LOW BACK THERAPY, LLC

LOW BACK SOLUTION

Therapeutic Exercise for Spine Health

Larry M. Parker, MD & Brian Utley, CSCS, PES

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For more information, please contact:

Low Back Therapy, LLC 927 Franklin Street Huntsville, AL 35801

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Introduction

Current statistics reveal that 80% of Americans suffer from low back pain during their lifetime. And, the running joke is that the other 20% are lying.

As a practicing spine surgeon since 1996, I wasn't at all surprised by these numbers. Week in and week out, dozens of demoralized patients walk through my door and share their own unique story of how low back pain has compromised their productivity, exercise, and overall quality of life.

Unfortunately, they have often been battling these ailments for some time; so long in fact, that they forget what it's like to experience a pain-free day or a day without wondering what faulty movement would trigger the debilitating low back pain that would surely put them out of commission for the foreseeable future.

It's a vicious cycle. Feel the pain....Get off your feet and rest. Feel the pain....Take a day off from work. Feel the pain....Attend a handful of therapy sessions. Feel the pain....Spend more time in the doc's office. Feel the pain....Explore the option for surgery.

The wheels on the bus go 'round and 'round.....

I can't say that these statistics and circumstances haven't been good for business. But, I can say that it discourages me to see so many people suffer from a condition that could be resolved if a progressive and intentional approach was applied.

With that in mind, I kept my eyes and ears open while seeking a solution for the masses.

Then, in the spring of 2011, I came across a strength and conditioning coach in the area who has a therapy background and is known for his progressive training approach, especially with regard to core stabilization and joint function. I reviewed some of his published work and was drawn to his attention to detail when it came to the body's movement efficiency and health of the spine. I knew I had my guy....

Between my clinical experience and Brian's daily work in the field, we collaborated with the goal of developing a comprehensive and practical system for providing relief to long-time sufferers of chronic low back pain. And, we did so with the idea of making this system convenient, easily accessible, and more affordable than traditional therapy.

Our immediate attention was placed on determining why so many people fail to gain relief from traditional therapy protocols. The reason became very evident....

The short-sighted approach is often to treat the pain site instead of the pain source. It's like hearing a fire alarm go off in your house and rushing to pull out the battery to relieve yourself from the deafening noise instead of actually putting out the fire.

In the case of low back therapy, simply treating the pain site inevitably leads to temporary relief but doesn't resolve the issue long-term.

With this in mind, we concluded that the more appropriate course of action would be to take a global and comprehensive approach to therapy of the low back in which the entire kinetic chain is addressed in order to seek more functional movement patterns. This, in turn, would realign the body, provide support to the lumbar spine, and allow it to perform its intended function and remain healthy.

While our services aren't directly accessible to everyone, we wanted to provide the same "client/patient experience" to the masses in terms of the programming and instruction. Our objective is to empower patients with knowledge of the process they are performing, so they can apply these principles for years to come, instead of simply spoon-feeding them stock exercises for short-term relief.

Our next consideration in the process was how to address each individual's needs. Chronic low back pain may be the most common ailment in our country today, but it presents itself in varying degrees and under many circumstances. To that point, we placed attention on providing modifications throughout the programming.

The philosophy and system are foundational for all, but variables within the programming can be manipulated to suit each individual's needs. Also, in a progressive therapy program, each individual can determine whether they are ready to advance to the next session or need to repeat the current one they are performing.

With these concepts in mind, your question now must be, "So, what exactly does this global approach look like, and what can I expect?"

Glad you asked. Read on....

Chapter 1:

What This Program Is All About

Before I get into the nuts and bolts of the system, let me give you a birds-eye view of the process.

Quality of movement is priority one throughout this process and it's critical that each individual understands exactly how his/her body is intended to function.

I want you to picture the body as a stack of joints, where bone meets bone (e.g. knee, elbow, hip). Throughout the body, each joint is called upon to perform a specific function in order for the body to perform movement efficiently. To generalize, joints are intended to provide either stability or mobility. In other words, we expect the body to either prevent movement at a joint or produce it.

While maintaining this visual of the body as a stack of joints, I'd like to work from the ground up while focusing on the body's most significant joints.

To begin, let's look at the ankle. It's a joint that is capable of multi-directional movement. It can produce flexion, extension, eversion, and inversion. So, the objective at the ankle is to produce functional mobility. If the ankle isn't capable of such movement, then other joints will be compromised.

Moving up the body, we focus next on the knee. Like the elbow, the knee is a hinge joint, which is only intended to flex and extend. Any sort of lateral or medial movement is definitely not desirable, and will likely result in injury. So, the objective at the knee is to produce functional stability.

Next up the chain is the hip, a ball and socket joint that is capable of a great deal of movement. It can produce flexion, extension, abduction, adduction, and rotational movement. It is critical to achieve mobility in the hips, especially when you consider their proximity to the low back, our area of concern for this project.

As we move up to the body's next segment we reach our target area, the joints of the lumbar spine. The 5 vertebrae of lumbar spine are larger than those above it and are not designed for movement. In fact, 0-2 degrees of rotation at the lumbar spine is optimal. When an individual starts to rotate 3 or more degrees at the lumbar spine, tearing of the lumbar discs begins to take place on a microscopic level. So, it is critical that we achieve stability at the lumbar spine.

Above the lumbar spine we find the thoracic spine, which is made up of 12 vertebrae. These joints are progressively smaller than the lumbar vertebrae as we move up the body and, consequently, are capable of significantly more movement. Compared to the lumbar spine, the thoracic spine undergoes 7-9 degrees of rotation at each segment. Increased mobility is the objective at the thoracic spine.

On either side of the thoracic spine you will find the foundation of the shoulders, the scapulae (shoulder blades). The scapula connects the humerus (upper arm bone) with the clavicle (collar bone). Because the scapula does serve as the foundation of the shoulder, we need it to exhibit a measure of stability. Or, a better way to state it would be to say that we need controlled mobility as the shoulder blade glides through a controlled path without getting off track. A lack of stability, or controlled mobility, at the scapulae will cause the surrounding joints to compensate.

The final segment in the chain that we'll focus on is the glenohumeral joint. This is where the head of the humerus (upper arm bone) meets the glenoid fossa of the scapula (shoulder blade). Because there is so little surface area at the segment, this ball and socket joint is more mobile than any other joint in the body. And, it's important to maintain a high level of mobility there so its function isn't comprised, along with the function of the surrounding joints.

As you consider this overview of joint function, hopefully you recognize the alternating pattern of mobility and stability as we moved up the kinetic chain of the body. When the joints are performing their intended function properly, the body will exhibit clean, efficient movement leading to a healthy, pain-free body. But, when one joint isn't performing its intended function properly another joint will compensate, because the body will find movement somewhere. And, one compensation pattern will likely lead to another and another and

That's how chronic pain and injuries develop. Repetitive compensations and poor movement patterns will ultimately cause problems.

The most obvious example we can point to using this approach, relative to low back pain, is a lack of hip mobility. When the hips don't flex, the low back will instead. When the hips don't extend, the low back will instead. When the hips don't rotate, you guessed it....the low back will instead.

Based on the joint-by-joint discussion above, you should recognize that if the low back is performing all of those movements instead of stabilizing, there are going to be problems. So, the issue here is getting the hips to move better and addressing all the variables that will promote better hip mobility.

Once again, our objective isn't to simply treat the pain site. It's to treat the pain source, and we do so by taking a global approach to our therapy program in which we look above and below the low back and go to work on surrounding it with a well-oiled machine that will allow the body to function synergistically, promoting healthy, pain-free movement.

With these concepts in mind, below is a general outline of the structure for each therapy session in which our global approach will be applied to seeking quality functional movement and pain-free results....

- → Self Myofascial Release
- → Flexibility / Joint Mobility
- → Activation
- → Strength Training w/ Fillers
- → Exit Activity

The Preparatory Phase of each session includes the Self Myofascial Release, Flexibility/Mobility, and Activation segments. The objectives of the Preparatory Phase are to address variables that will contribute to improved quality of movement and to prepare the body for the Strength Training segment.

Self Myofascial Release

Your body's fascial system is a single entity that runs from head to toe and acts as an envelope around your muscles. Self myofascial release is a procedure in which you will use a couple tools to address muscle tone and density. Areas of increased tissue density need to be decreased. The goal is to break down soft tissue adhesions and scar tissue that restrict movement patterns.

In other words, self myofascial release is like a poor man's massage where you are working out the knots in your muscles that cause you more harm than you realize.

You are likely to experience a great deal of discomfort early in the process, but those difficult spots are where you need to bear down and spend the most time. There is a cumulative effect to this soft tissue work, so consistent and dedicated work will yield positive results, but don't expect there to be an immediate impact, other than the discomfort you feel.

The self myofascial release protocols will be addressed at the beginning of each session and sometimes at the end. This soft tissue work will likely be more necessary at the beginning of the therapy program than it will toward the end. You should notice gradual but consistent improvements as you progress through the program.

You can individualize your soft tissue work by applying more or less pressure to each area simply by adjusting your body position. Remember, you need to spend more time on the "hot spots" as those are signs of increased tissue density that need to be broken down.

Also, the tool you're using will affect the pressure you feel and can be individualized. The greater the density of the tool, the more pressure you will apply. For example, a lacrosse ball will apply more pressure than a tennis ball, and foam rollers are offered at a variety of density levels.

General time guidelines are provided in this manual for soft tissue work, but it's important that you spend the appropriate amount of time for your specific needs.

We have provided a little variety in the programming for Self Myofascial Release. There are two routines, and they will be alternated from session to session. Tennis balls and foam rollers are the primary tools used for demonstration, but other options can be used in their place such as a lacrosse ball, medicine ball, and "stick", among others.

Flexibility

After decreasing tissue density with the Self Myofascial Release work, muscles can now be effectively lengthened. This will be accomplished by utilizing static flexibility stretches.

You should notice that there wasn't a "warm-up" that preceded stretching like so many subscribe to, only the soft tissue work.

This is intentional.

We do want the body to eventually warm up during the preparatory phase but all in due time. The reason you will not be warming up to stretch, in a traditional sense, is because that only creates superficial lengthening of the muscle.

If I threw an (object) in the microwave and took it out, you would notice right away that it would be easier to stretch but would soon return to its original state once it cooled off.

We don't want temporary gains in flexibility. We want permanent changes in the length of the muscle, so we will stretch "cold" immediately after the soft tissue work. You likely won't be gaining the same range of motion as you would be if you were warmed up, but you will be achieving more permanent gains.

There is a measure of consistency as you transition from the soft tissue work to the static stretches, as you will be addressing several of the same areas that you just worked on. Remember the process....

Decrease tissue density à Lengthen the muscle.

Like Self Myofascial Release, static flexibility should be uncomfortable to achieve gains. Each stretch will be held for a designated period of time, but feel free to individualize and spend more time where necessary.

Joint Mobility

The concept of joint mobility was already discussed at length earlier in this chapter, and now we apply it to the preparatory phase of the therapy program.

With tissue density decreased and muscles lengthened, it is now time to work on getting functional movement from the ankles, hips, and thoracic spine.

Remember, if one of those joints isn't displaying an adequate range of motion, the joints above and/or below it will compensate and move for them. When reminded of the body's alternating pattern of joint mobility and stability, you should realize that these compensations will take place at joints that are intended to stabilize, thus causing problems.

If we can surround the low back with a mobile thoracic spine and hips, in particular, our chances for a healthy, pain-free low back have greatly increased.

One faulty pattern can affect the whole body, which is why we go beyond the thoracic spine and hips and address ankle mobility in the preparatory phase. We also value the ankle's proximity to the ground and appreciate the significance of our body's base of support relative to overall functional movement.

You will notice that the mobility exercises are more dynamic in nature compared to the soft tissue and flexibility segments. This is by design. As you progress through the preparatory phase of the session, the level of activity increases along with your heart rate, core temperature, and joint lubrication.

Activation

The next phase of prep work takes us to the activation segment. The objective here is to "turn on" parts of the body that might be dormant or not contributing enough to your body's movement patterns. Most often, we are targeting regions of the body such as the core, glutei, and musculature of the upper/mid back.

