

For Barbell Strength Athletes When Equipment Is Limited Or Unavailable.

Non-Traditional Strength Training Methods

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Introduction

In an era where barbell training is increasing in popularity, platforms and bumper plates are found in commercial gyms, and barbell gym equipment sells out quickly when a pandemic strikes; we often forget that there are other implements to use for strength training.

Why? Because we believe that barbells are optimal, the best way to progressively overload, are highly functional and have endless possibilities.

It's true! But we can sometimes find ourselves running into some problems!

What happens if:

You lose access to a barbell, plates, rack, and bench for extended periods?

Your client has no interest in touching a barbell but wants to get stronger?

You're on a 10-day cruise, and all that's in the fitness center on the ship is pin loaded machines, dumbbells, and a group fitness room?

You're just starting a side hustle and building an in-person clientele by seeing people in their homes rather than in a gym?

What do you do in these situations where you don't have access to the optimal equipment for developing optimal strength?

You need to think outside the box! After having been in the professional fitness industry for 11 years and being a gym-rat since I was 17, I remember the days I didn't even know what a barbell is. I remember fun dumbbell variations, fixed barbell weights, pin-loaded machines, fitness classes, kettlebell workouts, bodyweight workouts, and metcons before they were metcons.

But since the popularity of barbell sports has grown, many people's first exposure to fitness is through a barbell sport.



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The story goes: Joe Schmoe didn't play sports growing up. At 22, he lost 55lb and started Barbell Training. He loved it so much he entered some powerlifting meets and decided to become a coach. All he knows is the squat, bench press, deadlift, and maybe the overhead press. A client of his goes on vacation, and the hotel doesn't have a rack. Coach Joe tells his client to take the two weeks off from training. The client backtracks while he's away, and Coach Joe waived the fee for those two weeks.

This didn't have to happen. Progress could have been maintained, and Coach Joe could have made money. But because Coach Joe has no experience with exercise outside of barbell training, he didn't know what to do.

This is why I firmly believe that all Barbell Strength Coaches NEED to know other exercise implementation to be successful and a top-tier coach.

Everything we're going to talk about centers around the <u>4 Core Goals</u> of Progressive Rehab & Strength:

- 1) Maximum muscle utilization through the greatest effective range of motion
 2) Injury Risk Reduction
 - 3) Maximizing Goal Outcome
 - 4) Maintaining Longevity in Goals, Sport, and as a Client

In this guide, we're going to talk about easily transportable equipment, has low space economy, can be made or found anywhere in the world, how to choose exercises that maximize outcomes, and piece it together to develop a program in the absence of a gym or barbell and rack.



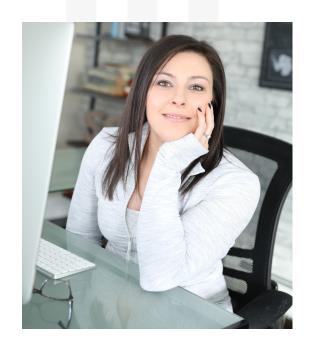
Social Isolation No Equipment Program

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Hi! I'm Dr. Rori Alter, PT, SSC, PRSCC and feel strongly about maintaining fitness in any circumstance and having vast exercise knowledge beyond the barbell. That's why I put this guide together: to help you think outside the box when disaster strikes or your clients don't want to pay you because they'll be on a cruise for 10 days. Maintain your strength and keep your business running with the information provided in this guide!





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Training implements

I'm going to divide training implements into two sections:

1) implements that you can mimic the barbells with and progress decently well and 2) implements that you cannot mimic the barbell movements but can utilize to provide varying stress using alternative movements to accumulate training stress to maintain fitness while without barbells or develop fitness when barbells were never available to you. Everything is written in order of most optimal to least optimal as well!

