dumbbells are a great option (but not the only option).

Now with any horizontal pressing movement, such as a flat, decline or incline press, follow these three key steps...

Step 1: Starting with the dumbbells on your client's lap, have them lay down in a flat position, with their feet stable on the ground.

Step 2: Start in a fully stretched position at the bottom using a neutral hand position. You will still have your client focus on thoracic extension, but not to the same degree as with the barbell bench press. From there, have them push the weight up to a complete lockout.

On the incline press variation, you will have your client focus on a more pronounced thoracic extension due to the change in angle between vertical and horizontal (depending on which incline you have your client go with).

Step 3: Now, have your client control the weight back down to the full stretch again.

You can explore different rep ranges and set variations with all pressing movements, which I discuss at length in the Strength System International Certification program.

COMMANDMENT 7:

SUPPLEMENTARY EXERCISES FOR THE PULL PATTERN

Now we want to look at some of my favourite supplementary exercises for the pull pattern. Here, I will split these up into horizontal and vertical pull exercises.

Horizontal Pull Exercises

For the horizontal pull pattern, there's an extensive list of different exercises that you can choose from, such as a seated cable row, rope face pulls, and an array of bent-over barbell row variations. However, one of my favourite exercises is a one-arm dumbbell row, so here is how you can coach your clients to do it correctly.

ONE ARM DUMBBELL ROW

Step 1: Set your client up on a bench with a wide, stable base of support. Make sure they have a nice neutral spine so that they get the correct movement pattern through the shoulder blade.

Step 2: From here, have them start with the dumbbell in their working arm in the full stretch position. As they raise the dumbbell to their body, have them focus on retraction and depression of the scapula.

Step 3: Have your client lower the weight back down to the full stretch position.

COMMANDMENT 7:

SUPPLEMENTARY EXERCISES FOR THE PULL PATTERN

You want to have your client take a very slight pause at the bottom so that there's no chopping action here and there's no momentum creating the movement. It should all be coming from the muscle.

Vertical Pull Exercises

Now, when it comes to strengthening the vertical pulling pattern, without a doubt, my favourite strengthening exercise for that is a pull-up or a chin-up with all the different variations of hand positions, including pronated, neutral, and supinated.

However, I have to mention that this is probably one of the most challenging ways to strengthen the vertical pulling pattern because it's a bodyweight exercise and not everyone has the strength to perform this exercise correctly.

This is especially the case for general population clients who are just starting with you. However, that doesn't mean that after a while, you can't have them work up to it.

If your lifter can't perform a bodyweight chin-up or pull-up with good technique, I recommend that you use band assistance. Always prioritise good technique. If they're unable to do this, consider using a lat pulldown instead.

COMMANDMENT 7:

SUPPLEMENTARY EXERCISES FOR THE PULL PATTERN

PULL UP / CHIN UP

Step 1: Using either a pronated, neutral or supinated grip, you're always going to have your client start in a fully stretched position.

Step 2: From there, with the scapula protracted and elevated, you are going to have them pull their body up to the bar, retracting and depressing their scapula.

If they cannot achieve that end position, where the scapula is retracted and depressed, they are not using the correct technique.

Try to correct their technique, but if they still can't achieve this position, then regress the exercise by adding in band assistance or swapping to a lat pulldown.

One of the common mistakes we see people make is trying to get their chin over the bar, even if it means resorting to lousy technique with a rounded back.

Instead of trying to get the chin over the bar, think about pulling the chest up to the bar while keeping the shoulder blades pulled back and down.

In closing, when performed correctly, these exercises can add massive value to your client's exercise stack and progress their results in record time!

COMMANDMENT 8:

LEARN HOW TO PERFORM THE HIGH BAR SQUAT

In this section, we will look at how to help your clients perform a high bar squat, so let's get into it...

High Bar Squat

Step 1: Start the movement by grabbing the barbell as close as shoulder mobility allows.

Step 2: Come under the barbell, placing the barbell on the muscles of the upper trapezius and making sure that it's sitting on soft tissue, not on bony landmarks.

Step 3: Pull the elbows back and shoulder blades down, making sure to activate all the muscles of the upper back, which increases the rigidity of the torso, stabilising the spine, but also provides a nice cushion for the barbell to rest on.

Step 4: Un-rack the weight and take three steps back, getting in the most comfortable stance. You take three steps simply because the fewer steps you take back, the more efficient the setup. Please note your feet should be slightly externally rotated, not straight. How much depends on what feels suitable for your client!



COMMANDMENT 8:

LEARN HOW TO PERFORM THE HIGH BAR SQUAT



So why three steps back, and why not two steps?

If you take two steps back, you will have to step straight into your squat stance. This will involve stepping side to side, and if you do this, the weight plates will bang into the racks.

So, the first step one must take when un-racking a squat rack is straight back so that you clear the rack, which is why three steps are a little bit easier to perform than two steps.

If you perform four steps, that's also fine, but the most efficient way is three steps, and that is the first step straight back to clear the rack, then we go side to side. So that's the idea of 3 steps.

Step 5: Looking straight ahead throughout the entire movement, initiate the squat by spreading the floor apart with your feet and pushing the knees out in the same direction as the toes, which will open your hips.

Step 6: Squat as deep as mobility allows (where you can maintain a neutral spine), and don't go any deeper. Ideally, your clients' hamstrings should touch their calves, but it may not be possible for everyone; hence it is not essential.

