

Starting Strength Training Fundamentals and Mistakes to Avoid

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BE STRONGER

Online Coaching

Starting Strength

Who is this Report for?

The content of this Report is dedicated for those of you who already know of the Starting Strength method and may have started training on your own, as well as for those of you who have just heard about this miraculous method of training and wish to learn whether it is something you'll want to pursue further.

My goal in making this information easily accessible and understandable is to point out the importance of the more fundamental aspects of efficient and safe training in this method. I found that a lot of these basic aspects are being underestimated or even overlooked entirely, and this is hindering the progress of getting stronger.

For those of you who don't know what the Starting Strength method is yet – [Here's](#) a short video from the Starting Strength website which introduces the method.

How to use this Report?

For each of the subjects below, whether it is listed as an article or as a video, make sure you fully understand the principles in it and are able to incorporate these pointers and cues into your own training. You may already be implementing some or most of them, and if so - good for you! It's not so common to have all of this down at the beginning of your training, because there is quite a bit to learn and keep track of to be doing everything correctly.

Upon finishing reading the Report and watching the videos, and successfully incorporating all of the new findings, you can devote your focus, time, and resources to the single most important thing that drives the progress most effectively in training in the Starting Strength method, which is the correct and efficient execution of the lifts, according to the Starting Strength Movement Model. If you take one thing from this Report, please let it be this: It's impossible to over emphasize just how much the correct execution of the lifts itself is responsible for the results you get when training in this method.

Enjoy!

About me, and Why I wrote this Report?

My name is Zohar Yermiyahu, I'm a certified Starting Strength Coach in Tel Aviv, Israel. I've been in the Israeli Naval Academy and graduated *summa cum laude*, after which I served in the Navy for 8 years as an Operations officer in the Missile Ships. I've been active and interested in fitness throughout my whole adult life and was always trying to find the method of training that would be the most effective and efficient, and that will not dictate that I should spend hours on end in the gym.



Several years ago, I stumbled upon a video of someone called Mark Rippetoe who lectured in some university, explaining the case study of the Starting Strength method. This was a long and rather “boring” video, not flashy or at all similar to anything I've seen before in the fitness industry. When I first encountered this video, the thing that struck me the most about this method and that was the most unique is the logic of the method, the reasoning behind everything, and the detailed analysis of movement and mechanics and how the body as an organism reacts to stressors and adapts. It made me realize that there is something very different here than what is common in the fitness industry, and that made me purchase the “blue book”, which I highly recommend for those of you who are interested in learning more in depth the nitty gritty of the method. [Starting Strength basic barbell training](#), by Mark Rippetoe.

Three months after I've started training myself, I was the strongest I can remember myself, and I wasn't even doing it **correctly**, by the standards I later learned, because I was doing it on my own and without proper coaching. Pretty quickly I started to get into some sticking points and stalling and having difficulties in continuing the progress I've previously made, I've decided to hire an online coach, a certified Starting Strength Coach. My progress completely took off in the following months because of it.

It's really hard to explain the feeling of carrying yourself with a much stronger body. How normal day-to-day routines that used to be a bit hard or strenuous are now being done with complete ease. How confident it feels to stand up straight, tall, poised, and not get fatigued and collapse into a slouch after a minute. And even how much confidence you start to feel about the integrity of your body and its abilities, such as the function of your joints, back and their capacity to withstand all of life's challenges.

These new discoveries and what Rip (Mark Rippetoe) was talking about led me to realize the potential that training in this simple method of training can have on older individuals, in the ages of 50s, 60s, and beyond, if they could just learn how to perform the lifts efficiently and safely. This helped me make up my mind that I want to become a certified coach to be able to serve this population better, and through this method of training to improve their functionality in life, help them become more able physically, and eliminate their chronic pain by helping them get a lot stronger than they are now.

This report paves the way to give you the fundamentals you need to start training in the Starting Strength method efficiently and safely enough, so you can become more freed-up to focus more exclusively on the most important aspect of your training, which is your form, The specific technique in which you move under the bar, because this will be your greatest investment in increasing your strength over time.



Chapter 1: Necessary Personal Equipment

There are 4 primary pieces of personal equipment that you must have to perform the Starting Strength method optimally. Some would say that you can lift without it or do it in some other way. There are plenty of reasons why you SHOULD train with this equipment, and you'll understand a little bit better why after reading the following articles.