Kettlebells & Dumbbells:

Almost every exercise you can do with a barbell can be done in a bilateral or single limb stance with BKs or DBs, and you even have more options. One of the most valuable things we love about barbells is the ability to incrementally load the bar even as little as half a pound from session to session. While we can't load quite as minutely with KBs and DBs, there have been some recent product developments that allow us to load these implements in smaller increments than 2.5-5lb per hand. Many companies have made fractional magnetic plates that can attach to the ends of DBs, and Rogue Fitness recently came out with a rubber fractional set designed explicitly for KBs.

The other difficulty DBs and KBs have is the inability to hold substantial weight as your arms become the limiting factor as compared to a barbell. To override this, we typically have to program high rep sets, or more volume, which we will go into later.

Other than that, having a range of KB or DB loads is a great alternative when Barbells are unavailable. To save space in a home gym or increase portability when training people in their homes, I'd recommend purchasing an adjustable dumbbell or adjustable kettlebell set. Many companies produce these options, and it's up to you to do your research, read reviews, and find what works best with your budget! *For*

31 KB/DB exercise examples, click here.





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Resistance Bands

Similar to how you can do almost every barbell exercise with KBs and DLs, you can with resistance bands as well. The biggest problem is you cannot objectively measure the amount of resistance you are using and, therefore, cannot track progress objectively either. This, along with resistance bands, never being able to match heavy loads that you can squat, bench press or deadlift, also makes progressive overload, and ultimately progress challenging with resistance bands. Again, you'll have to use more reps per set and total volume to achieve similar, yet not optimal, results.

You can even add resistance bands to your DB or KB work to increase the resistance when the load is limited, but again, run into the problem of not being able to measure it objectively. Lastly, depending on what type of band you're using and where it's placed, it can be a bit uncomfortable on the skin. So, while you can do the movements of the main barbell lifts with resistance bands, it may be easier and more comfortable to use these to do smaller isolation movements that can be combined in a workout to cause decent stress to maintain strength and fitness.

Resistance Bands To Keep On Tap Include:

Tubing with various attachments

Monster bands

Monster mini loops

Minibands

All of these are available from hundreds of distributors and come in packs of varying resistance. Usually, the manual that comes with them will describe how many "pounds of resistance" the bands produce. Still, I caution you that this will never be accurate because it depends on the age of the band and how it's positioned every single time you use them. However, these are a great alternative, especially when you're traveling and possibly want to pack something in your suitcase to maintain fitness when you're without access to a gym! *For 19 Resistant Band exercise examples, click here.*





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The Total Resistance Exercise System (TRX)

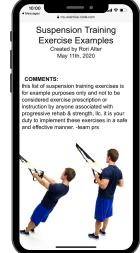
The Total Resistance Exercise system, known commonly as the TRX, was designed in the 90s by a Navy Seal who created a more diverse and challenging exercise system, other than general calisthenics, for himself while deployed without equipment. This system, which is essentially a ring suspension system, can increase or decrease the challenge of many types of exercises based on where you position yourself in space relative to gravity.

The TRX is an excellent tool for upper back, chest, and core work but is not as great for lower body exercises as it has limitations in its ability to add stress to those. However, in general, in the weaker population (i.e., those who struggle to squat to depth even without weight) it can assist them in gradually loading squat and lunge variations from easier to standard upright positions.

The biggest drawback of suspension training is that:

- 1) You cannot objectively measure external load or resistance; you can only subjectively measure where you are in space from session to session for each exercise.
 - 2) You cannot mimic the deadlift or overhead press barbell movement.
- 3) Even though you can mimic the squat, the TRX system only offloads rather than increases the resistance of the squat.

But! This doesn't mean the TRX, or other similar systems, aren't beneficial or bad tools to use. The TRX is an extremely lightweight, compact, easily transportable, single piece of equipment that you can create ENTIRE workouts from. For 20 TRX exercise examples, click here.



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How To Use The TRX:

The premise behind the system depends on where your body is positioned relative to gravity is what determines how much resistance from gravity you get.