Make sure to control the weight down to the bottom position and then drive it back up to the start. Initially, ensure your clients don't bounce out of the bottom.

There you have it, high bar squat complete!

COMMANDMENT 9:

LEARN HOW TO PERFORM THE LOW BAR SQUAT



For commandment 9, we will look at coaching the low bar back squat. One of the first differences between the low bar back squat and the high bar back squat is that the barbell sits about 1-2 inches lower on the back.

It's resting on the posterior deltoids instead of the upper traps, and what that does is slightly changes the centre of gravity and forces the torso to lean forward, to be able to balance the barbell on the rear deltoids.

This forces the hips into a more flexed position at the bottom of the squat, making it more of a hip dominant movement than a high bar squat, which is a little bit more upright when you're balancing the barbell on your upper trapezius.

Now, how that will present in each individual will look slightly different from person to person – but that is where being a good hands-on coach that knows some bio-mechanics is helpful!

For example, different limb lengths (e.g., long legs and short torso vs. long torso and short legs) will also affect the torso angling in a squat, regardless of the bar position.

So how do you do it? Read on!

COMMANDMENT 9:

LEARN HOW TO PERFORM THE LOW BAR SQUAT



Step 1: Grab the barbell as close as shoulder mobility allows, coming under the bar, and placing the barbell on their rear deltoids.

Note that many females complain that they don't have rear deltoids because they're pretty small, but trust me, they're there, and there is soft tissue for that barbell to sit on.

Step 2: Pull the elbows back and shoulder blades down, engaging all the upper and mid-back muscles.

Step 3: Lift the bar out of the rack, then take three steps back into the lifter's comfortable stance. In a low bar squat, it's generally slightly wider than a high bar squat.

Step 4: Looking straight ahead, initiate the movement with the same cues as the high bar squat by externally rotating the femur (thigh bone), spreading the floor, pushing the knees out in the same direction as their toes, and opening the hips.

Step 5: Maintain a controlled tempo on the way down and drive it up with intent. Once done, walk the weight back into the rack and re-rack it.

Note: It is essential to treat the warmup weights precisely like a top weight. It's about technical practice. One should practice the exact way they're going to move on maximum weight, even from the early sets with minimal weight on the bar.

Now there you have it; your client has performed the low bar squat!

COMMANDMENT 10:

LEARN HOW TO PERFORM A CONVENTIONAL DEADLIFT

Once you understand the fundamentals of the conventional deadlift, all the various deadlift variations become pretty easy. So, in this section, I will cover the conventional deadlift.

There are so many different deadlift variations that I love to include in all my athletes' programming from time to time.

Now, if you want more in-depth coaching on all the different deadlift and squat variations, as well as all the supplementary exercises, once again, please make sure to check out the Strength System International Certification.

I want to give you as much value as I can here, but there is only so much that I can show you in an eBook.
Now onto the conventional deadlift...

Step 1: Stand with the shins about an inch away from the barbell, but objectively what we're looking for is the barbell to be roughly over the midfoot at the start of the setup.

When I say the middle of the foot, don't measure from the shin to the front of the foot; measure from the back of the heel to the front of the foot (so you're counting the entire length of the foot). From here, find the midpoint, and this is your mark for where the bar should be during the initial stage of the setup.

Step 2: For a deadlift stance, an easy guide to use is to consider what your most potent jump stance would be. So, if you look at a sport where they like to jump a lot – like basketball – if you look at how they like to stand when they're jumping for a slam dunk, they're not standing with a very wide stance.

COMMANDMENT 10:

LEARN HOW TO PERFORM A CONVENTIONAL DEADLIFT

It's actually quite close, and that's because it's the stance where you're able to produce the most power from. Now that will change from lifter to lifter, and it depends on several things, such as hip structure and leg mass.

But please note this is to find the stance width. When we think about foot angle in the conventional deadlift, your feet should be parallel or toes very slightly pointed out.

The other thing that we need to consider with the conventional deadlift stance is that the stance must be inside our arms. Now, what's the most efficient position for the arms to be? It's for the arms to be straight down.

Suppose you look at the proportions of a female who has very feminine proportions compared to someone like me, who's a male and has more masculine proportions. In that case, I am comfortable having my arms straight down and my feet in the correct position.

For a female with narrower proportions, it might be a little bit strange for her to have her arms straight down and her legs on the inside of that.

Her hips are proportionately a little bit wider than her grip, so we need to consider that the hips must take priority, so the grip might be slightly outside of where it would be if the arms are straight down.

COMMANDMENT 10:

LEARN HOW TO PERFORM A CONVENTIONAL DEADLIFT

Now factoring all of this in, you want to grab the bar on the outside of your legs, giving yourself enough room to be able to push the knees very gently outwards against the inside of your locked elbows.

Step 3: Activate the lats by pulling the armpit towards your pelvis and sitting into position to activate leg drive.

Step 4: Reach the crown of the head towards the ceiling to take the slack out of the bar and elongate the spine. From here, you want to have your clients focus on pushing the world away with bum down, knees out, armpits to the pelvis, head to ceiling.

Now there you have it; your client has executed a conventional deadlift!

COMMANDMENT 11:

THE IMPORTANCE OF PREHAB EXERCISES

In this section, I will talk a little bit about activation exercises, specifically activation exercises for the shoulders, core, and glutes.