The activation exercises should serve as a great compliment to the mobility work. As the targeted regions become more active, they will support cleaner movement patterns and allow the joints perform their functions more efficiently.

For example, we want to promote extension at the hip and stability at the lumbar spine. The muscle group that should contribute most to hip extension is the glutei. Unfortunately, many people get very little contribution from the gluteus which compromises hip extension and forces the body to seek movement elsewhere. This most often results in the compensation pattern of lumbar extension instead.

At the same time, to promote better stability at the lumbar spine, we need to train and activate the core region in a stabilizing manner. Think of your core as a cylinder made up of your abdominals, low back, and obliques. Proper and functional core training should aim to prevent movement, not create it.

So, you will not see traditional, dated exercises like sit-ups and crunches in the programming, since they go against our objectives. These movements harm posture and ultimately the low back region over time.

Repeated flexion of the lumbar vertebrae can eventually lead to rupturing of discs. Not to mention, by continually flexing the spine you are shortening the rectus abdominis and pulling the rib cage down to the pelvis creating poor posture and compromising the mobility of the thoracic spine. This creates a negative cascading effect throughout the other joints, since they are all working to coordinate together for movement.

Activation exercises and the time protocols associated with them aren't intended to create a lot of fatigue, if any. Again, they're simply designed to turn on segments of the body, so they are contributing more to quality movements that we hope to see during the strength training segment that follows.

Strength Training w/ Fillers

After completing the preparatory phase of the session, you will move on to strength training. The objective here is to get carry-over from the movement quality established in the prep phase and now strengthen the body with a focus on balance and realignment.

Remember, this therapy program is taking a global approach and addressing the pain source, not just the pain site. So, like the prep phase, the strength training segment will address the entire body using a variety of movement patterns with core stabilization integrated into the exercises rather than isolating this region.

In general, we can break the strength training exercises down into 4 movement patterns.

There are 2 upper body patterns per session. One serves as a pushing pattern and the other a pulling pattern. By nature, the pushing patterns train the front side, and the pulling patterns train the back side of the upper body.

To say, we're aiming to create balance in the body doesn't necessarily mean that there should be equality in the number of sets and reps in a session for these 2 movement patterns. That would imply that each individual is already balanced and that we're just trying to maintain that balance while getting stronger.

This isn't realistic as you'll find that almost everyone needs more work done on pulling movements because of previous workout habits or daily postural issues that tighten the front-side muscles and weaken the back-side muscles. So, when determining where you will get additional sets during your session, always lean toward more pulling movements.

The 2 lower body movements are categorized as either knee-dominant or hip-dominant patterns. Muscle activity for lower body exercises isn't as straight forward as the upper body movements but, in general, the knee-dominant exercises require more pushing and activity from the muscles on the front-side of the lower body. Meanwhile, hip-dominant exercises qualify more as pulling movements and place more emphasis on the back-side muscles.

All of this is said to make you more mindful of your therapy process. To get the best results, it's very important to understand where you are recruiting movement, and then apply this through exercise.

Like the upper body, the lower body pulling (hip-dominant) exercises will likely need more attention than the pushing movements. By nature, the hip-dominant exercises will place a greater priority on hip flexion and extension, thus training the gluteus for greater activation and strength. And, as you know from previous discussion, better gluteus activity usually translates to a healthier low back.

The strength training exercises should stress the body more than any of the prep phase segments. We will be placing the muscles under more tension with the goal of eliciting more force production from the body.

Ideally, this force production is produced synergistically as the body coordinates itself through the functional movement patterns that are described throughout this manual. If a movement pattern is faulty, exercise load must be decreased until the pattern is executed efficiently. WE WILL NOT TRY TO BUILD STRENGTH ON TOP OF A DYSFUNCTIONAL MOVEMENT PATTERN.

In other words, mobility and stability are a precursor for strength. And, that's why those 2 variables must be addressed with a great deal of attention in the prep phase of each session.

The concept of "fillers" is integrated into the strength training process. The fillers serve a couple purposes. First, they function as an active form of recovery between your strength training sets rather than just standing around waiting for your next set to begin.

Most importantly, though, the fillers reinforce sound movement patterns that were drilled during the prep phases of each session. So, fundamental variables concerning mobility, stability, and activation are "rehearsed" in between your strength training sets in an effort to continue to make them a habitual part of your body's movement.

In other words, the "fillers" remind your body where movement should be taking place and how individual parts of your body should be contributing to this movement. They are not intended to create additional fatigue but, instead, allow your body to recover productively.

Exit Work

Each session will conclude with Exit Work. Think of this as a way of allowing the body to calm down after completing your strength training exercises while also addressing an area of weakness before finishing up for the day.

This segment of your session provides you the latitude to choose what exercises you will perform. The idea is for you to evaluate which segment of the prep phase you feel like you could benefit most by performing again. So, you will perform either your soft tissue work, flexibility, mobility, or activation exercises to conclude your session.

If it's not obvious where you need more attention, we suggest that you simply choose a different segment to perform during each session for your Exit Work. They all hold value, so additional exposure to each will certainly be of benefit to you.

Chapter 2:

The Progressions

This low back therapy system is progressive on both micro and macro levels. There is a systematic progression to each individual session, and there are several progressions applied from session to session.

It is very important to note you should NOT advance to the next session until you can successfully execute the objectives of the current session. Since this is a progressive program, you will have a very difficult time performing the following session if you are struggling through your current one.

This doesn't mean that you must do everything perfectly, but use your best judgment when determining if you are ready to move forward.

In general, we want to address the body's alignment and posture first. It's important for the body to recognize optimal positioning.

Second, we'll focus on motor control, or activities carried out by the central nervous system that organizes the body's musculoskeletal system to execute coordinated movements and skilled actions.

Next, we place our attention on endurance. Since we rely on the core musculature to stabilize the lumbar spine practically with every movement we perform, it's important for that region of the body to have a great capacity for endurance. Core stability is addressed in a variety of ways during each session. There are segments in which we isolate the region specifically, but there are also segments where core stability is integrated into global movement patterns, which are more functional in nature.

Finally, our therapy progression addresses strength. With the body aligned properly, motor units firing efficiently, and a foundation of endurance in place, we can effectively strengthen the body, thus alleviating any undue stress on the low back. Functional strength is the magic elixir for what ails you. This means that the body produces force efficiently through the synergistic activity of the body's musculature. But, remember, this can only happen when the other variables are in place first.

As for each segment within a session, there are varying degrees of progressions.

The Self Myofascial Release segment isn't progressive in a sense that you only have 2 alternating routines to perform. But, there are progressions that you should manage throughout the 18 sessions.

You will spend progressively less and less time on the Self Myofascial Release segment as your tissue quality improves throughout the therapy program. On the other hand, there are progressions related to the amount of pressure you are applying to the soft tissue. Body positioning and options for alternative tools are discussed throughout the videos as ways to advance the pressure applied during this segment.

With 4 routines to cycle through during the 18 sessions, there isn't a definite progression to the Flexibility segment, although you will likely feel more challenged with each session as you advance through the first 4 because of positioning.

You are really in control in your own Flexibility progressions as you work to gain more range of motion each time you cycle back through 1 of the 4 routines.

Consider this when it comes to the Mobility segment of each session. By definition, you cannot exhibit mobility without stability. In other words, your body must be able to stabilize itself in particular positions to achieve mobility, or movement, in the appropriate areas.

You'll notice that positioning is more comfortable, and stability demands are lower early in the programming and progressively become more advanced as you move from session to session. So, your ability to achieve movement at the designated joints will be dependent on your ability to achieve stability at other segments.

Movement will become more dynamic during the Mobility segment as you progress through the sessions. The more dynamic the movement, the greater need for your body to stabilize itself in order to exhibit the functional mobility patterns we are seeking in the ankles, hips, and thoracic spine.

Your Activation segment will change every other session. The Activation exercises are repeated in every even-numbered session in an attempt to give you an additional opportunity to improve upon specific activities that will contribute to better movement patterns. The initial sessions focus on very fundamental activations and patterns that assist more global activities. Although the Activation segment isn't designed to fatigue, you will notice a gradual increase in the intensity of the exercises you perform as you progress through the low back therapy system.

There are very specific progressions associated with the Strength training segment from session to session. You will notice a progression for each of the 4 movement patterns discussed earlier in the manual.

In general, you are first placed in a stable environment, so your body can learn a movement pattern without a lot of difficulty or confusion. Then, variables are manipulated to create more unstable environments requiring your body to resolve the instability while still performing the movement.

Instability is introduced in a number of ways.

In many cases, you will begin by performing movement patterns in a tall kneeling (on both knees) position. This is considered to be a fairly stable and comfortable position to start exercise from. The tall kneeling position progresses to a half kneeling position (one knee down) to create more instability, requiring your core stabilizers to resolve the instability by firing more aggressively. Next, the tall kneeling position is taken to a more functional, standing bilateral stance. And, in many cases this positioning progresses to a split stance or even a single leg stance.

The objective is to force your body to continue to adapt to new stimuli and still express strength in the process.

Other strength training progressions include transitioning from bilateral upper body movements to unilateral or alternating patterns. Again, this simply creates more instability that the body must resolve to perform the movement.

In some cases, progressions are executed by simply adjusting the dumbbell hold on a leg exercise. From holding one dumbbell vertical at your chest, to two dumbbells held at your side, to one dumbbell held at your side or above your head, you'll notice the changing demands that are placed on your body. The off-set dumbbell hold is used frequently in programming to integrate core stability into the movement, as you must work to counter the single dumbbell hold and resist rotation in the trunk while performing the bigger global movement.

These examples are just the tip of the iceberg. Your Strength training segment exercises change with every session, so you will be exposed to 72 different exercises over the course of the 18-session program. Some of the progressions are more subtle than others, but they each serve a purpose in challenging the body to strengthen and support the low back.

Another consideration, with regard to progressions, is the volume of work you will be performing from session to session throughout the program. You have the freedom to individualize your sessions and perform more or less work based on your individual needs, but the intention is for you to spend far more time performing the Prep Phase exercises than you do the Strength segment exercises early in the therapy process.

This goes back to the concept of addressing posture/alignment and motor control objectives first and foremost early on with less attention on endurance and strength. This continuum will shift throughout the process as posture/alignment and motor control become more ingrained.

Volume of work is broken down into sets and repetitions. You will notice in this manual that each exercise has a designated repetition count or time interval associated with each set that is performed. It's up to you to determine how many sets of each exercise you will perform for a particular session. But, as we stated above, the best course of action would be to perform additional sets in the Prep Phase segment early in your therapy process and then transition to more Strength training sets as your body adapts.

You'll notice that you are provided loose time parameters for your Self Myofascial Release sets. This is because tissue quality and adaptation will vary greatly from one individual to another. As the "hot spots" begin to dissipate from one session to the next, you will be able to back off your time spent in this segment, although it will always be necessary to do the minimum.

Your time and repetitions per set will remain consistent for your Flexibility, Mobility, and Activation segments throughout the therapy process. It's the number of sets that will adjust as you progress.

A quick scan through the Strength segments of the programming will reveal that the designated repetition counts adjust from 12 in the first six sessions, to 10 in the middle six, and finally to 8 in the final six sessions. This transition in rep counts reflects the concept of prioritizing endurance before strength throughout this process.

By nature, you will load an exercise more aggressively and express more force when the rep counts are lower. But, we must also take into account the element of instability that is intentionally introduced in many of the progressions. The added instability may make the exercise more intense without an increase in load.

If you are using the bands instead of cables, keep in mind that intensity or resistance is increased by simply adjusting your hand position on the band.

If you are limited on your dumbbell selection, don't assume that you can't make an exercise more intense. Tempo of movement and your own specific muscle contractions go a long way toward determining the intensity of a set.

In general, you want to spend 2 seconds on the lowering (decelerating) phase of movement, 1 second on the lifting (accelerating) phase of movement, and 1 second on the transitional (amortization) phase in between. But, if you are limited on dumbbells you can simply increase the time spent during the lowering and transitional phases of movement. You can quickly make a 15 pound weight feel like a 25 pound weight simply by adjusting your tempos.