Lifting Shoes

Lifting shoes are the first and most important item of personal equipment in effective strength training. When you lift weights, the only contact point you have with the ground is through the shoes. They provide support for the foot and optimize the process of getting stronger in your training program. If you made up your mind that you want to train correctly, it's important to understand that proper lifting shoes are not just "nice to have" or a piece of equipment that only advanced lifters need, but rather a crucial part of your training needs that is worth investing in sooner than later. This is true even if lifting is "just a hobby" of yours.

Why we use lifting shoes:

1. Their sole and insole are not compression-able, like they are in normal sneakers or running shoes. This helps a lot with the stability of the foot. We don't need shock absorbance in our lifting shoe to cushion the foot, on the contrary. We need a hard surface the push against that doesn't deform under a load and thus functions as a much more efficient force transmitter to and from the ground. It is also important that our foot will get hard support consistently throughout its length. The bottom of the shoe is completely flat which provides a better contact surface with the ground.
2. They provide support for the foot's anatomical arch, and prevent a medial collapse of the arch, which tends to happen under loads that are heavier than our body weight. A proper lifting shoe has a metatarsal strap from the inner side of the shoe which tightens the grip the shoe has over the foot.
3. They have a slight heel elevation, of usually between $\frac{1}{2}$ inch and $\frac{3}{4}$ of an inch, which facilitates shoving the knees forward in the Squat, which makes the shins a bit more inclined forward. This helps us to produce more force with the quads while still "staying in the hips", like we should, when performing the movement correctly according to the Starting Strength Model.

How to choose your first lifting shoes

The best place to find the shoes you need is online; Search for “weightlifting shoes”, for men/women. Most local stores don’t possess a variety of shoes and sizes throughout the year, so just find the brand, shoe model and size you want online, order it, and if the size doesn’t fit properly, return it and order another one. You can usually compare the size of the shoe to other shoes you may have of the same brand. This process works for international orders as well, it just takes a bit more time and might cost a few more dollars to ship, but it’s your best (and sometimes only) option. The price ranges somewhere between 60-200\$ for a pair. Your first pair doesn’t have to be the most expensive one, but also keep in mind that the pair you buy will probably last for several years.

When to start using lifting shoes

If you’ve been training for a couple of weeks now and you haven’t gotten shoes yet, I’d recommend buying a pair as soon as possible. I usually recommend my online trainees to buy them right away, but I’m also aware that some people need several workouts “under their belt” to get completely hooked and starting to see and feel the beginning of the tremendous benefits that training in the Starting Strength method can give them, before purchasing the shoes. If you’re serious about getting those results that you already know you CAN get, you’ll need lifting shoes.

For those of you that have been training for several months and still haven’t gotten yourselves a pair of lifting shoes, because you either need to get around to it or you come up with any other reason or concern, then consider this: Every single time that I’m able to convince someone to just get a pair of lifting shoes already, they always tell me that they wish they would have done it sooner. No exceptions. It improves the way you perform the lifts tremendously.

You’ll be wearing your shoes throughout the entire workout, in all four lifts: the Squat, the Press, the Bench Press, and the Deadlift. You don’t need to wear different shoes for different lifts. Later on in your training career, as you become much stronger and more experienced, some lifters choose to use different shoes for the deadlift, without the heel raise. It’s completely unnecessary to do that in the first couple of years, and it’s even safe to say that you can just keep on performing all of the lifts in your regular lifting shoes for your entire training career. The most important point here is that if you don’t own shoes yet, then the above discussion is completely irrelevant, and you should get a pair of lifting shoes as early as possible.

If you don’t walk around with your lifting shoes outside of the gym, and basically wear them for 2-5 hours a week, they last for YEARS. It doesn’t damage them to wear them when you walk to and from your car if it’s more convenient for you, but it’s better not to go run errands with them. Just put them in your gym bag or inside the trunk of your car and wear them before the workout.

Lastly, when I talk about lifting shoes, I always have to acknowledge that some of you are principally against lifting weights with shoes, for some reason. Whether it's the notion that lifting barefoot is "better" because it's more natural, or that you don't want to hinder your form, or you want to preserve some range of motion around the ankle that the shoe allegedly shortens, etc. I will address those reasons in an upcoming video, giving a thorough explanation to why none of the above even makes sense if the conclusion is to not use lifting shoes, so stay tuned to the Be Stronger YouTube channel.