Activation exercises are important because they help improve performance and reduce the chance of injury. The thing to note here is that activation exercises are not meant to fatigue you but prepare the body for the higher intensity work to follow.

THE LOCK BIG 3 FOR SHOULDERS

This is my favourite way to warm up the shoulders before any heavy pressing session. What we're doing is activating the stabilisers of the shoulder joint, as well as the scapula stabilising muscles.

This is an activation that was taught to me through working with one of the best rehabilitation specialists in the game, Andrew Lock.

The Big 3 suggests we've got three exercises that we will be doing. Now we're going to be using a very lightweight, and it's also a concise range of motion, so we're going to do a higher rep range with sets of 25 reps per movement.



STEP 1 - CRUCIFIX POSITION



STEP 2 - CRUCIFIX RAISED



STEP 3 - PALMS DOWN - RAISED POSITION



STEP 4 - PALMS DOWN



STEP 5 - PALMS UP - RAISED POSITION



STEP 6 - PALMS UP

COMMANDMENT 11:

THE IMPORTANCE OF PREHAB EXERCISES

Step 1: Start laying down, face flat on the ground, in a crucifix position with arms abducted at 90 degrees to his torso.

Step 2: From here, lift the arms a couple of inches off the ground for 25 reps. There is no need to hold the arms up in the air isometrically as the movement is performed up and down to a controlled tempo. Now, if your clients can hold small weights in their hands, that is awesome! However, many clients won't be up to using weights.

Step 3: The next exercise requires bringing the dumbbells by your side with your palms down, followed by lifting your arms off the ground with the same tempo, leading with your thumbs. Once again, use a light dumbbell if you can.

THE MCGILL BIG 3

Whenever loading the spine or our hips with heavy exercises like a squat or a deadlift, I like to perform core and glute activations as part of my warmup before I start even loading my body. This is something that I've learnt from Professor Stuart McGill, who is known as the best spine researcher in the world.

He's developed a core activation drill called The McGill Big 3, and this is what I like to prescribe for myself and all my athletes before we do any of our squat or deadlift sessions.



1. BIRD DOG



2. CURL UP (CRUNCH)



3. PLANK + SIDE PLANK

COMMANDMENT 11:

THE IMPORTANCE OF PREHAB EXERCISES

THE SEQUENCE STARTS WITH A BIRD DOG.

Step 1: On all fours, with hands below the shoulders, knees below the hips, raising the opposite arm and leg while maintaining a neutral spine. Do five reps on each side for ten total reps.

Step 2: So, we now move on to the rolling plank from the bird dog. Starting with the front plank, what we are looking for is 30 seconds. No sagging of the hips or arching the back – make sure the core muscles are engaged.

Step 3: After 30 seconds, we move on to the side plank from the front plank. What we're looking for is a nice straight spine with the supporting arm locked firmly in underneath that shoulder and a proud open chest. We're going 15 seconds on each side, then swap sides. The internal and external obliques, the hip abductors, and the QL are now working.

After 15 seconds on each side, go back to the front and repeat the rotation one more time.

Step 5: Now, onto the third, which is curl-ups. The way we perform this is with one leg bent (as if you're doing a regular sit-up) and the other leg out straight. This helps maintain a neutral spine. Place your hands on your stomach.

Step 6: From this position, the first thing you're going to do is brace your abs as if someone is about to drop a weight onto them. Next, lift the elbows to the ceiling, then bring your chin to your chest.

COMMANDMENT 11:

THE IMPORTANCE OF PREHAB EXERCISES

Then, curl up so your ribcage lifts off the ground (think about pulling your rib cage towards your pelvis) and hold for five seconds at the top. Perform five reps of this, then swap your legs over, so the leg that was bent is now straight and vice versa—repeat 5 reps of 5 seconds on this side.

So, there you have it, your client is ready to lift some *serious* weights!



COMMANDMENT 12:

THE IMPORTANCE OF PROPER LOAD SELECTION

In my opinion, load selection, which is the intensity at which we train or how much weight we're lifting, is one of the most critical variables we must control when creating a training plan for our clients and athletes.

AS YOU MAY HAVE HEARD ME SAY BEFORE... "LOAD IS KING".

So, to develop muscle size and strength, we need to provide an adequate amount of stress for our body to adapt to, and if we are working with an intensity that is too low too often, we won't get the results we want [9].

On the other hand, if we train with too high intensities, this is also not ideal as it puts us at risk of some negative training responses [9]. This includes injury, as even one poorly attempted rep at an intensity that is too high increases our risk of injury.

We can also reinforce lousy movement patterns with our clients by having them lift weights that force their bodies to resort to bad technique, and chronically training at an intensity that is too high can put unnecessarily high amounts of stress through our body, which can be challenging for us to recover from.

E.g. Getting them to lift too much weight when they are not ready. So, ego lifting.

Now lifting weights that are too heavy is common; however, I also have seen coaches training clients with too light weights to get the stimulus required to develop strength and get results.

While both errors can limit the results you're getting from your training, in my experience, training too heavy too often will be a lot worse for you and your client's results than consistently training with weights that are too light.

COMMANDMENT 12:

LEARN HOW TO PERFORM A CONVENTIONAL DEADLIFT

We have already covered how vital lifting technique is for long-term strength training progression. In my opinion, this is the most important variable that will influence the success of a lifter.

If someone is consistently training with loads that are too heavy, there is no way that they can maintain proper technique while pushing to failure or close to failure.