Another very important consideration for you will be behavior modification outside of the therapy sessions. What we're suggesting is that you be very conscious of your posture positions throughout the day.

We must get out of static work positions that compromise posture. The body's tissues adapt to what you give it, so if you're constantly hunched over with your hips flexed, you can expect that to show up in movement patterns even when you're not working, and that will contribute to low back pain.

Our solution is for you to set a timer to go off every 15 minutes to break you of poor posture cycles. This will naturally become more habitual for you, and you may not need the timer after awhile.

Chapter 3:

Equipment Needs

There were 2 very distinct considerations when it came to the programming for LowBackTherapy.com. First of all, we wanted to ensure that we provided you with the most comprehensive and systematic series of exercises to rid you of your chronic low back pain and get you back to enjoying the finer things in life.

Second, we wanted to see that you could conveniently execute the program regardless of your circumstances. With that in mind, we meticulously plotted out each session, segment, and exercise with equipment needs in mind.

If you will be performing this therapy program in a commercial gym, every piece of equipment you will need should be at your disposal.

But, if you don't have a gym membership, don't sweat it. There's no need to go sign up. We have adapted this program to a home setting and only require the most basic equipment.

Below you will find a list of the types of equipment needed to perform this therapy program. In many cases, additional alternatives are provided.

• **Dumbbells**: Free weights are our preferred mode of resistance training, as opposed to machines. They force the body's stabilizers to contribute in order to execute movement patterns rather than relying on the guided path of a machine. Dumbbells are sold at many stores, and you won't need any of the very heavy ones. For convenience, you can consider the interchangeable dumbbell sets. They're more expensive, but every weight you would need is found in the same dumbbell block. It only takes a subtle adjustment to select the load that you need.

Truth be told, if you don't have dumbbells or don't feel like investing in some, you could likely find objects around your house that provide the same degree of resistance that a dumbbell does. Those same objects can also be used in the instances where you see a medicine ball utilized for resistance in the videos.

• **Thera-Band / Tubing**: Those performing the therapy program at home will substitute some sort of elastic band for the cable exercises. You will be able to execute the same movement patterns with resistance. The only difference is that there is a graduating assistance associated with using a band, while cable resistance is consistent throughout the entire range of motion. The band is perfectly functional, though, for our needs.

Aside from serving as a substitute for cable exercises, a band will also be used for several of the activities in the Activation segment, so it is a very versatile tool for us.

- Stability Ball: The stability ball won't be utilized as frequently throughout the programming as are dumbbells or the band, but it serves a very distinct purpose for us. As a tool, it introduces an element of instability that our body must resolve while performing specific movement patterns.
- **Foam Roller**: The foam roller is a very significant tool that will be used at the beginning of each session. Foam rollers are available at different lengths and densities. It is possible that your density selection could adjust over the course of this therapy program, but keep in mind that are manipulations you can execute while performing your soft tissue work to manually adjust the pressure you are feeling.

A foam roller is a tremendous investment beyond the scope of this therapy program, but if one isn't available and you have no interest in getting one, there are other options. You can apply pressure by using a medicine ball or various types of pipe where a cover or coating can be applied.

The bottom line is to decrease tissue density by using a tool that can apply pressure throughout the designated spots, so feel free to find another suitable option if you must.

• **Tennis Ball**: The most common tool to use for more isolated soft tissue work is the tennis ball. That being said, there are several viable substitutions. Other types of balls such as lacrosse balls, golf balls, soft balls, etc. can be used instead. Just be conscious of how each of these balls will likely feel different because of varying degrees of density.

Another very valuable tool that you will see used during soft tissue segments is the Stick. It costs a little more than the other soft tissue tools, but if you have one at your disposal, you will quickly appreciate the work that it can do.

Other minor objects or props that you will need to consider for the program include:

- **Bench / Box / Chair**: There are a handful of times during the program where you will sit on, step on, or utilize an object that can function like a bench. There is no need to go buy a specific piece to satisfy this need. There is a great deal of latitude in how these particular exercises are performed with regard to the object you're using, and chances are you have something laying around the house that will do just fine.
- Stick / Rod / Dowell: Early on in programming, you will utilize a stick to assess your own posture during specific movement patterns. Once again, there are several suitable replacements that can be used.
- Anchor / Attachment for Band: This certainly isn't something that you should feel the need to go out and buy. We reference it here only to make you aware of this consideration. You will need to find something secure in your home to loop your band to in order to perform the exercises. There are times when the band attachment is high, low, or somewhere in between.

Chapter 4:

Therapy Sessions

Session #1

SELF MYOFASCIAL RELEASE (A): Minimum of 10 seconds per spot. Spend more time as needed.

Tennis Ball: Plantar Fascia

Tibialis Anterior / Peroneals Posterior Shoulder Capsule

Pec Minor

Foam Roller: IT Band

Quadriceps Groin

Gluteus Medius Latissimus Dorsi

FLEXIBILITY (A): 10 seconds per stretch MOBILITY

Wall Pec Linear Ankle Wall Mob (x 10 each ankle)

Standing Quadriceps Lying Psoas March (x 10 each leg / 2 second pause)

Standing Groin Supine Knee to Knee (x 10 reps)

Supine Shin Grab Foam T-Spine Extension (x 5 reps @ 2 locations)

Side-lying External Rotation (x 10 each arm)

ACTIVATION

Standing Posture (x 10 reps)
Quad Draw-in (x 10 reps)
Quad Bench Bent-knee Hip Extension (x 10 each leg)
Facing Forearm Wall Slide (x 10 reps)
Wall March Isometric Hold (x 5 each leg / 5 second pause)
Wall No Money (x 10 reps)

STRENGTH TRAINING PLUS FILLERS

Cable / Band Tall Kneeling Chest Press (x 12 reps) à facing forearm wall slide (x 10 reps)

Stability Ball Body Weight Squat (x 12 reps) à wall march isometric hold (x 5 each leg / 5 second pause)

Cable / Band Tall Kneeling Low Row (x 12 reps) à foam t-spine extension (x 5 reps @ 2 locations)

Cable / Band Pull-through (x 12 reps) à quad draw-in (x 10 reps)

EXIT WORK: Choose from Self Myofascial Release, Flexibility, Mobility, & Activation

SESSION OVERVIEW

Session #1 begins by addressing soft tissue work with the tennis ball in the Self Myofascial Release series A. First, you will roll the arch of your foot (plantar fascia) which should create an immediate loosening of the muscles running up the back side of your body, since your fascial system functions as 1 unit. Next, you will address the soft tissue around your shin before moving to the back of your shoulder and pec, where you will likely find a lot of soreness. Upon moving to the foam roller, you will roll the IT band. This is a critical spot to roll, because you can't address it with any sort of stretching. You are almost assured of finding many sore spots on the IT band. Follow this by rolling the front (quadriceps) and inside (groin) of the upper leg before moving on to outer gluteus and side of your trunk up toward the shoulder (latissimus dorsi).

With tissue density decreased you will move on to Flexibility series A, the first of 4 static stretching protocols where the goal is to now lengthen the muscle. You will target 4 areas of the body that were addressed during soft tissue work. The pec will be lengthened while using a wall for assistance. The quadriceps and groin will be stretched from standing positions. And, the supine shin grab will address the glute and upper hamstring while maintaining stability in the trunk.

You will perform 5 mobility drills after completing the flexibility exercises. For the ankle wall mob, position your foot next to a wall so that your knee can tap the wall when your ankle reaches it maximum range of motion through flexion. The lying psoas march resembles the supine shin grab from the flexibility set, except you will not be assisting the range of motion with your arms. You will be addressing hip internal rotation with the knee to knee movement. Extension of the thoracic spine will be trained while using your foam roller as a hinge. The objective is to wrap your upper back around the foam at multiple segments. With an element of thoracic extension in place, you will work for rotation in a side-lying position.

Your activation segment starts by addressing the fundamentals of posture in a standing position. The objective will be to separate your rib cage from pelvis while pulling your head and shoulders back in line with your hips. The quad draw-in teaches you how to effectively brace your spine. You will use this procedure throughout the entire program. The bent-knee hip extension off a bench teaches you to access extension through your hip while stabilizing your trunk. The position on the bench doesn't allow you to extend your back. The forearm wall slide turns on the serratus anterior which drives upward rotation of the scapula. This also impacts the movement of your thoracic and lumbar spine. The march on the wall teaches your body to recognize contrasting actions at the hip on opposite sides. Muscles associated with the hip flexors will be active on 1 side, while hip extensors (gluteus) will be active on the side in contact with the ground. The no money exercise turns on the external rotators of the shoulder which assist in correcting posture.

Your first strength training movement functions as an upper body push pattern. The cable/band chest press will be performed from tall kneeling posture to emphasize hip extension and glute activation along with sound postural fundamentals in the upper body. The chest press will be followed by the wall slide "filler" to rehearse clean upward scapular rotation. Your lower body knee dominant pushing pattern will be the stability ball squat. The aid of the stability ball allows you to comfortably push your hips back on the squat to ensure that your squat pattern is sound before progressing forward. The wall march isometric hold "filler" will follow in which opposite contrasting activity on opposite hips is rehearsed. Next, you will perform the low row from a tall kneeling position. The low row functions as your upper body pulling pattern and should be performed with the shoulders set back and down through the entire movement. Thoracic spine extension will be reinforced in the "filler" movement that follows. Your fourth movement is the cable/band pull-through which grooves a hip hinge pulling pattern. Picture a lasso around your waster and someone pulling your hips back. Be sure to keep your weight situated on your heels in this movement. Fundamental core stability and bracing will be reinforced in the draw-in filler.

Your session will conclude with Exit Work as you choose 1 or more components of your Prep Work and repeat the process to emphasize clean movements once again.

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Session #2

SELF MYOFASCIAL RELEASE (B): Minimum of 10 seconds per spot. Spend more time as needed.

Tennis Ball: Calf / Achilles

Piriformis Infraspinatus Latissimus Dorsi Wrist Extensor / Flexor

Foam Roller: Hip Flexor / TFL

Hamstring Gluteus Maximus Rhomboids

FLEXIBILITY (B): 10 seconds per stretch MOBILITY

Wall Latissimus Dorsi
Linear Ankle Wall Mob (x 10 each ankle)
Standing Hamstring
Side-lying Leg Raise (x 10 each leg)
Half Kneeling Psoas Stretch
Prone Windshield Wiper (x 10 reps)

Standing Shin Grab Foam T-Spine Extension (x 5 reps @ 2 locations) Side-lying External Rotation (x 10 each arm)

ACTIVATION

Standing Posture (x 10 reps)
Quad Draw-in (x 10 reps)
Quad Bench Bent-knee Hip Extension (x 10 each leg)
Facing Forearm Wall Slide (x 10 reps)
Wall March Isometric Hold (x 5 each leg / 5 second pause)
Wall No Money (x 10 reps)

STRENGTH TRAINING PLUS FILLERS

Cable / Band Tall Kneeling Lat Pull (x 12 reps) à side-lying external rotation (x 10 each arm)

Weighted Hip Lift (x 12 reps) à prone windshield wiper (x 10 reps)

Cable / Band Half Kneeling Chest Press (x 12 reps) àwall no money (x 10 reps)

Stability Ball DMB Squat (x 12 reps) à quad bench bent-knee hip extension (x 10 each leg)

EXIT WORK: Choose from Self Myofascial Release, Flexibility, Mobility, & Activation

Session #2 begins with Self Myofascial Release series B. First, with the tennis ball, you will roll the calf and Achilles addressing both the outside and inside heads of the calf. Next, you will move up to the gluteus region, cross your leg, and focus on the piriformis. This is often a sensitive spot and will likely need more attention. You will then move up behind the shoulder and locate the infraspinatus, which will be a notch at the base of the joint. You follow that by assuming a standing position near a wall while rolling the ball on the latissimus dorsi from the back of the armpit downward. The wrist extensors and flexors will be addressed next by rolling the top and bottom of the forearm. If you have access to "The Stick" this can be done even more effectively. Your transition to the foam roller begins by rolling the muscles of the hip flexor region and TFL at the top of the front-side of the leg. Seated postures over extended periods of time often make these muscles very tight and short causing low back pain. Next, you will move on to the hamstring and roll the entire back-side of the upper leg at all angles and then move up to the gluteus next. You'll finish by placing the foam parallel with your spine and rolling out the rhomboids, the muscle between your spine and shoulder blades.