Lifting Belt

Lifting belt is the second most important item of personal equipment in effective strength training. It provides support for the abs to contract harder than they can without the belt, thus helping the back segment to become more rigid, which makes it a more efficient force transmitter to and from the ground.

When we lift weights we use the Valsalva maneuver, which is a specific way to breath and hold the breath during the execution of the lift. We take a big breath and then brace our abs hard like we're about to get punched in the stomach. This makes the intra-abdominal volume decrease, thus making the intra-abdominal pressure increase. This increased pressure makes the entire torso segment more rigid.

The reason for that is that we want to make the back segment, the torso, more stiff and rigid when we perform the lifts. A rigid segment transmits force much more effectively than a soft segment, which tends to deform upon applying force to it. This quality of a softer segment to deform, makes it less efficient in transmitting force from the "engine" in your legs and hips to the load that sits on your shoulders or in your hands. The more rigid we can make the back segment, the more of that force we produced will get to the bar and make it move.

This is why we use the belt when we lift weights. It sits tightly around the torso, between the hip bone and the ribs, and provides a hoop tension which gives feedback for the abs that allows them to contract harder. You don't push against the belt, but rather just ignore its presence and brace tight. The result is an even more rigid back segment than you could've achieved without using the belt. This helps us tremendously in our training and allows us to lift heavier weights and get stronger more effectively. Even our abs get stronger more effectively by using the belt, because the muscles of the abdominal cavity can contract harder when they have the belt than otherwise. They also are under a greater training stress because of the increased weights we can lift made possible by the more rigid back segment.

Stay tuned for an upcoming video in the Be Stronger YouTube channel where I go in-depth about how and why specifically we use the belt and address the misconceptions that many people have about using the belt.

In which lifts should I use the belt

In the Squat, the overhead Press, and the Deadlift, after your initial warm up sets; somewhere between your last warm up set and 1-2 sets before that, if the weight you go up to requires that number of warm up sets. In the Bench Press, it is more of a personal preference.

Some of you with a history of back injuries or chronic back pain may decide to use the belt for all of your sets after the empty barbell, because it helps protect the spine by keep the back tighter.

Since we don't contract the abs when we perform the Bench Press the same way we do it in the Squat, then the presence of the belt doesn't enhance the brace of the abs. Some lifters find wearing the belt useful in the Bench Press as well because it feels more tight and solid when they do a heavy set. Others feel like the belt bothers them. I'll leave that for you to try and decide for yourself.

When should you get a belt and start using it

I usually don't recommend starting to use the belt too early on in your training program. Usually, new lifters haven't yet developed the proper control over their abs to produce a sufficient intra-abdominal pressure for the belt to become useful. The too early use of the belt introduces more proprioceptive feedback that may distract new lifters from learning how to perform the lift correctly and "fire the right muscles" correctly.

Usually, after a couple of months, give or take, it's a good time to start using the belt; assuming progress in weights on all lifts has been made during that time. As I mentioned earlier, sometimes we might start a little sooner than later due to a history of back injuries, but even in that case, our goal is to still learn how to correctly produce tightness for the back with our abs, before introducing another apparatus into the system.

How tight should you wear the belt

The belt shouldn't sit comfortably and loosely, but rather tight. Not being able to insert 2 fingers too comfortably between your belly and the belt is a good starting point. Note that the belt is not too tight as to restrict your breathing. As you gain experience in your lifting, you'll be able to wear the belt more tightly, but in the beginning it's better to start less tight than too tight.

Keep in mind that performing the lifts with the belt takes some getting used to, and in the beginning, it may feel a bit painful in the flesh of the belly or in the hip bone. Some belts also tend to get a bit less stiff with time, which helps.

Watch my colleague and Starting Strength Coach Ray Gillenwater explains [how to wear the belt](#).