LIFTING WEIGHTS AND GETTING STRONGER IS NOT JUST ABOUT GRUNTING OUT THE HEAVIEST LOADS THAT WE CAN LIFT. STRENGTH IS A SKILL, AND EVERY TIME WE SET UP TO THE BAR, WE PRACTICE THAT SKILL.

If we practice the skill incorrectly with sub-optimal technique, then what we're doing is teaching our body how to move poorly. If this sub-optimal technique comes because of lifting too heavy, we are also putting ourselves at a much higher risk of injury.

Now, the other thing is if we are constantly lifting at our absolute max capacity, then there won't be room to progress because the fact is that strength gains aren't always linear week to week.

Lifting the heaviest weight possible all the time might seem like the most hardcore way to approach training, but it's a quick way to learn lousy lifting techniques, get an injury, or plateau.

In my opinion, having the discipline to hold ourselves and our clients accountable and lift with the right intensity to master our skills is a lot more hardcore.

So, in conclusion, repeat after me... Load is king!

COMMANDMENT 13:

THE IMPORTANCE OF PROGRESSIVE OVERLOAD

When we put our bodies under stress by lifting weights, our bodies are forced to adapt to that stimulus by increasing the strength and or size of the muscle and surrounding tissue.

If we increase that stimulus little by little each week, then our bodies will continue to adapt, and we will see gradual improvement over time.

However, if we continue to give our body the same stimulus over and over, and don't ever increase the difficulty of what we're doing, then over time, it won't be getting the same adaptations of increased strength and or muscle size.

This is known as the concept of progressive overload.

To take a quote from Zatsiorsky and Kraemer's book *Science and Practice of Strength Training*, "the concept of progressive overload is based on the idea that a training adaptation takes place only if the magnitude of the training load is above the habitual level" [9].

This means that to help our clients continue making improvements, we need to continue to overload their bodies in some form or another, and this is what we call progressive overload.

COMMANDMENT 13:

THE IMPORTANCE OF PROGRESSIVE OVERLOAD

Increasing the weight that our clients are lifting is one way to execute progressive overload. This is also known as a load-related cycle, and this is one of my favourite ways to overload my athletes.

We're all here to get our clients stronger, and adding weight is an excellent sign that we're achieving this. Lifting more weight is fantastic for training morale, but it's also so important to keep in mind what we discussed about load selection and staying within a conservative range so that you can improve each week.

The second way we can overload is by increasing the reps. This is also known as a rep related cycle. Increasing the reps each session is also an excellent way to achieve overload in your training.

This is not necessarily less effective than adding weight to the bar, but honestly, I just know how much people love adding weight to a movement, and in strength sports, that's ultimately what they're being judged for.

But, adding reps is still an excellent method of overload and if you're limited in weights or the weight increments are bigger than what you need, increasing the reps can be especially useful.

Another option we have is increasing the number of sets, also known as the set related cycle.

Now I don't often find myself reaching for this method, as it's not a great way to retrospectively gauge whether you've made improvements. I also like the idea of getting the most with the least, which reduces some of the risks associated with training like injury, but more importantly, it leaves so much room for progression.

COMMANDMENT 13:

THE IMPORTANCE OF PROGRESSIVE OVERLOAD

Adding lots of extra volume isn't always necessary, and with my methods, I prefer to take a conservative approach to volume. But anyway, increasing sets and thus increasing volume is another overload technique.

The final overload technique is changing movements. This can mean improving the movement's quality, changing the exercise, or increasing the movement difficulty, such as adding a deficit to a deadlift.

I will regularly use more difficult exercise variations in a program, but I don't think of this as a measured overload technique simply because there are lots of factors that make it so hard to measure.

But regardless, if I have someone deadlifting 300 kilograms with terrible technique, and then after a month of working together, they are lifting the same weight with excellent technique, then I know they've improved!

COMMANDMENT 14:

UNDERSTAND TRAINING VOLUME

Since we've already discussed training at the right intensity and the need for progressive overload, it only makes sense that we now look at how many reps and sets we should be doing.

A straightforward definition of training volume is the total quantity of work done in training, which you can see in the figure below.

$$\text{REPS} \times \text{SETS} \times \text{LOAD} = \text{VOLUME}$$

In my experience, there are certainly some trends that we can see regarding how different people will respond to more or less volume, but at the end of the day, it varies from person to person.

As a general rule, in all my training and coaching, I prefer the approach of quality over quantity and getting the most that we can out of the least amount of work, which is certainly reflected in my approach to volume prescription.

The discussion on sets and reps forms the basis of any conversation about volume, and it can go quite in-depth, but I do want to keep it simple here. It's a common belief that higher rep ranges build muscle exclusively, and lower rep ranges build strength.

The truth is that it is totally possible for higher reps to contribute to strength gains, and it is possible to build muscle with lower rep ranges. As a result, I don't tend to look at the rep prescription through the lens of high reps for hypertrophy and low reps for strength.

COMMANDMENT 14:

UNDERSTAND TRAINING VOLUME

THERE ARE THREE LEVELS AT WHICH STRENGTH CAN IMPROVE THROUGH TRAINING:

Neural adaptations which involve increasing the number of fibres we can voluntarily activate within our muscles.

Adaptations within the muscle itself, for example, increasing muscle surface area or changing the arrangement of muscle fibres within the muscle.