After decreasing tissue density, you will move on to Flexibility series B, the second grouping of flexibility protocols. Once again, areas that were targeted in soft tissue work will be addressed here to lengthen the muscles. First, you will stretch the latissimus dorsi with assistance from a wall. For the standing hamstring, understand that your hamstring attaches at the pelvis, so the goal is to turn your pelvis against the leg that is elevated to get the most substantial stretch. As I mentioned in the soft tissue work, extended time spent in a seated position causes the hip flexors to be tight and short, which ultimately compromises glute activity and hip extension, so people resort to lumbar extension. The half kneeling psoas stretch addresses 1 of the hip flexor muscles specifically. The standing shin grab will help to lengthen the muscles of glute and upper hamstring.

The ankle and thoracic spine mobility drills will carry over from session #1, while you will perform 2 new drills for hip mobility. Instead of hip flexion, which was performed in session #1's lying psoas march, you will train hip abduction with a side-lying raise in session #2. Internal rotation at the hip will be trained using the windshield wiper movement versus the knee to knee movement of the previous session. The objective is to keep the feet together and separate the feet without compromising your trunk stability to achieve hip internal rotation. Notice that there may be asymmetries between your right and left sides. The goal will be to increase range of motion on both sides to the point where they are similar.

The same 6 activation drills carry over from session #1 to session #2.

Your first strength training movement is an upper body pulling pattern. The cable/band lat pull will be performed from the tall kneeling position to emphasize posture and glute activation. Unlike the low row, this is a vertical pulling movement. Like the low row, your shoulder blades should remain set back and down through the entire movement. The lat pull will be followed by the side-lying external rotation "filler" to enhance thoracic mobility along with good movement through the shoulder. Your hip dominant movement for session #2 is the weighted hip lift, in which you will place your upper body in an elevated position with your feet down. Allow your hips to sag (flex) before driving through your heels and achieving extension, much like the pull-through in session #1. Hip internal rotation is rehearsed in the windshield wiper "filler" that follows. We'll take the cable/band chest press movement from session #1 and move from a tall kneeling position to a half-kneeling position with 1 knee up and 1 knee down. This creates a little instability and forces the core to activate more in order to stabilize the position. The external rotators will be activated in the wall no money "filler" that follows. And, for your knee dominant push pattern, dumbbells or weights will be added to the stability ball squat for more difficulty. The quad bench bent-knee hip extension will be the "filler" to continue to emphasize hip extension and lumbar stability.

Your session will conclude with Exit Work as you choose 1 or more components of your Prep Work and repeat the process to emphasize clean movements once again.

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SELF MYOFASCIAL RELEASE (A): Minimum of 10 seconds per spot. Spend more time as needed.

Tennis Ball: Plantar Fascia

Tibialis Anterior / Peroneals Posterior Shoulder Capsule

Pec Minor

Foam Roller: IT Band

Quadriceps Groin

Gluteus Medius Latissimus Dorsi

FLEXIBILITY (C): 10 seconds per stretch

MOBILITY

Half Kneeling Quadriceps Linear Ankle Wall Mob (x 10 each ankle)
Half Kneeling Adductor Lying Psoas March (x 10 each leg / 2 seco

Half Kneeling Adductor

Stability Ball Pec Stretch

Arm Cross

Lying Psoas March (x 10 each leg / 2 second pause)

Supine Knee to Knee (x 10 reps)

Supine Diamond Slide (x 10 reps)

Quad T-Spine Rotation (x 10 each side)

ACTIVATION

Quad Bent-knee Hip Extension (x 10 each leg)
Front Plank (x 10-20 seconds)
Doorway Slide (x 10 reps)
Seated Psoas Hold (x 10 seconds each side)
Cable / Band Horizontal Retraction (x 10 reps)
Hurdle Walk w/ Pause (x 10 steps each leg / 2 second pause)

STRENGTH TRAINING PLUS FILLERS

DMB Tall Kneeling Shoulder Press (x 12 reps) à cable / band horizontal retraction (x 10 reps)

Body Weight Box Squat (x 12 reps) à seated psoas hold (x 10 seconds each side)

Cable / Band Half Kneeling Low Row (x 12 reps) à quad t-spine rotation (x 10 each side)

Weighted Single Leg Hip Lift (x 12 each leg) à front plank (x 10 seconds)

Session #3 begins by repeating the soft tissue series A from session #1. Ideally, you have broken down some scar tissue and adhesions since the last time you addressed these areas, so you should be feeling slightly less soreness this time through.

You will progress to a new set of stretches, Flexibility C, in today's flexibility segment as you address some of the same areas that were targeted in soft tissue work. You will assume a half kneeling position with 1 foot forward and 1 knee down for the quadriceps stretch. The closer you position yourself the surface that your back foot is up against, the more stretch you will produce on the quadriceps. They key is to maintain a chest-up position to maximize the stretch. You will then transition into an adductor (groin) stretch from the half kneeling position with 1 leg out wide to be stretched. This position should be manipulated to achieve the best stretch on the groin. The pecs will be stretched by laying supine on a stability ball with the arms outstretched in a "Y" position. Finally, the shoulder will be stretched by crossing the arm across the body.

As you move on to the mobility drills, you will perform the linear ankle wall mob for the last time before progressing to a new ankle mobility drill in session #4. For the hip, you will repeat the 2 drills from session #1, which were the lying psoas march and lying knee to knee. Ideally, you will experience more psoas activity and hip range of motion both through flexion and rotation than you did in session #1. You will progress to 2 new thoracic mobility drills in today's session. For the diamond slide, you will lie on your back with your shoulder blades depressed back and down and arms in a "W" position. The objective is to slide your arms to an overhead position while maintain scapular positioning and contact with the floor. Your second thoracic mobility drill will emphasize rotation from a quadruped position. Employ the draw-in fundamentals you learned during the initial sessions to brace the core and isolate movement through the thoracic spine.

For your first activation exercise you advance beyond using the bench and perform the bent-knee hip extension from a free-standing quadruped position. Now you will have to stabilize your spine while promoting hip extension without the aid of the bench. Next, you will perform a front plank. You should set your shoulder blades in the back and down position while activating the core to achieve neutral spine and the glutes to maintain hip extension in the plank. The head should hold a neutral position. The doorway slide will follow which is a progression from the forearm wall slide. You will abduct your shoulders to use the doorway frame and activate the serratus anterior, promoting better scapular elevation. Next, you will transition to a seated position and work to activate the psoas, which is the hip flexor muscle that promotes flexion above 90 degrees. The key is to hold posture while flexing the hip and not allow any compensation patterns. The cable/band horizontal retraction will be performed to train scapular retraction and promote better posture. And, the hurdle walk with a pause will draw upon the movement fundamentals of the seated psoas and also address single leg stability. Moving from a bilateral stance to a single leg stance should immediately turn on core and hip stabilizers that were not active in a bilateral stance.

Your first strength training movement is a dumbbell shoulder press from a tall kneeling position to integrate activity. Posture and shoulder mechanics are keys to making this a safe and productive movement. The "filler" behind this movement is the horizontal retraction to emphasize the contribution of scapular stabilizers in posture. Next, you will progress from the stability ball-aided squat to a free standing body weight squat with a touchdown on an object behind you to emphasize hip flexion. The seated psoas hold "filler" will follow as you continue to promote increased hip mobility through improved psoas activity. Your third exercise will resemble the pulling movement you performed in session #1, only this time you will execute the low row from a half kneeling position instead of a tall kneeling position. This will cause a little more instability and force you to resolve that through concentrated core and glute activity in addition to sound posture. Thoracic mobility will be enhanced afterward as you perform the quad t-spine rotation as a "filler". For your hip dominant movement, you will progress from the bilateral hip lift in session #2 and move to a single leg hip lift. Continue to work through your heel in this movement to maximize glute activity. This will be followed by a front plank "filler" to emphasize core stabilization among other variables.

Your session will conclude with Exit Work as you choose 1 or more components of your Prep Work and repeat the process to emphasize clean movements once again.

Session #4

SELF MYOFASCIAL RELEASE (B): Minimum of 10 seconds per spot. Spend more time as needed.

Tennis Ball: Calf / Achilles

Piriformis Infraspinatus Latissimus Dorsi Wrist Extenor / Flexor

Foam Roller: Hip Flexor / TFL

Hamstring Gluteus Maximus Rhomboids

FLEXIBILITY (D): 10 seconds per stretch MOBILITY

Single Arm Pull Knee Break (x 10 reps)

Band 3-way Hamstring

Half Kneeling Hip Flexor

Seated 90/90

Seated 90/90

Seated 90/90

Seated 90/90

Seated 90/90

Seated 90/90

Supine Diamond Slide (x 10 reps)

Quad T-Spine Rotation (x 10 reps)

ACTIVATION

Quad Bent-knee Hip Extension (x 10 each leg)
Front Plank (x 10-20 seconds)
Doorway Slide (x 10 reps)
Seated Psoas Hold (x 10 seconds each side)
Cable / Band Horizontal Retraction (x 10 reps)
Hurdle Walk w/ Pause (x 10 steps each leg / 2 second pause)

STRENGTH TRAINING PLUS FILLERS

Cable / Band Half Kneeling Lat Pull (x 12 reps) à supine diamond slide (x 10 reps)

Feet Elevated Body Weight Hip Lift (x 12 reps) à quad bent-knee hip extension (x 10 each leg)

DMB Half Kneeling Single Arm Shoulder Press (x 12 each arm) à doorway slide (x 10 reps)

DMB Goblet Box Squat (x 12 reps) à knee break (x 10 reps)

EXIT WORK: Choose from Self Myofascial Release, Flexibility, Mobility, & Activation

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Session #4 begins by repeating the soft tissue series B from session #2. Like I stated in the previous session, hopefully you have broken down some scar tissue and adhesions since the last time you addressed these areas, so you should be feeling slightly less soreness this time through.

You will perform the fourth set of flexibility exercises (D) today after completing your soft tissue work. First, you will stretch the rhomboids and upper back with the single arm pull. Next, you target the hamstring at multiple angles with the band 3-way hamstring. It's important to give attention to stabilizing the parts of the body other than the targeted leg to ensure there are no compensation patterns. The half kneeling hip flexor will address lengthening the muscles that run along the front side of the leg. Positioning adjustments can be made if this stretch is difficult to perform at first. The seated 90/90 will address hip external rotation. Remain conscious of your posture while performing the stretch.

A new ankle mobility drill is introduced today with the knee break. You will be performing the same movement pattern through the ankle as with the wall mob but will be doing so this time independent from the wall with both ankles moving at the same time. The multi-planer split squat series begins today in the sagittal, or linear, plane of movement. The key movement pattern takes place at the hip of the lead leg, while the spine should remain stable. Thoracic mobility, shoulder range of motion, and posture is also a priority as the arms will remain raised in an overhead position. The side-lying leg raise and windshield wiper movements from session #2 will be repeated in today's session, as will the 2 thoracic mobility drills from session #3, the diamond slide and quad rotation.

The same activation series from session #3 will be repeated in session #4.

Your first strength training movement for the day is the lat pull performed from a half kneeling position instead of a tall kneeling position as was performed in session #2. All the same movement cues apply, only this time you will have to work harder to stabilize yourself because of the half kneeling position. The diamond slide "filler" will be performed after to reinforce efficient movement through the shoulder and upper back. For your hip dominant movement, you will perform a hip lift, but this time you will perform it from a position with your feet elevated instead of your back like in previous sessions. The hip lift will be backed up with quad bent-knee hip extension to reinforce glute activity in conjunction with core stability. For your upper body push movement, you will progress the shoulder press to a half kneeling position while pressing 1 dumbbell at a time. This will require significant more stability that the shoulder press from session #3. This will be followed by a doorway slide "filler" where proper scapular elevation is rehearsed. Your final strength training movement is the goblet box squat where you will take the body weight squat performed in session #3 and load the pattern with a weight held under your chin to allow for good posture. The box (or whatever is available) is utilized to reinforce depth and confidence in the pattern. Ankle mobility will be reinforced afterward in the "filler" movement.