How to choose your first belt

I usually recommend one of two models for novice lifters when they buy their first belt. The main thing to point out is that if you've been training for several months now and you still don't own a belt, just get one of the great options below and don't waste any more time contemplating over which model to choose:

1. A nylon 4-inch Velcro lifting belt, by Harbinger. This is a great option to start out with, which is less stiff and can be used as a great intro into using the belt. It's ridiculously inexpensive and lasts for many months.
2. A single ply leather 3-inch prong lifting belt, by Dominion. This is a very high-quality belt which is suitable for basically all lifters. It's stiffer than the nylon belt which may be a bit uncomfortable in the beginning but an advantage after a while.

Whichever one you choose, do it as soon as possible. Go online and purchase it; note the size you need based on the size chart they provide. As you become more experienced in lifting, you'll have learned more about your personal preference and needs. I'll just say that most of you can find yourselves using your first belt for many years without needing to replace it (even more with the leather one because it's really high-quality).

Fractional Plates

Another type of training equipment that ALL of you will need early on is Fractional Plates (or microplates). Fractional Plates are weight plates that fit on the sleeve of the Barbell, like all of the other weight plates, but can allow a jump in the total weight of the barbell that is lighter than 5 pounds (or 2.5 kg).

The smallest increment possible with the standard weight plates found in commercial gyms is 5 pounds (or 2.5 kg) by using a 2.5-pound plate (or 1.25 kg) on each side of the barbell. Older trainees, women, and the upper body lifts of most men will get to a point, very early on, where a jump of 5 pounds (2.5 kg) in the total weight of the barbell is going to be too big of a jump to be able to move up in weights effectively. In this case, to allow for continued progress at a more moderate pace over time, you will need to have the ability to progress the total weight of the bar in increments that are smaller than what can be assembled with the standard weight plates.

You want to have the option for 4 more “stops”, or weight increments, on the way up, allowing for 1-pound (or 0.5 kg) jumps. For this purpose, you will need a set of 4 pairs of 0.5-pound plates each (or 0.25 kg). It is also possible to purchase 1 pair of 1-pound plate each (or 0.5 kilos) and 2 more pairs of 0.5-pound plate each (or 0.25 kilos).

The weight on each side of the barbell should be assembled using the same weight plates, of course, for symmetry and balance of the bar. Fractional plates are not really considered "personal equipment" like lifting shoes or a lifting belt, but since most commercial gyms do not usually provide this equipment, we need to purchase them independently and store them in our gym bag.

Another important thing to mention, when we talk about Fractional Plates, is that the weight of the weight plates in commercial gyms isn't very accurate, and it's within a certain tolerance from the face value weight. Moreover, the cheaper the equipment the greater the inaccuracy and the randomness of weight between plates. This means that if you use different plates on different days that you go to the gym, which is very likely, this inaccuracy can sometimes be greater than the effect of the weight of the fractional plates. Having said that, it is important to remember that what matters most is the process of the incremental increase of the weight you're lifting, and not necessarily the absolute weight on the bar. If you progress in weight by 1 pound (or 0.5 kg) each workout or each week, for example, then after 5 times you will reach a weight that is 5 pounds (or 2.5 kg) heavier, whether it is the exact weight that was on the barbell or not, especially if you use random plates each time where the weight averages out in the long run. So, you can neglect the inaccuracy of the weight of the plates, and instead focus on the number you lift “on paper”.

Where to buy Fractional Plates

The best way is to buy them online. You can go for the cheapest ones you find; It doesn't have to be fancy. The difference between fractional plates in pounds and in kilograms is negligible, which means you can buy fractional plates that are in kilograms even if the other weight plates are in pounds, and vice versa, if you find a bargain. The important thing is that you can have a fixed weight increase, so you can progress in smaller and predetermined increments.

You can also make them by yourself – Go to the nearest hardware store and get pieces of flat chain or washers and weigh them to learn how much a piece weighs (it is crucial to make sure that the diameter of the inner hole is greater than 2 inches (or 50 millimeters) so that it would fit on the sleeve of a standard Olympic Barbell.

Lifting Straps

I'd recommend using lifting straps in the deadlift as soon as you get to a weight where your grip starts to fail. The Deadlift is not a grip exercise in its essence, but a pulling exercise. The grip gets stronger as a result of performing the Deadlift, but that's just a positive side effect and not the primary objective of the lift. The primary objective of the Deadlift is to get our pull stronger, a lot stronger, and our increased back strength is the greatest benefit.