Adaptations increase tendon/connective tissue stiffness, so our muscles can more effectively transfer force onto our bones and joints to produce movements [10].

To get the neural adaptations and increase tendon stiffness, you need to practice the movement at appropriate intensities so that the body can get used to producing the right amount of force required.

But at the same time, hypertrophy is also so important. When all other factors are accounted for, the cross-sectional muscle area directly relates to the potential for strength that the muscle has.

Research suggests that a variety of repetition ranges, all the way from 5 reps to 30 reps, can stimulate hypertrophy if the lifter is working at close proximity to failure [11,12].

Therefore, dedicating time to increase muscle size and training in a variety of repetition ranges can be an excellent way to increase the force potential of a muscle with your clients... oh, and they will likely also build a more aesthetically pleasing physique along the way as well!

COMMANDMENT 15:

THE ART AND SCIENCE OF EXERCISE SELECTION

There is a vast range of exercises out there that we can choose to include in a strength-building program with our clients, and there are also a lot of trends in the fitness industry where specific movements will come in and out of fashion.

People love to debate which movement is the absolute best exercise or say that another exercise is completely useless. Still, as usual, I think the truth can be found somewhere in the middle.

To borrow a philosophy from Andrew Lock, one of the best strength rehab specialists in Australia and arguably the world, "There's no such thing as a bad exercise, just the wrong exercise given to the wrong person at the wrong time." [13]

I'd also like to add that there is no such thing as the perfect exercise. Still, some exercises will be more or less helpful for a particular individual who has a specific goal at a specific point in time.

Some exercises just give you and your clients more bang for your buck, and mastering these basic movements will get you so far as a coach. On the other hand, having a broad knowledge of many exercises allows you to take things to the next level when needed.

But remember that the more critical skill of these two is mastering the basics because the absolute basic movements are what you should be using 99% of the time.

This brings us to the next topic that I want to talk about, which is balancing specificity and variation in your training. This topic is central to any discussion on periodisation for sports performance, and that's something we cover in-depth in my Strength System International Certification program.

COMMANDMENT 15:

THE ART AND SCIENCE OF EXERCISE SELECTION

One of the fundamental principles underpinning any training program is that training adaptations are very specific.

Even if the goal is to improve the squat, we must be specific with which squat variation we want to improve and the rep ranges we want to get better at. Practising what you want to be good at makes you better at it!

So, to get good at maxing out our squats, we just need to get lots of practice maxing out our squats, right?

No, it's not that simple because we also need to consider the principle of variation.

The law of accommodation tells us that if we use the same movements with the same training load over a long period of time, our bodies might respond well at first. Still, over time, because of the principle of diminishing returns, we will see decreasing improvements in response to these exercises.

This means that we need to implement overload and variation in our training to keep seeing results with our clients.

COMMANDMENT 15:

THE ART AND SCIENCE OF EXERCISE SELECTION

Variation allows us to keep improving. It gives us the ability to target specific attributes, prevents athletes from getting bored, and it also helps prevent injuries as it allows us to strengthen and fortify our bodies through so many different angles and ranges, which reduces the chances of us developing muscle imbalances, and prevents overuse from repeating the same movement over and over.

A key point to note is that variation is not the same as randomisation. We need progressive overload in our training, which means that we need to be doing something consistently enough to see improvements in it. When I say variation, I mean from training block to training block and not from session to session.

Also, note that variation doesn't have to mean a totally different exercise; it can be something as small as adding a pause into a movement or elevating a lifter's heels for a squat. That's why our training needs to be periodised, which will be the topic of the next commandment!

COMMANDMENT 16:

UNDERSTAND THE PERIODISATION CYCLES

In this section, I want to talk to you briefly about macro-, meso- and micro-cycles.

To be completely honest, these are terms I rarely use, so I'm going to keep this part brief, but I did want to include it because this is terminology that you will come across when you're doing your own research and learning about programming.

MACRO-, MESO-, AND MICRO-CYCLE ARE WORDS THAT ARE USED TO DESCRIBE THE TIME-SCALE ORGANIZATION OF A PROGRAM [14].

A macro-cycle represents one entire competitive season. So, if the competitive season occurs once per year, then the macro-cycle will be an entire year, but if there are, say, two competitive seasons within a year, then there will also be two macro-cycles.

The big macro-cycles are then divided into mesocycles. This is where we start thinking about targeting different training attributes. Each mesocycle will focus on different training outcomes that support the main overriding goal.

So, for one mesocycle, the focus might be hypertrophy; for another, it might be skill acquisition. A mesocycle can go for a few weeks or a few months.

Within the mesocycles, we have our micro-cycles. Typically, these are about a week-long but can range from a few days to a few weeks. Now, as I said, I don't use this exact terminology very much, but that doesn't mean that I'm not keeping long-term outcomes, mid-term outcomes, and short-term outcomes in mind when planning a program for a client.

COMMANDMENT 16:

UNDERSTAND THE PERIODISATION CYCLES

Whether you choose to use this terminology or not, one of the key points you should take away from this discussion is the time-scale framework you need to have in mind when structuring a successful program for your clients.

It's great for them to have a long-term goal, but if that goal is a few years away, it can be helpful to break it down into 6-monthly or 12-monthly blocks or macro-cycles.

Then to take that one step further, we can break these macro-cycles down into mesocycles. This will allow us to focus on each of the different training attributes that we want to develop to reach the primary goal.