SELF MYOFASCIAL RELEASE (A): Minimum of 10 seconds per spot. Spend more time as needed.

Tennis Ball: Plantar Fascia

Tibialis Anterior / Peroneals Posterior Shoulder Capsule

Pec Minor

Foam Roller: IT Band

Quadriceps Groin

Gluteus Medius Latissimus Dorsi

FLEXIBILITY (A): 10 seconds per stretch MOBILITY

Wall Pec Knee Break (x 10 reps)

Standing Quadriceps Frontal Split Squat (x 10 each leg)
Standing Groin Single Leg Dead-lift (x 10 each leg)

Supine Shin Grab Knee to Knee (x 10 reps)

Seated T-Spine Rotation (x 10 each side) Bent-over T-Spine Rotation (x 10 each side)

ACTIVATION

Quad Straight-knee Hip Extension (x 10 each leg) Side Plank (x 10-20 seconds each side) Seated Hip Hinge (x 10 reps) Cable / Band Vertical Retraction (x 10 reps) Clam (x 10 each leg) Fulcrum 1 (x 10 each hand)

STRENGTH TRAINING PLUS FILLERS

Cable / Band Standing Chest Press (x 12 reps) à seated t-spine rotation (x 10 each side)

DMB Goblet Squat (x 12 reps) à quad straight-knee hip extension (x 10 each leg)

Cable / Band Tall Kneeling Single Arm Row (x 12 each arm) à cable / band vertical retraction (x 10 reps)

Stability Ball Feet Elevated Hip Lift (x 12 reps) à single leg dead-lift (x 10 each leg)

Session #5 begins by performing the soft tissue series A from sessions #1 and #3.

You will also go back to your session #1 stretches and repeat series A for Flexibility. You should experience increased range of motion from the first time you performed these stretches.

You will repeat the knee break ankle mobility drill that was performed in session #4. A couple new hip mobility drills will be introduced in the form of the frontal split squat and single leg dead-lift. Your split squat movement from session #4 transitions from linear movement to lateral movement. The same principles apply with regard to hip mobility and core stability. A significant key to performing this movement is to ensure that the foot, knee, and hip on the loaded side don't begin to rotate as you initiate movement. This is a compensation pattern that we want to eliminate. The single leg dead-lift teaches a hip hinge pattern while utilizing only about 10 degrees of knee flexion. After reaching the peak of your range of motion in the hip, pull back to top and assume an extended hip position. The knee to knee movement from previous sessions will be employed again to train hip internal rotation. The seated and bent-over rotations are introduced to train thoracic mobility in a rotational plane. For both movements, it's critical to establish posture first and extension in the thoracic spine before seeking rotation.

Your activation series progresses today by starting off with a straight-knee hip extension movement from a quadruped position. This creates a longer lever for the body to stabilize and resist movement in the trunk. You will transition from a front plank to a side plank where the goal is to resist rotation in the trunk. Many of the same variables are in play from the front plank with regard to core and glute activity. The seated hip hinge is utilized to continue training the body to seek movement through the hips and activate the glutes by squeezing through the top of the movement. In today's session you will transition from horizontal scapular retraction to vertical and learn to activate the muscles of the trapezious that depress the scapulae. The clam will be performed to turn on the gluteus medius, a muscle critical to stability at the knee which impacts the surround joints. The first of 3 fulcrum progressions is introduced in today's session. The objective here is to activate all the motor units within the back extensor muscles. It's very important to never extend the spine beyond the neutral position when performing this exercise.

For your first strength training exercise of the day, you will transition from kneeling positions to a standing position for the cable/band chest press. Mechanics will remain the same for the upper body. You will only need to adjust to the new dynamics of the standing position. You will reinforce thoracic spine mobility afterward with the seated t-spine rotation. You will perform the goblet squat again for your knee dominant lower body pattern like in session #4. Only this time, you will not use the box as an aid behind you. Your "filler" movement that follows will be the quad straight-knee hip extension reinforcing good mechanics at the hip and trunk. You will return to horizontal pulling with the tall kneeling single arm row. This a progression from the low row performed in previous sessions. The single arm movement will require more core stability than the double arm row. Trapezious activation will be reinforced afterward with the vertical retraction exercise. The feet elevated hip lift from session #4 will progress to a stability ball in today's session which requires more stabilization from the body. This will be followed by the single leg dead-lift to reinforce hip mobility.

SELF MYOFASCIAL RELEASE (B): Minimum of 10 seconds per spot. Spend more time as needed.

Tennis Ball: Calf / Achilles

Piriformis Infraspinatus Latissimus Dorsi Wrist Extenor / Flexor

Foam Roller: Hip Flexor / TFL

Hamstring Gluteus Maximus Rhomboids

FLEXIBILITY (B): 10 seconds per stretch MOBILITY

Wall Latissimus Dorsi Knee Break (x 10 reps)

Standing Hamstring Transverse Split Squat (x 10 each leg)
Half Kneeling Psoas Stretch Supine Single Leg Raise (x 10 each leg)

Standing Shin Grab Windshield Wiper (x 10 reps)

Seated T-Spine Rotation (x 10 each side) Bent-over T-Spine Rotation (x 10 each side)

ACTIVATION

Quad Straight-knee Hip Extension (x 10 each leg) Side Plank (x 10-20 seconds each side) Seated Hip Hinge (x 10 reps) Cable / Band Vertical Retraction (x 10 reps) Clam (x 10 each leg) Fulcrum 1 (x 10 each hand)

STRENGTH TRAINING PLUS FILLERS

Cable / Band Tall Kneeling Single Arm Pull (x 12 each arm) à side plank (x 10 seconds each side)

Stability Ball Hamstring Curl (x 12 reps) à seated hip hinge (x 10 reps)

Cable / Band Split Stance Chest Press (x 12 reps) à bent-over t-spine rotation (x 10 each side)

DMB Goblet Split Squat (x 12 each leg) à clam (x 10 each leg)

Session #6 begins by performing the soft tissue series B from sessions #2 and #4.

You will also go back to your session #2 stretches and repeat series B for Flexibility. You should experience increased range of motion from the first time you performed these stretches.

The knee break ankle mobility drill will be performed for the last time in session #6. Hip mobility work begins by transitioning to a transverse split squat in which the rotational plane of movement is employed in contrast to the linear and lateral planes that were used in the previous 2 sessions. The same movement fundamentals apply for this split squat despite the change of direction. Next, a single leg raise will be performed while lying on your back. The objective here is to create maximal range of motion at the hip without compensating elsewhere to create it. The windshield wiper, seated t-spine rotation, and bent-over t-spine rotation drills are repeated from previous sessions.

The same activation series from session #5 will be repeated in session #6.

The lat pull from sessions #2 and #4 will now be performed 1 arm at a time, requiring more core stability. A side plank "filler" will be performed afterward to reinforce core stability. The feet elevated hip lift movement from previous sessions will be utilized today as you add a hamstring curl with the stability ball for added difficulty. The glutes and hamstrings will have to coordinate together to perform this movement in conjunction with core stability. Functional hip movement and glute activation will be reinforced afterward with the seated hip hinge. The standing chest press will be progressed as you will assume a split stance today. This will introduce added instability and require additional core activity to perform. The "filler" that follows will be the bent-over t-spine rotation to enhance thoracic mobility. For your last strength training movement of the day, you progress to a goblet split squat. This should be a familiar movement pattern as you trained this same movement unloaded in mobility work during session #4 with the sagittal split squat. With that in mind, employ the same cues you used to execute the mobility drill. The only difference is that you're now adding load to the pattern to train strength. Glute medius activation will be addressed afterward with the clam.

SELF MYOFASCIAL RELEASE (A): Minimum of 10 seconds per spot. Spend more time as needed.

Tennis Ball: Plantar Fascia

> Tibialis Anterior / Peroneals Posterior Shoulder Capsule

Pec Minor

Foam Roller: IT Band

> Quadriceps Groin

Gluteus Medius Latissimus Dorsi

FLEXIBILITY (C): 10 seconds per stretch

MOBILITY

Half Kneeling Quadriceps Half Kneeling Adductor Stability Ball Pec Stretch

Arm Cross

Half Kneeling Adductor Dip (x 10 each ankle) Sagittal Split Squat (x 10 each leg) Single Leg Dead-lift (x 10 each leg) Cradle Walk (x 10 each leg)

Wall Slide (x 10 reps)

Crouched T-Spine Rotation (x 10 each side)

ACTIVATION

Bird-dog (x 10 each side) Quad Hip Circle (x 5 each direction / each side) Prone Lower Trap (x 10 reps) Horizontal Band Pull-apart (x 10 reps) Band Clam (x 10 each leg) Fulcrum 2 (x 10 each hand)

STRENGTH TRAINING PLUS FILLERS

Stability Ball DMB Shoulder Press (x 10 reps) à crouched t-spine rotation (x 10 each side)

DMB Split Squat (x 10 each side) à quad hip circle (x 5 each direction / each side)

Cable / Band Half Kneeling Single Arm Row (x 10 each arm) à prone lower trap (x 10 reps)

DMB Suitcase Dead-lift (x 5 each hand) à single leg dead-lift (x 10 each leg)

Session #7 begins by performing Self Myofascial Release series A.

You will also go back to your session #3 stretches and repeat series C for Flexibility. You should experience increased range of motion from the first time you performed these stretches.

Your mobility work begins with the half kneeling adductor dip to increase ankle mobility. Place your foot underneath or just behind the knee to achieve enough range of motion. As an added bonus, you will also get some flexibility benefits in the groin from this movement. You will repeat the sagittal split squat mobility drill from session #4 with the objective of experiencing more efficient and functional movement this time around. You will also repeat the single leg dead-lift movement for hip mobility. The cradle walk is introduced today for external rotation of the hip as the opposed to the internal rotation trained with the knee to knee and windshield wiper drills. This will function as a more dynamic version of the seated 90/90 stretch that you performed in Flexibility series D. Pay close attention to the hand placements on the leg before pulling up, and be sure to hold posture and not be too aggressive with the rotational movement of the hip. The wall slide is introduced for thoracic mobility in conjunction with a clean scapular glide and movement at the shoulder. This can be compared favorably to the doorway slide of previous sessions. The crouched t-spine rotation is a progression from the quadruped t-spine rotation. You will notice that you'll feel more restricted from the crouched position than you did from the quadruped position, because you are eliminating any possible compensation from the lumbar and hips.

For activation, you will first progress from the bent-knee and straight-knee hip extensions to a bird-dog movement in which you add a reach from the opposite-side arm, which will require more stability and activation from the core to perform effectively. The hip circle is performed from a quadruped position. The objective is to stabilize the spine while seeking as much rotational range of motion through the hip in both directions. For the prone lower trap, you assume the anatomical position face down and recreate the standing posture drill that you performed in the first couple sessions. The horizontal band pull-apart will also be utilized to activate the muscles of the upper back, including the lower trapezius. You will create more glute medius activation in the next drill by adding a band for resistance to the clam. And, finally, you will move your fulcrum position forward requiring more activation from the motor units of the back extensor muscles.

For you first strength training movement, we will take the shoulder press from a kneeling position to the stability ball, adding new dynamic of instability to resolve. It will be chased with a thoracic mobility drill, the crouched rotation. Next, you will perform the split squat again, but this time you will progress from the goblet hold to a dumbbell hold by your side with both arms. Be sure to focus on maintaining your posture for the entire set rather than allowing your shoulders to roll forward because of fatigue. Core activation and hip rotational mobility will be reinforced afterward with the quadruped hip circle. Today, your single arm row will progress to a half kneeling position, requiring more stabilization efforts from your core. Lower trapezius activation will be reinforced afterward with the prone lower trap. The final strength training movement to be performed in today's session is the suitcase dead-lift. You will notice that it utilizes the same hip hinge pattern already trained in previous exercises such as the pull-through. You will be holding only 1 dumbbell to force your core to stabilize your spine and resist rotation. The "filler" that follow is the single leg dead-lift to reinforce hip mobility.