More Resistance: position your body more horizontal
Less Resistance: position your body more vertical
Increase The Challenge of Core Exercises: put your feet in the rings OR have your
hands in the rings and move your arms further away from you
Decrease The Challenge of Core Exercises: put your hands in the ring and follow the
horizontal/vertical guidelines
Increase The Challenge of Single-Leg Exercises: Put your rear foot in the ring

Increase The Challenge of Single-Leg Exercises: Put your rear foot in the ring Decrease The Challenge of Single or Bilateral Leg exercises: Hold on to the rings

Sliders:

These are a neat little tool that you put under your hands, feet, or both to decrease the friction between you and the floor. Sliders advance the challenge of an exercise by changing time under tension or adding an eccentric component to a concentric only movement like a lunge or adding a concentric and eccentric element to an otherwise isometric exercise like a plank.

Sliders are mostly added to single leg and core exercises and can be purchased online or makeshift with a hand towel. Similar to the TRX, you cannot objectively gauge progressive overload, and you cannot mimic the main barbell lifts with these. However, when load or resistance is limited, they are a cheap, easily transportable tool that may add value and some type of progression to the exercise program. For 8 Slider exercise examples, click here!



Formatting Exercises For Strength Goals

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Studies have demonstrated that when the load is significantly limited, training at or near muscular fatigue failure preserves and may even increase strength for a while. So how do we do this to utilize what we've got when equipment is limited?

Rating Of Perceived Exertion (RPE) is a widely used subjective intensity measurement tool used in powerlifting. Utilizing an RPE stop to dictate the number of reps is a great way to train low load close enough to muscular failure when the load is limited or consistent from session to session. RPE Stop means that you do as many reps as needed to achieve a certain RPE. Once that's accomplished, you stop the set. Completing more reps at the same RPE in a subsequent session means you have progressed your volume instead of your load. For a detailed explanation of RPE, please read this article.

Example: Week 1, you perform three sets of 35lb Goblet Squats with an RPE stop of 9 for each set. You achieve 15 reps set 1, 13 reps set 2, and 12 reps set 3. The next week you perform the same 35lb Goblet Squats with an RPE 9 stop and get 17 reps set 1, 15 reps set, and 12 reps set 3. You have made progress because your volume increased even though the load didn't.

Time Under Tension (TUT) is another way to increase the fatiguability of an exercise in the absence of adding more weight. This means for the same number of reps with the same load, the exercise feels hard, has a higher RPE, and is thus training closer to fatigue failure. Some methods include:

- 1) *Paused Work:* At the turn around point between the concentric and eccentric portion of the exercise, you come to a stop for 1-3 seconds.
- 2) *Tempo Work:* Utilizing a tempo on the concentric or eccentric portion of the exercise, you slow the movement down. This is often combined with paused work as well. We recommend keeping tempo work under 6 seconds to reduce injury risk. Some commonly used tempos are 3-0-3, 3-2-1, 2-2-2, and so on.
- 3) *1.5 Reps:* This method adds time under tension because you're doing the concentric portion of the movement, starting the eccentric. Then halfway through the eccentric, you go back to the concentric portion before completing the entire rep. An example of this with a squat is you perform the down motion and come halfway back up, then you go back down, and then come all the way up. This is considered one rep.

Progressing In The Absence Of The Barbell

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Combining Modalities:

If you're limited with DB or KB loads, an additional way to increase the resistance of the exercises you are performing is to add a resistance band, slider, and or TUT to the motion as well. As we've mentioned previously throughout this guide, it's hard to gauge how much tension you're actually adding, making it hard to assess progress from session to session objectively. However, it's certainly better than doing 55 reps in one set to reach an RPE 9!

When beginning with a new client or introducing someone to new and novel exercises and training modalities, it's crucial to develop a graduated exposure strategy to allow them to learn movements and adapt to new training styles. This will reduce the possibility of injury, excessive soreness, and things going awry.

Start with the least complicated way of performing exercises and organizing training sessions and add in layers over time to continue to progressively overload in the absence of a full barbell training set up.

Got questions? Join our FREE Facebook group, The Secret Society of Barbell Mastery, and drop them in there.

Are you interested in learning how to assess, plan, and progress for any barbell training athlete of any ability and goal desires? Join us for the next online mentorship cohort by getting on the waiting list here!