Generally, if I'm getting someone ready for their goal, we will start further out with more muscle building and exercise variation. We will taper into more skill work with each mesocycle as we get closer to the deadline.

Micro-cycles are essential to keep in mind as well. These are particularly useful when we are thinking about managing the total workload and balancing the amount of work we are doing with adequate recovery.

We can also look at this from another angle. If you're only thinking about micro-cycles and you never plan further than a couple of weeks ahead, then you'd probably really benefit from setting some mid-to-long-term goals with your clients and planning their training according to those.

So, in conclusion, being aware of these terms and their application is essential to your development as a strength coach who can progressively and safely build up the strength and performance of their athletes.

COMMANDMENT 17:

UNDERSTANDING HOW TO APPLY PERIODISATION

In this section, we will talk a little more about how to set up a training cycle around a specific goal.

Now, if a client has a specific goal, their training needs to become more and more specific as they get closer to their deadline. Further out, you can include more variety.

However, we do not want to go so far down the “variety” end of the spectrum that they are training for a totally different sport or set of strength qualities that doesn’t benefit them. So, with all of this in mind, I typically start a beginner client off with just the basics.

Remember that you want to get the most out of the least, and since all these movements are so new, their bodies will respond well to the new stimulus. The same applies if you have drastically overhauled someone’s technique.

For more advanced lifters, you can start to add more planned and logical variations to their training. Typically, I will change my athletes’ training program every four weeks.

This is around the time the athlete can start getting a bit bored, but in terms of administration, it also makes things easier to keep track of when programs are due.

COMMANDMENT 17:

UNDERSTANDING HOW TO APPLY PERIODISATION

When you change their movements, do not change much. For example, do not start replacing a conventional deadlift with an overhead squat.

Remember that you will typically change the repetition scheme with each program adjustment, which is a form of variation in and of itself. So, perhaps instead, you could add a deficit to a conventional deadlift and increase the repetitions.

Another principle that is useful to follow is to make movements harder, further out from when the athlete's peaks. Four months out, you might start them off with a high deficit deadlift, then reduce the deficit in the next four-week block.

In the next block, you might get them lifting paused off the floor before finally peaking in the final four weeks with a conventional deadlift off the floor.

This is another technique that guarantees they can continually add weight to the bar each week. Not only are we reducing volume as we go, which allows us to increase the load, but we are also decreasing the degree of difficulty of the movement, which continues to boost confidence and training morale for the athlete.

And lastly, you always must keep structural balance in mind. Your program should include some ancillary exercises that are used to ensure your clients are achieving structural balance and to target any smaller muscle groups that they might need to focus on.

COMMANDMENT 18:

THE SCIENCE OF RECOVERY

Proper recovery is so important no matter what someone's goal is because if someone is under-recovering, I can guarantee they will be under-performing.

This can be one of the most challenging areas to coach with elite athletes, as they usually have only one speed – go, go, go!

Simply put, fatigue refers to the decreased capacity of our body to produce maximum force in a particular muscle compared to our rested state [15].

There are a few ways fatigue can be produced, but we are going to look at central fatigue and muscle damage.

CNS fatigue, or Central Nervous System fatigue, is the reduced capacity for our body to voluntarily recruit muscle fibres and produce force, meaning that our muscles are more than capable of doing the work. Still, the message from our brain to our muscles is inhibited to some degree [16].

CNS fatigue can happen either during our session, where it accumulates from set to set and exercise to exercise as the workout goes on or after our session, which we think mostly happens due to muscle damage.

CNS fatigue during our workout dissipates relatively quickly and helps explain why we should get enough rest between sets and perform our highest priority movements at the start of the session.

On the other hand, the CNS fatigue that happens after our workout plays a large part in dictating the frequency in which we can train [16].

To minimise the effect of CNS fatigue during our workout, adequate rest between sets is essential [16].

COMMANDMENT 18:

THE SCIENCE OF RECOVERY

For beginners and intermediate strength athletes, for their main strength sets, it is generally recommended that they rest for 3-5 minutes, and advanced lifters who are moving more weight can take up to 10 minutes rest between sets.

When it comes to minimising the fatigue experienced after a session, we should be aiming to minimise unnecessary amounts of muscle damage, or when high amounts of muscle damage are inevitable, we need to make sure that we are giving ourselves adequate rest between sessions [16].

Lifestyle stress can also be a stressor. Emotional stress, financial instability and similar kinds of “everyday” stress can substantially impact our recovery [17, 18].

This means that if lifestyle factors for our clients are adding up, then their ability to recover from hard sessions might be impacted.

So, if this is the case, it might be worthwhile pulling back on their training until their lifestyle stressors are under control. This will get them better results in the long run because our results in training are limited by how well we are recovering.

A key point to take home is that more training is not always better. No doubt you have likely heard the saying ‘work smart, not hard’, and a vital component of that approach is understanding what factors contribute most to fatigue so that you can work smart.

Unfortunately, we don’t have time to go into any more detail here. Still, once again, I highly recommend checking out my Strength System International Certification program for more detail on how to manage fatigue properly both within a workout and across your training week!

COMMANDMENT 19:

THE TRUTH ABOUT 'NO PAIN, NO GAIN'

As a coach, you should aim to only do good for your client or athlete, and their health should be your number one priority with every single decision you make!

It is not your job to push someone to their breaking point. Disregarding someone's health to achieve ANY goal is not only malpractice and bad for your reputation and business model, but it is also not conducive to achieving the goal.