SELF MYOFASCIAL RELEASE (B): Minimum of 10 seconds per spot. Spend more time as needed.

Tennis Ball: Calf / Achilles

Piriformis Infraspinatus Latissimus Dorsi Wrist Extenor / Flexor

Foam Roller: Hip Flexor / TFL

Hamstring Gluteus Maximus Rhomboids

FLEXIBILITY (D): 10 seconds per stretch

Single Arm Pull Band 3-way Hamstring Half Kneeling Hip Flexor

Seated 90/90

Half Kneeling Adductor Dip (x 10 each ankle) Frontal Split Squat (x 10 each leg) Supine Single Leg Raise (x 10 each leg) Standing Hip Internal Rotation (x 10 each leg)

Wall Slide (x 10 reps)

MOBILITY

Crouched T-Spine Rotation (x 10 each side)

ACTIVATION

Bird-dog (x 10 each side) Quad Hip Circle (x 5 each direction / each side) Prone Lower Trap (x 10 reps) Horizontal Band Pull-apart (x 10 reps) Band Clam (x 10 each leg) Fulcrum 2 (x 10 each hand)

STRENGTH TRAINING PLUS FILLERS

Cable / Band Half-Kneeling Single Arm Pull (x 10 each arm) à bird-dog (x 10 each side)

DMB Swing (x 10 each reps) à band clam (x 10 each leg)

SB DMB SA Shoulder Press (x 10 each arm) à wall slide (x 10 reps)

DMB Single Arm Split Squat (x 10 each leg) à standing hip internal rotation (x 10 each leg)

Session #8 begins by performing Self Myofascial Release series B.

You will also go back to your session #4 stretches and repeat series D for Flexibility. You should experience increased range of motion from the first time you performed these stretches.

Your same ankle mobility work will carry over to today's session with the half kneeling adductor dip. For hip mobility, you will return to the frontal split squat as you train lateral movement through the hip. The supine single leg raise from session #6 will be repeated in today's session. A new hip rotation drill is introduced today as you perform the standing hip internal rotation drill. It's important to focus on turning your hips hard against the non-moving leg instead of simply swinging the leg over. The wall slide and crouched t-spine rotation drills will be repeated for thoracic mobility.

The same activation series from session #7 will be performed in session #8.

For the strength training segment, the same single arm pull from session #6 will be progressed to a half kneeling position. It's key to maintain neutral posture here and not compensate for the more unstable position. Lumbar stability and hip extension will be reinforced with the bird-dog "filler". A new hip hinge movement is introduced to-day with the dumbbell swing. Note that this movement is identical to the pull-through performed at the beginning of the therapy program, only faster with a different tool. That being said, perform the movement at a speed that you can tolerate and do NOT substitute back extension for hip extension. The band clam serve as the "filler" to continue to work on glute medius activation. The stability ball shoulder press will be progressed today as you perform the movement with 1 arm. The "filler" that follows will be the wall slide to enhance thoracic mobility and clean movement through the upper back and shoulders. Your final strength training movement of the day is the single arm split squat. Like the suitcase dead-lift in the previous session, the single arm hold will require more contribution from the core to stabilize the spine and prevent rotational movement. Hip rotational mobility will be reinforced afterward with the standing hip internal rotation drill.

SELF MYOFASCIAL RELEASE (A): Minimum of 10 seconds per spot. Spend more time as needed.

Tennis Ball: Plantar Fascia

Tibialis Anterior / Peroneals Posterior Shoulder Capsule

Pec Minor

Foam Roller: IT Band

Quadriceps Groin

Gluteus Medius Latissimus Dorsi

FLEXIBILITY (A): 10 seconds per stretch

MOBILITY

Wall Pec Standing Quadriceps Standing Groin Supine Shin Grab Half Kneeling Adductor Dip (x 10 each ankle) Transverse Split Squat (x 10 each leg) Shin Grab (x 10 each leg) Cradle Walk (x 10 each leg)

Side-lying Windmill (x 10 each arm)

Split Stance Broom Pec Mob (x 10 each arm)

ACTIVATION

Double Leg Hip Lift (x 10 reps) Stability Roll-out (x 10 reps) Elbow Push-up (x 10 reps) Vertical Band Pull-apart (x 10 reps) Band Standing Hip ER (x 10 each leg) Fulcrum 3 (x 10 each arm)

STRENGTH TRAINING PLUS FILLERS

SB DMB Single Arm High Chest Press (x 10 each arm) à elbow push-up (x 10 reps)

DMB Single Arm Snatch Split Squat (x 10 each leg) à shin grab (x 10 each leg)

Cable / Band Standing Row (x 10 reps) à vertical band pull-apart (x 10 reps)

Glute-Ham Negative (x 10 reps) à half kneeling adductor dip (x 10 each ankle)

Session #9 begins by performing Self Myofascial Release series A.

You will also go back to your session #1 and session #5 stretches and repeat series A for Flexibility.

You will perform the half kneeling adductor dip for the last time in today's session. It will be followed by the same transverse split squat you performed in session #6. You will be introduced to a new hip mobility drill today with the shin grab. This will serve as the dynamic version of the standing shin grab that you perform in your Flexibility B set. Maintain a neutral spine, and don't substitute lumbar extension for hip flexion. The cradle walk, for hip external rotation, will be repeated in this session. Two new mobility drills are introduced today to improve movement in the thoracic spine and shoulder girdle. The side-lying windmill is a progression from the side-lying external rotation that was performed during the early sessions. And, the broom pec mob should serve to increase range of motion at the shoulder and improve your thoracic extension at the same time.

Your activation segment will begin on your back while performing the double leg hip lift to promote contribution from the glutes toward hip extension. Like the other hip lifts you've performed so far, it's important to push through your heels to achieve maximal glute activation. This will be followed by the stability ball roll-out for core stability. The objective is to prevent lumbar extension throughout the movement. The ball placement can be adjusted to increase or decrease difficulty. Next, you will perform the elbow push-up. You'll notice that elements of the plank are present in this exercise, so be sure to employ those fundamentals. Otherwise, you are working to strengthen the scapular stabilizers. Like the horizontal movement, the vertical band pull-apart will be performed to activate the lower trapezius, which is critical for optimal shoulder function and posture. The glute medius and external rotators of the hip will be turned on while performing the band standing hip external rotation exercise. This will contribute to better movement at the hip and improved stability at the lumbar spine. You have also reached the third and final progression of the fulcrum as you extend the lever and move your positioning forward for greater activity of the back extensors.

During the strength training segment, you return to a horizontal pushing pattern with the single arm high chest press performed on a stability ball. Core and shoulder stability will be required as you press 1 dumbbell while maintaining the other in an elevated position. You will assume a bridge position on the stability ball with your head supported and hips up to integrate core and glute activation. The "filler" behind the press is the elbow push-up for activation of the scapular stabilizers among other parts of the body. Next, you will transition to a snatch position for your single arm split squat. This will require more stability throughout the body in contrast the low dumbbell hold. The shin grab mobility drill will follow to reinforcement sound hip flexion. Your upper body pull movement for the day is the cable/band standing row. In previous sessions you have performed this movement from kneeling positions. The vertical band pull-apart will be performed as the "filler" exercise to emphasize contribution from the muscles of the upper back. A glute-ham negative will be performed next to train the muscles of the back-side of the body. This movement will require synergistic strength from the glutes, hamstrings, and calves to execute properly. The objective is to decelerate your body weight down as slow as possible. Ankle mobility will be reinforced afterward with the half kneeling adductor dip.

SELF MYOFASCIAL RELEASE (B): Minimum of 10 seconds per spot. Spend more time as needed.

Tennis Ball: Calf / Achilles

Piriformis Infraspinatus Latissimus Dorsi Wrist Extenor / Flexor

Foam Roller: Hip Flexor / TFL

Hamstring Gluteus Maximus Rhomboids

FLEXIBILITY (B): 10 seconds per stretch

MOBILITY

Wall Latissimus Dorsi MP Ankle Wall Mob (x 5 each direction / each ankle)

Standing Hamstring Sagittal Lunge w/ Raise (x 10 each leg)

Half Kneeling Psoas Stretch Prisoner Squat (x 10 reps)

Standing Shin Grab Standing Hip Internal Rotation (x 10 each leg)

Side-lying Windmill (x 10 each arm)

Split Stance Broom Pec Mob (x 10 each arm)

ACTIVATION

Double Leg Hip Lift (x 10 reps) Stability Roll-out (x 10 reps) Elbow Push-up (x 10 reps) Vertical Band Pull-apart (x 10 reps) Band Standing Hip ER (x 10 each leg) Fulcrum 3 (x 10 each arm)

STRENGTH TRAINING PLUS FILLERS

Cable / Band Face Pull (x 10 reps) à stability ball roll-out (x 10 reps)

DMB Goblet Reverse Lunge (x 10 each leg) à standing hip internal rotation (x 10 each leg)

SB DMB Alternating Chest Press (x 10 each arm) à side-lying windmill (x 10 each arm)

DMB Goblet Step-up (x 10 each leg) à prisoner squat (x 10 reps)

Session #10 begins by performing Self Myofascial Release series B.

You will also go back to your session #2 and session #6 stretches and repeat series B for Flexibility.

You will begin today's mobility segment with a new but familiar drill for ankle mobility. The wall mob that you performed in the first 3 sessions will now be performed in multiple planes to increase range of motion in the ankle. You will be making a transition today with your hip mobility work. The stationary split squat patterns now become more dynamic as you will now lunge into each position. This adds more work for the body as you will have to contend with a greater amount of force to decelerate once your foot strikes the ground. Today, you will work in a linear path with the sagittal lunge and raise. Hip mobility will be trained with the prisoner squat, as will ankle and thoracic mobility when performed correctly. Feet will be positioned just outside your hips, and posture should be maintained to the best of your ability during the movement. The standing hip internal rotation will be repeated today, as will your 2 thoracic mobility drills, the side-lying windmill and broom pec mob.

The same activation series from session #9 will be used in session #10.

A cable face pull will be performed first during your strength training segment. This pulling movement is executed at a higher hand position than the low row that was programmed for previous sessions. This movement strengthens the muscles of the upper back. It will be followed by a stability ball roll-out to reinforce core stability. The goblet reverse lunge will be performed next. Although labeled as a lunge, the reverse action requires you to pull your body back to the neutral position, thus training your glurtes and muscles on the back-side of your leg more so than a forward lunge. Standing hip internal rotation will serve as the "filler" afterward. You will then progress to the alternating chest press, also performed on a stability ball like the press movement from the previous session. The alternating pattern requires you to stabilize your trunk to manage the contrasting movements. Utilize the same stabilizing cues on the stability ball that you employed in session #9. Thoracic mobility will be reinforced afterward with the side-lying windmill. Your final strength training exercise of the day is the goblet step-up. Remain conscious of your trunk positioning during the movement, as many people compensate for lack of hip mobility or leg strength by flexing at the trunk. Also, be sure to finish tall and extended through the hip at the top of the movement. The prisoner squat mobility drill will serve as the "filler" after completing your step-ups.

SELF MYOFASCIAL RELEASE (A): Minimum of 10 seconds per spot. Spend more time as needed.

Tennis Ball: Plantar Fascia

Tibialis Anterior / Peroneals Posterior Shoulder Capsule

Pec Minor

Foam Roller: IT Band

Quadriceps Groin

Gluteus Medius Latissimus Dorsi

FLEXIBILITY (C): 10 seconds per stretch MOBILITY

Half Kneeling Quadriceps MP Ankle Wall Mob (x 5 each direction / each ankle)

Half Kneeling Adductor Frontal Lunge w/ Press (x 10 each leg)

Stability Ball Pec Stretch

Arm Cross

Shin Grab (x 10 each leg)

Cradle Walk (x 10 each leg)

Quad T-Spine Rotation w/ Shoulder IR (x 10 each side) Foam T-Spine Extension (x 5 reps @ 2 locations)

ACTIVATION

Single Leg Hip Lift (x 10 each leg)
3-pt Leg Plank (x 10-20 seconds each leg)
Scap Push-up (x 10 reps)
X-Band / Monster Walk (x 10-20 seconds each direction)
Single Leg Figure 8 (x 5 each leg)
Prone W Raise (x 10 reps)

STRENGTH TRAINING PLUS FILLERS

DMB Standing Shoulder Press (x 10 reps) à quad t-spine rotation w/ shoulder IR (x 10 each side)

DMB Step-up (x 10 each leg) à cradle walk (x 10 each leg)

Cable / Band Single Arm Row (x 10 each arm) à 3-pt leg plank (x 10 seconds)

DMB Reverse Lunge (x 10 each leg) à single leg hip lift (x 10 each leg)

Session #11 begins by performing Self Myofascial Release series A.