In order to keep getting stronger, you need to keep pulling heavier and heavier weights. At some point, the weight of the loaded barbell will start to become heavier than what you can securely hold in your hands, with a double overhand grip. At that point, you need to switch grip to a more secure grip so you could continue to lift heavier weights with your body than what you can grip with your hands.

If you artificially limit the weight you're deadlifting because you've never switched grip, because you want to continue getting your grip stronger, you basically waste precious training time and resources on this misguided idea. We can deadlift way more than what we can hold securely in our hands, with a double overhand grip. There are other, more efficient, ways to increase grip strength, but slowing down or even stopping your progress of increasing the weight of the deadlift just to work on your grip strength is a crucial mistake.

Instead, just pull your warmup sets with a double overhand grip until you reach a weight where your grip starts to fail, and then switch to using lifting straps for the rest of the warmup sets and work sets. Upon switching to using lifting straps, you'll find that it's much easier to pull a weight that you previously couldn't even get off the ground without the straps. It doesn't mean it's cheating or that you're doing something wrong. The purpose here is to continue to get the deadlift stronger with heavier weights, stressing and strengthening the entire system, and not to get stuck on a weight that is too light for you back and legs but too heavy for your grip.

I sometimes hear arguments against using lifting straps because some people want to "get stronger without artificial accessories" or something like that. These arguments are missing the entire purpose of deadlifting in the first place, and also all of the benefits that you can get from a much heavier deadlift. The deadlift is too important of an exercise to get stronger with to limit it because of flawed rational.

I'm a great proponent of using lifting straps in the deadlift, much more than I'd recommend using the other types of grip (the hook grip or an alternate grip, also called mixed grip). The reason is because most people I work with (and most people in general) want to get generally stronger, add more muscle mass, improve their body composition and lose fat, and generally be more healthy and vital individuals. Most of us don't have competitive aspirations in the sport of Powerlifting, where the use of straps is prohibited, so we don't need to endure the pain of using a hook grip or sacrifice the symmetry of our position in the deadlift by using a mixed grip. I will address this in-depth in an upcoming video, so stay tuned to the Be Stronger YouTube channel to learn more about why I recommend avoiding these types of grip.

Which type of lifting straps to use

There are several types of lifting straps, each with their pros and cons. I usually avoid this discussion entirely with people that their deadlift is lighter than 400 lbs., and just recommend the simplest type, the one I still use today, and which gets the job done. It's also the one that is the easiest to get. If you prefer a different type of straps, then by all means, get it. As long as you just get it and don't waste time deciding while your deadlift is not progressing in weights regularly because of the grip.

I recommend the most common type of straps, with the loop sewed into the strap. You can easily order one online, when you search for "lifting straps for weightlifting". They come in only one size. There are plenty of manufacturers. The price ranges between 10-30\$. They will last for many months and even years for most trainees.

* I would advise against the "figure 8" straps for our purposes. This is the kind in which the straps is sewed together all the way and look like the figure 8. Using these straps is more dangerous because when you use them and let go of the bar, for some emergency reason, your hands don't get free of the straps.

Chapter 2: How to Set Up Your Equipment Correctly

Video: [The correct height of the hooks for the Squat and the Press](#)

Video: [The correct height of the hooks for the Bench Press](#)

Video: [The correct height off the floor for the Deadlift](#)

The use of Safeties in the Squat and the Bench Press

In order to continue to get stronger, we need to keep pushing the boundaries of what we think we are able to. In this case, we need to try to lift heavier and heavier weights which in turn will produce the strength adaptations. As we progress in weights it becomes more and more difficult and strenuous to finish the set successfully, but committing to reach our goals means that we need to go ahead and to do things even if they are hard.

Now, in both the Squat and the Bench Press we are basically positioned between a heavy object, the barbell, and an immovable object, the ground, or the bench itself. We don't have a good way in which we can escape from underneath the barbell safely if we need to. Whether it be because we started a rep which we aren't absolutely sure we're able to finish and bring back up (i.e., fail), or because something went wrong on the descent part of the rep that made us trip or lose balance and the bar started to go down and gain momentum that we can no longer control and bring to a stop.

As opposed to the Deadlift and the overhead Press, in which we can safely "fail" - In the Deadlift we just lower the bar back down to the ground and no harm has been done, and in the Press the bar just comes back down to the bottom position of the Press, in our hands.