If you do this, you risk your client's health and jeopardise their athletic progress.

Many people have been indoctrinated with the 'no pain, no gain' approach to training. I believe that this idea that injuries should be a part of sports and strength training is very outdated.

So many people believe that injuries are just unavoidable and that the harder you work and the stronger you get, the more injuries you will have.

So, this means that the athletes who are not getting injured are either lucky or lazy, right?

This is not the case. There are certainly some bodies that are harder and last longer, but I can honestly tell you that careless training will catch up to everyone at some point, no matter who they are.

COMMANDMENT 19:

THE TRUTH ABOUT 'NO PAIN, NO GAIN'

MAKE SURE THAT YOU MOVE AWAY FROM THE 'NO PAIN, NO GAIN' MINDSET.

Injuries and pains that occur from training are usually a sign that there is weakness, imbalance, and/or incorrect movement occurring somewhere in the body, and if you pay attention to the pain, you can fix the underlying problem.

But on the other hand, if you ignore it, you risk further engraining a destructive pattern or causing damage to the surrounding tissues. Does this mean you have to sacrifice your athlete's performance to prioritise health?

Absolutely not! Performance and health go hand in hand. You need to remember that an injured athlete simply will not perform at their best. A minor injury or pain can affect training capacity and training morale, and a severe injury can be devastating for an athlete's future in their sport.

Or, if you are not working with athletes and work more with gen pop clients, injuries can seriously affect someone's quality of life and ability to even get into the gym.

To get results, you need to be able to train, so from that perspective alone, training in a way that minimises injury is a wise investment. But also, remember that injuries and pains are a sign that something needs to be fixed, and if we find and address that issue, we will usually see a reduction in pain and an increase in performance.

COMMANDMENT 20:

DIETARY CONSIDERATIONS FOR STRENGTH ATHLETES

Nutrition is one of the most essential factors you must consider to maximise performance, manage body composition, and improve recovery for your clients.

Hence it is so essential to be considered when it comes to strength-based training!

Now one of the most important components of nutrition, if not the most important for any strength athlete, is energy balance. Energy balance will stipulate whether you or your athlete will put their body in a prime position to gain muscle or lose fat.

When someone consumes more calories than they use, they are in a calorie surplus, and they will likely put on body weight. If they consume fewer calories than their body uses, they are in a deficit, and they will typically lose body weight. It is that simple.

However, the macronutrient composition of the diet also matters. For example, it has been shown that a person can lose muscle tissue, even in a positive energy balance, if sufficient protein is not consumed [19].

Simply being in a deficit or surplus, calories in versus calories out, is not the only determining factor for muscle gain or fat loss. Macronutrient intake, especially protein intake, is crucial for manipulating body composition.

Protein intake should generally be set between 2-3g per kg of body weight [20].

COMMANDMENT 20:

DIETARY CONSIDERATIONS FOR STRENGTH ATHLETES

For clients that are more prone to putting on body fat when in a calorie surplus, you might want to opt towards the higher end of protein intake when in a muscle-building phase to reduce excess body fat gain [21].

For clients that struggle to gain weight and/or have a poor appetite, you should stick to the lower end of the range.

When in a deficit, higher protein intake, around 3g per kilogram per day, may also be favourable due to the increased anti-catabolic effect, greater satiety, and higher thermic effect of feeding [20,21].

In terms of importance, the next macronutrient you need to calculate is fat, as carbohydrates are not essential to survival like protein and fats are. Studies have shown that if you drop fat intake below 0.8 to 1 gram per kilogram of body weight, it will negatively impact hormone levels [22].

This is the minimal amount of fat to ensure a healthy diet, do not go below this amount.

As far as carbohydrates, you want to make sure you are consuming enough to keep glycogen levels topped up. Low glycogen has been shown to reduce strength and increase protein breakdown during high-intensity resistance training [23,24].

Provided someone is not doing a ridiculous amount of volume or running a marathon, 3 grams of carbohydrates per kilogram of body weight per day should be sufficient.

COMMANDMENT 20:

DIETARY CONSIDERATIONS FOR STRENGTH ATHLETES

Once you have met the minimum protein, fat, and carbohydrate requirements, how you spread the remaining calories does not matter that much. At the end of the day, the diet plan on which a client feels best on and finds easiest to follow will result in a higher level of adherence and ultimately success.

Now, I'm not a nutrition expert, nor do I pretend to be, and when it comes to nutrition, I've always focused on the basics that I have just covered.

However, if you want to learn more about nutrition for improving health, body composition, and athletic performance, Clean Health has, in my opinion, the leading nutrition-based course on the planet, the Performance Nutrition Coach (PNC) certification.

[LEARN MORE ABOUT PNC](#)

CONCLUSION

CONGRATULATIONS ON FINISHING THIS EBOOK!

I really hope you got something out of it, and it has given you a burning desire to learn more and become the next elite level strength coach!

If you want to continue learning and furthering your skills and knowledge from here, make sure you check out my course suite via the image below.

Again, congratulations on finishing this guide and I wish you and your clients the very best in your training for the coming weeks and months ahead!

LEARN MORE NOW!