You will also go back to your session #3 and session #7 stretches and repeat series C for Flexibility.

The multi-planer ankle wall mob will carry over from session #10 to session #11. The hip mobility lunge series transitions to a lateral movement in today's session with the frontal lunge with press movement. Continue to focus on keeping your weight on the back of the foot on contact and maintain trunk stability as your flex through your hip. A common flaw with this movement is to open the foot, knee, and hip of the landing leg to compensate for a lack of hip mobility and/or core stability. Keep this in check, and work to increase your range of motion with no compensations. The shin grab and cradle walk will be repeated from previous sessions. A new thoracic mobility drill is introduced in today's session as you will take the quadruped t-spine rotation from previous sessions and add shoulder internal rotation to the movement. You do this by fixing your arm behind your back on the rotating side. Be sure to keep your shoulder blade set down and back throughout the movement to maintain scapular stability. Thoracic extension will be trained again with the foam being used as a hinge.

For activation, the hip lift will progress to a single leg movement today. The fundamentals remain the same. You will progress from a standard front plank to a 3-point plank in which you elevate 1 leg while holding the position. This will require both additional core stability and glute activation on the elevated side. The scap push-up is a progression from the elbow push-up and serves the same purpose of activating the serratus anterior, which enhances scapular stability. Glute medius activity will be trained by performing either the x-band or monster walk, depending on what tools you have available. The single leg figure 8 will activate the stabilizers that support the joints of your leg and core. The bigger the 8, the harder your body will have to work to stabilize. The prone W raise will serve to activate your lower trapezius similar to the prone lower trap that you performed in previous sessions.

In today's session, you will take the shoulder press to a standing position and then reinforce thoracic mobility and range of motion at the shoulder afterward with the quad t-spine rotation with shoulder internal rotation filler. The step-up movement will transition from a goblet hold to a low dumbbell hold at your sides. Don't allow your shoulders to roll forward as advance through the set. The "filler" that follows will be the cradle walk to enhance external rotation of the hip. The standing cable/band row from session #9 becomes a single arm movement in today's session. The key adjustment will be to prevent trunk rotation with only 1 arm working. Core stability and glute activity will be enhanced afterward with the 3-point leg plank. Your final strength training exercise of the day will be the reverse lunge, only this time performed with 2 dumbbells held by your side instead of the elevated goblet hold you utilized in the previous session. Like the step-up, maintain a strong posture position throughout the set. The "filler" that follows will be the single leg hip lift to reinforce glute activity.

SELF MYOFASCIAL RELEASE (B): Minimum of 10 seconds per spot. Spend more time as needed.

Tennis Ball: Calf / Achilles

Piriformis Infraspinatus Latissimus Dorsi Wrist Extenor / Flexor

Foam Roller: Hip Flexor / TFL

Hamstring Gluteus Maximus Rhomboids

FLEXIBILITY (D): 10 seconds per stretch MOBILITY

Single Arm Pull MP Ankle Wall Mob (x 5 direction / each ankle)
Band 3-way Hamstring Transverse Lunge w/ Press (x 10 each leg)

Half Kneeling Hip Flexor Prisoner Squat (x 10 reps)

Seated 90/90 Standing Hip Internal Rotation (x 10 each leg)

Quad T-Spine Rotation w/ Shoulder IR (x 10 each side) Foam T-Spine Extension (x 5 reps @ 2 locations)

ACTIVATION

SL Hip Lift (x 10 each leg)
3-pt Leg Plank (x 10-20 seconds each leg)
Scap Push-up (x 10 reps)
X-Band / Monster Walk (x 10-20 seconds each direction)
Single Leg Figure 8 (x 5 each leg)
Prone W Raise (x 10 reps)

STRENGTH TRAINING PLUS FILLERS

Cable / Band Split Stance Single Arm Row (x 10 each arm) à foam t-spine extension (x 5 reps @ 2 locations)

DMB Single Arm Reverse Lunge (x 10 each leg) à mp ankle wall mob (x 5 each direction / each ankle)

DMB Standing Single Arm Shoulder Press (x 10 each arm) à scap push-up (x 10 reps)

DMB Single Arm Step-up (x 10 each leg) à x-band / monster walk (x 10 seconds each direction)

Session #12 begins by performing Self Myofascial Release series B.

You will also go back to your session #4 and session #8 stretches and repeat series D for Flexibility.

All of your mobility drills are repeated from previous sessions except for the transition to a transverse lunge with press for hip mobility. While training the right hip, you should aim to open your right foot up to 3:00 before returning to the neutral position after each rep. Likewise, the left foot should open to 9:00 while training the left hip. While repeating the other mobility drills, you should see considerable increases in your range of motion.

The same activation series from session #11 will be used in session #12.

During the strength training segment, the standing single arm row will progress to a split stance position, adding a degree of instability, which must be resolved. Thoracic extension will be enhanced afterward using the foam roller. Next, you will progress to single arm reverse lunge. You will hold the dumbbell on the same side of the moving leg, and your objective will be to resist rotation in the trunk while performing the movement. Your "filler" will be the ankle wall mob. Your standing shoulder press will also progress to a single arm movement requiring more stability from the trunk to execute. The scapular stabilizers will be addressed afterward in the "filler" with the scap push-up. Your last strength training exercise of the day will be the step-up performed with a single arm dumbbell hold for added instability. Like the other single arm movements, the objective is to resist rotational movement. Glute activation will be addressed in the "filler" with the x-band/monster walk.

SELF MYOFASCIAL RELEASE (A): Minimum of 10 seconds per spot. Spend more time as needed.

Tennis Ball: Plantar Fascia

Tibialis Anterior / Peroneals Posterior Shoulder Capsule

Pec Minor

Foam Roller: IT Band

Quadriceps Groin

Gluteus Medius Latissimus Dorsi

FLEXIBILITY (A): 10 seconds per stretch MOBILITY

Wall Pec Rotational Ankle Sweep (x 10 each ankle)
Standing Quadriceps Sagittal Lunge w/ Driver Raise (x 10 each leg)

Standing Groin Reverse Lunge w/ Posterolateral Reach (x 10 each side)

Supine Shin Grab Hip Airplane (x 10 each leg) Yoga Pike (x 10 reps)

Seated T-Spine Rotation (x 10 each side)

ACTIVATION

Single Leg Hip Lift Iso (x 10-20 seconds each leg)
3-pt Arm Plank (x 5 seconds each arm direction)
Reverse Crunch (x 10 reps)
Bowler Squat (x 10 each leg)
Cable / Band Single Arm Straight Arm Pull-down (x 10 each arm)
Supine Band No Money (x 10 reps)

STRENGTH TRAINING PLUS FILLERS

DMB Split Stance Shoulder Press (x 8 reps) à 3-pt arm plank (x 5 seconds each arm direction)

DMB Single Arm Snatch Step-up (x 8 each leg) à hip airplane (x 10 each leg)

DMB Split Stance Single Arm Row (x 8 each arm) à supine band no money (x 10 reps)

DMB Single Arm Snatch Reverse Lunge (x 8 each leg) à single leg hip lift iso (x 10 seconds each leg)

Session #13 begins by performing Self Myofascial Release series A.

You will be performing Flexibility series A in today's session.

The rotational ankle sweep is introduced in today's mobility segment. The objective is to keep the base foot still while swinging the opposite leg. In doing so, you will create rotational ankle mobility. Any movement of the foot will compromise mobility at the ankle. An added benefit of the movement is dynamic flexibility in the groin. Drivers, or additional weight, will be integrated to the lunge series performed in the previous 3 sessions. You will execute the same movement patterns, but the intensity of the drill will increase because of the load, as will core activity. You can use anywhere between 2-10 pounds for your driver weight. Today's movement is a sagittal lunge with a driver raise. Next, you will perform the reverse lunge with posterolateral reach. This movement works to improve hip mobility by loosening up tight hip flexors while improving range of motion at the shoulder. There is a significant link between 1 shoulder and the opposite hip and ankle. The hip airplane will be performed next to improve hip internal and external rotation. Focus on rotating the pelvis towards the front leg and then away to achieve the best range of motion. The upper body and back leg should remain in a straight line throughout the movement. The yoga pike will be performed to improve extension of the thoracic spine. Do not allow the lower back to sag at any point during the movement. The seated t-spine rotation will be repeated from previous sessions.

For activation, you will start with the single leg hip lift iso in which you take the single leg hip lift from the previous activation series and hold at the top instead of repeating the movement. Maintain a push through the heel to achieve maximum glute activation. Your 3-point plank progresses today to elevating an arm versus a leg. This will be more challenging. You will move the arm to 3 different positions while working to stabilize your trunk. You can bend your elbow to decrease the difficulty of the exercise. Traditional crunches are advised against for reasons already discussed in this manual, but reverse crunches are a different story. This movement targets the external obliques (lower abs) and helps to correct forward pelvic tilt, which contributes to lower back pain. The bowler squat will be performed to train the glutes to produce and resist motion in multiple planes of movement. Adjust the range of motion to your current abilities. The cable/band single arm straight arm pull-down is utilized to activate the lats and scapular stabilizers. And, intensity is increased on the no money drill by adding a band for resistance while lying on the ground.

The strength training segment begins with the shoulder press performed in a split stance, which exposes the body to more instability. This is followed by the 3-point arm plank to reinforce core stability. Next, you will take the single arm step-up and move the dumbbell into a snatch position above the head for added difficulty. The hip airplane will follow to enhance rotational hip mobility. We will then take the split stance single arm row and transition to a dumbbell, which adds a level of difficulty and increased demands for stabilization. The external rotators of the shoulder will be addressed with the band no money "filler" that follows. The single arm reverse lunge from the previous session transitions to a snatch position in session #13. Glute activation will be targeted in the "filler" with the single leg hip lift iso.

SELF MYOFASCIAL RELEASE (B): Minimum of 10 seconds per spot. Spend more time as needed.

Tennis Ball: Calf / Achilles

Piriformis Infraspinatus Latissimus Dorsi Wrist Extenor / Flexor

Foam Roller: Hip Flexor / TFL

Hamstring Gluteus Maximus Rhomboids

FLEXIBILITY (B): 10 seconds per stretch MOBILITY

Wall Latissimus Dorsi
Rotational Ankle Sweep (x 10 each ankle)
Standing Hamstring
Frontal Lunge w/ Driver Press (x 10 each leg)

Half Kneeling Psoas Stretch
Spiderman Shift (x 10 each side)
Standing Shin Grab
Stability Ball Knee to Knee (x 10 reps)

Yoga Pike (x 10 reps)

Seated T-Spine Rotation (x 10 each side)

ACTIVATION

Single Leg Hip Lift Iso (x 10-20 seconds each leg)
3-pt Arm Plank (x 5 seconds each arm direction)
Reverse Crunch (x 10 reps)
Bowler Squat (x 10 each leg)
Cable / Band Single Arm Straight Arm Pull-down (x 10 each arm)
Supine Band No Money (x 10 reps)

STRENGTH TRAINING PLUS FILLERS

DMB Single Arm Row (x 8 each arm) à yoga pike (x 10 reps)

Weighted Single Leg Dead-lift Reach (x 8 each leg) à spiderman shift (x 10 each side)

DMB Single Arm Split Stance Shoulder Press (x 8 each arm) à c/b sa straight arm pull-down (x 10 each arm)

DMB Goblet Step Lunge (x 8 each leg) à stability ball knee to knee (x 10 reps)

Session #14 begins by performing Self Myofascial Release series B.

You will be performing Flexibility series B in today's session.