This is why we use the safety bars (also called safety pins, or safeties) in the Squat and in the Bench Press. These bars are carefully positioned in a very specific height which can meet the barbell just below the lowest height of the bar path, at the bottom position of the lift. This way, it serves as a measure of safety to "take" the bar from us if we go a bit lower than we need to in the case of a missed rep, and not to get crushed underneath it.

Watch my colleague and Starting Strength Coach Ray Gillenwater explains [how to position the safeties in the Squat](#).

The above principle applies to the Bench Press as well. You want to position the safeties in a way that will keep you safe in case of a missed rep or an emergency of some sort.

A caveat regarding the Bench Press in most commercial gyms

Since the use of safety bars in the Bench Press is HIGHLY recommended, almost mandatory, we have to acknowledge the issue that in most commercial gyms we wouldn't necessarily be able to Bench Press inside the squat rack where we can use the safety bars. Most commercial gyms have the standard model of designated bench press racks, that don't have safety bars in them.

Some gyms have a protocol that doesn't allow members to bench press inside the squat rack, where you can use the safety bars as mentioned above. They would say that since you can squat only in the squat rack, then you can't occupy the squat rack to perform bench press in and make other members that want to squat wait, while there is a free designated bench press rack to bench in.

Sometimes it's not a protocol that the management enforces but rather gym etiquette that has been developed in the gym and enforced by the members themselves, especially during crowded rush hours. Furthermore, many commercial gyms have squat racks that don't allow for an accurate enough way to bench press inside them because the pin holes are spaced out in not small enough intervals, for both the hooks and the safety bars.

In these cases, some of you will only have the option to bench only in the designated bench press rack, without the use of safety bars. This situation should not be taken lightly. It's a big decision you're taking, and you should be aware of the consequences. First, you MUST use the help of a spotter whenever that's the case. Ask someone who trains around you, someone that you think you can trust, or call the gym instructor and ask them to spot your set. It's very common for people to do this. The spotter is there to help you bring the bar safely up onto the hooks in case of a missed rep.

However, I would recommend considering again your Bench Press situation, and either try to find another gym where you can Bench Press with safeties or make arrangements that will allow you to bench inside the squat rack in your gym. The use of safeties in the Bench will help you to stay safe much more than a spotter could ever do. Sometimes coming to the gym not during rush hours or trying to make friends with the gym instructors on the floor solves the problem so you could just perform bench press in the squat rack in that gym. The point here is that if can only bench without the use of safety bars, then at least be aware of the risks, and of course, ALWAYS USE A SPOTTER.

[Chapter 3: How to Start and Finish Your Sets Correctly](#)

Video: [How to take the bar out of the rack correctly in the Squat](#)

Video: [How to take the bar out of the rack correctly in the Press](#)

Video: [How to take the bar out of the rack correctly in the Bench](#)

Video: [How to bring the bar back to the rack correctly in the Squat](#)

Video: [How to bring the bar back to the rack correctly in the Press](#)

Video: [How to bring the bar back to the rack correctly in the Bench](#)

Video: [How to finish a set of Deadlift correctly](#)

What's next

If you made it so far, I would first like to thank you for reading and subscribing to this information. I hope it helped you a lot and that you were able to implement the instructions and cues detailed here, and that it supported and improved your strength training process.

As you've probably picked up by now, I'm a huge advocate of doing things correctly and excelling in what you do. Unfortunately, one person cannot get to a master level in multiple disciplines in life on his own. We have a saying in Hebrew "Make for yourself a mentor", which I implement in my life on a regular basis. What it means for me is that in every field I wish to learn and excel at, I would be better off finding someone that has already walked that path and is now teaching other people how to do it, and learning as closely directly from them as I possibly can. Especially in the beginning. This is how I conduct my life and that saves me a tremendous amount of time and trial and error that I would have had to go through otherwise.

We offer a variety of online strength coaching services in Be Stronger, to help people get stronger using the Starting Strength method, and to achieve the strength and the body they desire. Whether you want to add muscle mass, lose weight, become more fit – the most efficient and effective way to reach there is through the pursuit of strength, and then adjusting according to your goals.

Feel free to [schedule a call with me](#) if you're interested in learning more about how we can help you get the results you want much faster.

In Strength,

Zohar Yermiyahu, SSC

Founder & head coach, Be Stronger