REFERENCES

1. Poliquin C. Achieving structural balance. T-Nation.
<https://www.t-nation.com/training/achieving-structural-balance>.
Published May 14, 1999. Accessed Feb 2, 2022.
2. French D. Adaptations to anaerobic training programs. In: Haff GG, Triplett NT, eds. Essentials of Strength Training and Conditioning. 4th ed. Champaign, IL: Human Kinetics; 2016:93-94.
3. Nordin M, Frankel VH, eds. Basic Biomechanics of the Musculoskeletal System. 3rd ed. Lippincott Williams and Wilkins; 2001.
4. Beardsley C. Which muscle groups do exercises stimulate (and which do they just work)? Strength and Conditioning Research.
<https://medium.com/@SandCResearch/which-muscle-groups-do-exercises-stimulate-and-which-do-they-just-work-aae53d1b0c20>.
Published August 30, 2018. Accessed Feb 2, 2022.
6. McBride JM. Biomechanics of resistance exercise. In: Haff GG, Triplett NT, eds. Essentials of Strength Training and Conditioning. 4th ed. Champaign, IL: Human Kinetics; 2016:37-40
7. Marieb EN, Hoehn K. The muscular system. In: Beuparlant S, ed. Human Anatomy and Physiology. 8th ed. San Francisco, CA: Pearson Education International; 2010:350-351
8. Lock A. How to protect your shoulders from injury. Iron Edge.
<https://www.ironedge.com.au/blog/how-to-protect-your-shoulders-from-injury/>. Published December 5, 2008. Accessed Feb 2, 2022.
9. Caulfield S. Exercise technique for free weight and machine training. In: Haff GG, Triplett NT, eds. Essentials of Strength Training and Conditioning. 4th ed. Champaign, IL: Human Kinetics; 2016:352.
10. Zatsiorsky VM, Kraemer WJ. Science and Practice of Strength Training. 2nd ed. Champaign, IL: Human Kinetics; 2006

REFERENCES

11. Beardsley C. How does one repetition-maximum (1RM) increase after training? Strength and Conditioning Research.
<https://medium.com/@SandCResearch/how-does-one-repetition-maximum-1rm-increase-after-training-2f85d7bb8c73>. Published February 26, 2018. Accessed Feb 2, 2022.
12. Schoenfeld BJ, Wilson JM, Lowery RP, Krieger JW. Muscular adaptations in low- versus high-load resistance training: A meta-analysis. *Eur J Sport Sci*. 2016;16(1):1-10. doi:10.1080/17461391.2014.989922
13. Beardsley C. Hypertrophy: Muscle fibre growth caused by mechanical tension. Strength and Conditioning Research Limited; 2019.
<https://www.amazon.com.au/Hypertrophy-Muscle-growth-mechanical-tension-ebook/dp/B07MPCKPRF>. Accessed Feb 2, 2022.
14. Personal Trainer Mentoring.
<https://personaltrainermentoring.com/blog/2018/09/20/andrew-lock-interview/>. Published September 20, 2018. Accessed Feb 2022.
15. Haff GG. Periodisation. In: Haff GG, Triplett NT, eds. *Essentials of Strength Training and Conditioning*. 4th ed. Champaign, IL: Human Kinetics; 2016:583-595.
16. Wan JJ, Qin Z, Wang PY, Sun Y, Liu X. Muscle fatigue: general understanding and treatment. *Exp Mol Med*. 2017;49(10): e384. Published 2017 Oct 6. doi:10.1038/emm.2017.194
17. Beardsley C. How do different types of fatigue affect hypertrophy and recovery? Strength and Conditioning Research.
<https://medium.com/@SandCResearch/how-do-different-types-of-fatigue-affect-hypertrophy-and-recovery-4b5bd500bcb>. Published December 11, 2018. Accessed Feb 2, 2020.
18. Australian Institute of Professional Counsellors. AIPC Article Library.
<https://www.aipc.net.au/articles/general-adaptation-syndrome/>. Published March 15, 2010. Accessed June 1, 2020.

REFERENCES

19. Beardsley C. What can the general adaptation syndrome tell us about periodisation? Strength and Conditioning Research. <https://medium.com/@SandCResearch/what-can-the-general-adaptation-syndrome-tell-us-about-periodisation-bb59bdb2ef79>. Published April 9, 2018. Accessed June 1, 2020.
20. Bray GA, Smith SR, de Jonge L, Xie H, Rood J, Martin CK, Most M, Brock C, Mancuso S, Redman LM. Effect of Dietary Protein Content on Weight Gain, Energy Expenditure, and Body Composition During Overeating: A Randomized Controlled Trial. JAMA. 2012;307(1):47-55.
21. Helms ER, et al. Evidence-based recommendations for natural bodybuilding contest preparation: nutrition and supplementation. Journal of the International Society of Sports Nutrition. 2014; 11: 20.
22. Antonio J, et al. A high protein diet (3.4 g/kg/d) combined with a heavy resistance training program improves body composition in healthy trained men and women--a follow-up investigation. Journal of the International Society of Sports Nutrition. 2015; 12:39.
23. Wang C, et al. Low-Fat High-Fibre Diet Decreased Serum and Urine Androgens in Men. Journal of Clinical Endocrinology & Metabolism. 2005; 90 (6): 3550-3559.
24. Leveritt M & Abernethy PJ. Effects of carbohydrate restriction on strength performance. Journal of Strength and Conditioning Research. 1999;13, (1), 52-7.
25. Lemon PW, Mullin JP: Effect of initial muscle glycogen levels on protein catabolism during exercise. Journal of Applied Physiology. 1980, 48 (4): 624-9.