Moving on to the mobility segment, the rotational ankle sweep will carry over to session #14. It will be followed by the lunge driver series which now transitions to lateral movement with the press. The spiderman series is introduced with the shift movement which enhances hip mobility and an element of thoracic extension. The knee to knee movement is moved to the stability ball to train hip internal rotation. The yoga pike and seated t-spine rotation carry over from previous sessions to train thoracic mobility.

The same activation series from session #13 will be used in session #14.

You will perform an upper body pull movement for your first strength training exercise. We are taking the single arm row movement and transitioning to a kneeling position on the bench. A flat back position should be held throughout the entire movement. The yoga pike "filler" will follow to enhance thoracic extension. Next, you will take the single leg dead-lift reach pattern that we have utilized in mobility work and add weight to it to strengthen the movement pattern. Hip and thoracic mobility will be rehearsed afterward with the spiderman shift. The split stance shoulder press from session #13 will progress to a single arm movement in today's session. The straight arm pull-down will serve as the "filler" afterward to promote activation of the scapular stabilizers. For your last strength training movement, we will take the lunge pattern trained in prep work and load with a goblet hold while stepping to an elevated position to minimize the impact of the landing while increasing the range of motion at the hip. Hip internal rotation will be enhanced afterward with the stability ball knee to knee drill.

SELF MYOFASCIAL RELEASE (A): Minimum of 10 seconds per spot. Spend more time as needed.

Tennis Ball: Plantar Fascia

> Tibialis Anterior / Peroneals Posterior Shoulder Capsule

Pec Minor

Foam Roller: IT Band

> Quadriceps Groin

Gluteus Medius Latissimus Dorsi

FLEXIBILITY (C): 10 seconds per stretch

MOBILITY

Half Kneeling Quadriceps Half Kneeling Adductor Stability Ball Pec Stretch Arm Cross

Rotational Ankle Sweep (x 10 each ankle) Transverse Lunge w/ Driver Press (x 10 each leg) Reverse Lunge w/ Posterolateral Reach (x 10 each side) Hip Airplane (x 10 each leg)

Spiderman Reach (x 10 each side) Side-lying Windmill (x 10 each side)

ACTIVATION

Single Leg Hip Lift + (x 10 each leg) Forward Crab Walk (x 10 alternating steps) Suitcase Carry (x 10 yards each hand) Cable / Band Anti-Rotation Chop (x 10 each side) Wall Band No Money (x 10 reps) Prone Trap (Y) Raise (x 10 reps)

STRENGTH TRAINING PLUS FILLERS

Stability Ball DMB Prone Shoulder Press (x 8 reps) à forward crab walk (x 10 steps or 10 yards)

DMB Step Lunge (x 8 each leg) à cable / band anti-rotation chop (x 10 each side)

DMB Reverse Fly (x 8 reps) à side-lying windmill (x 10 each side)

DMB Single Leg Dead-lift (x 8 each leg) à reverse lunge w/ posterolateral reach (x 10 each side)

Session #15 begins by performing Self Myofascial Release series A.

You will be performing Flexibility series C in today's session.

You will perform the rotational ankle sweep for the last time in today's session. Hip mobility work will begin will begin with the driver lunge series as you transition to the transverse (rotational) movement. The reverse lunge with posterolateral reach and hip airplane will be repeated from previous sessions. For thoracic mobility, the spiderman reach is introduced today. You will assume the forward shift position for the spiderman pattern and hold. While in this position, maintain thoracic mobility and rotate the shoulders for rotational mobility. You will conclude your mobility work with the side-lying windmill.

To begin activation, you will take the single leg hip lift movement and add resistance to the elevated leg by pushing on the front of the thigh. This will activate the hip flexor muscles to coordinate with hip extensor activation on the pushing leg. The forward moving crab walk will serve to activate the glutes and core, while also opening up your posture. The suitcase carry will call upon the core to prevent rotational movement and also coordinate the hip with the opposite shoulder while walking. Core stability is also trained with the cable/band anti-rotation chop. The resisted no money drill will be trained once again, this time in a standing position against a wall. The prone trap raise, or Y, will be utilized to turn on the lower trapezius muscles that promote functional movement of the shoulder and better posture.

Your strength training segment begins by assuming a prone position on the stability ball to execute the shoulder press. It will require significantly less load to perform than the other shoulder press movements, but it will demand more stabilization effort on your part. The crab walk will follow to reinforcement activation and posture. The step lunge follows and will be executed with a low dumbbell hold today instead of the goblet hold that was used in session #14. Core stability will be enhanced afterward with the anti-rotation chop. The rear deltoids and upper back will be strengthened in the next exercise with the reverse fly. Thoracic mobility will be enhanced in the "filler" that follows with the side-lying windmill. You will progress from the weighted single leg dead-lift reach to a low dumbbell hold. The key is to maintain the same spine position that you have grooved in mobility work and the weighted reach. Hip flexor mobility and shoulder range of motion will be enhanced with the reverse lunge and posterolateral reach "filler" that follows.

SELF MYOFASCIAL RELEASE (B): Minimum of 10 seconds per spot. Spend more time as needed.

Tennis Ball: Calf / Achilles

> Piriformis Infraspinatus Latissimus Dorsi Wrist Extenor / Flexor

Foam Roller: Hip Flexor / TFL

> Hamstring Gluteus Maximus Rhomboids

FLEXIBILITY (D): 10 seconds per stretch

MOBILITY

Single Arm Pull Band 3-way Hamstring Half Kneeling Hip Flexor

Seated 90/90

Rocking Ankle Pike (x 10 each ankle) Sagittal Lunge w/ Driver T-Spine Rotation (x 10 each leg) Spiderman Shift + Extension (x 10 each segment / each side) Stability Ball Knee to Knee (x 10 reps) Spiderman Reach (x 10 each side)

Side-lying Windmill (x 10 each side)

ACTIVATION

Single Leg Hip Lift + (x 10 each leg) Forward Crab Walk (x 10 alternating steps) Suitcase Carry (x 10 yards each hand) Cable / Band Anti-Rotation Chop (x 10 each side) Wall Band No Money (x 10 reps) Prone Trap (Y) Raise (x 10 reps)

STRENGTH TRAINING PLUS FILLERS

DMB Head-supported Bent-over Row (x 8 reps) à suitcase carry (x 10 yards each hand)

DMB Single Arm Single Leg Dead-lift (x 8 each leg) à spiderman shift + extension (x 10 each segment / each side)

Stability DMB Single Arm Prone Shoulder Press (x 8 each arm) à prone trap (y) raise (x 10 reps)

DMB Goblet Lunge (x 8 each leg) à stability ball knee to knee (x 10 reps)

Session #16 begins by performing Self Myofascial Release series B.

You will be performing Flexibility series D in today's session.

Mobility work will begin today with a new exercise to increase range of motion at the ankle. You will perform the rocking pike by attempting to drive your heel into the ground. This will stretch the calf and create flexion at the ankle. Your lunge driver series returns to the sagittal (linear) plane of movement but this time incorporates thoracic rotation. The key is to create rotation with a shoulder turn while bracing your core to ensure that the lumbar spine doesn't rotate. The spiderman series progresses as you will add a knee extension movement to the process to lengthen the hamstring allowing for improved pelvic alignment and a pain free back. You will perform the stability knee to knee, spiderman reach and side-lying windmill just as you have in previous sessions.

The same activation series used in session #15 will be used in session #16.

In today's strength training segment, you will lead off by performing the row from a bent-over position with your head supported on a fixed object that stands roughly hip high. You should demonstrate the posture fundamentals that have been drilled in previous sessions with your back flat and shoulders pulled back and down. Your head is supported to encourage you to maintain your position instead of rising up. Core stability will be reinforced with the suitcase carry that follows. The dumbbell single leg dead-lift will be performed with a single arm hold today to increase the anti-rotational demands on the core. Hip mobility will be enhanced in the "filler" as you perform the spiderman shift and extension. The stability ball prone shoulder press will progress today to a single arm movement, adding an increased level of instability to the movement. Lower trapezius activation will be addressed in the "filler" with the prone trap (y) raise. Deceleration demands are increased today on the lunge as we remove the elevated landing. You will use a goblet hold in today's session. The "filler" the follows will focus on internal rotation at the hip with the stability ball knee to knee movement.

SELF MYOFASCIAL RELEASE (A): Minimum of 10 seconds per spot. Spend more time as needed.

Tennis Ball: Plantar Fascia

Tibialis Anterior / Peroneals Posterior Shoulder Capsule

Pec Minor

Foam Roller: IT Band

Quadriceps Groin

Gluteus Medius Latissimus Dorsi

FLEXIBILITY (A): 10 seconds per stretch

MOBILITY

Wall Pec Rocking Ankle Pike (x 10 each ankle)

Standing Quadriceps Frontal Lunge w/ Driver T-Spine Rotation (x 10 each leg)
Standing Groin Shin Grab Reverse Lunge w/ Overhead Raise (x 10 each side)

Supine Shin Grab Hip Airplane (x 10 each leg)

3-pt Plank w/ T-Spine Rotation (x 10 each side)

ACTIVATION

Single Leg Hip Lift w/ Tennis Ball (x 10 each side) Backward Crab Walk (x 10 alternating steps) Waiter Carry (x 10 yards each arm) Plank Hand Switch (x 5 reps over-and-back) Reach, Roll, & Lift (x 10 each arm) Prone Trap (T) Raise (x 10 reps)

STRENGTH TRAINING PLUS FILLERS

Push-up (x 8 reps) à backward crab walk (x 10 steps or 10 yards)

DMB Lunge (x 8 each leg) à single leg hip lift w/ tennis ball (x 10 each leg)

DMB Single Leg Single Arm Row (x 8 each arm) à waiter carry (x 10 yards each arm)

Cable / Band Lift (x 8 each side) à frontal lunge w/ driver t-spine rotation (x 10 each leg)

Session #17 begins by performing Self Myofascial Release series A.

You will be performing Flexibility series A in today's session.

The rocking ankle pike will be repeated to kick off today's mobility segment. Next, the driver lunge with t-spine rotation will transition to lateral movement. It is more difficult to separate the hips and thoracic spine in lateral movement than it was for linear movement, so place your attention on keeping that pattern clean. A couple movements will be combined for the next mobility drill, as a shin grab is followed by a reverse lunge and overhead raise for both hip and thoracic mobility. You will perform the hip airplane again for rotational mobility at the hip. The final mobility drill of the session integrates several training variables. Thoracic mobility will be trained along with glute and core activity as you hold a 3-point plank while rotating the thoracic spine.

The single leg hip lift will employ a tennis ball today as hip flexor activity is achieved by securing the ball instead of pushing against the leg. Your second activation drill is the crab walk, only this time you move backwards from that position. A waiter carry will be performed next to activate the core and shoulder stabilizers while linking functional movement from the hip to opposite shoulder. The plank hand switch will also address core and shoulder stabilization. Next, you will perform the reach, roll, and lift for activation of the lower trapezius. For your final activation drill of the day, you will transition from "Y" position to a "T" position while executing the prone trap raise to, once again, activate the lower trapezius.

A standard push-up will be performed today in the strength training segment. It's very important to keep in mind your plank fundamentals while performing this movement. Pay attention to the details of the push-up as many take the movement for granted and don't fulfill the true objectives of the push-up. It will be followed by backward crab walk, enhance posture and both glute and core activation. You will transition from a goblet hold to a low dumbbell hold today while performing the lunge. All the same movement fundamentals remain constant with regard to the lunge pattern. Glute and hip flexor activation will be addressed in the "filler" with the tennis ball single leg hip lift. Your upper body pulling pattern will be the dumbbell single leg single arm row. A great deal of muscle integration is required to perform this movement. While assuming a single leg stance, work to assume a "T" position with your trunk as close to parallel with the ground as possible. Maintain a flat back position while rowing a dumbbell with the arm opposite of the down leg. Core and shoulder stability will be targeted afterward with the waiter carry. Your final strength training exercise of the session is the cable/band lift. This incorporates a wide range of movement as you initiate movement from a low position and transition to an overhead finish. This will require a significant amount of muscle to perform. Hip and thoracic mobility will be enhanced with the frontal lunge and driver t-spine rotation afterward.

SELF MYOFASCIAL RELEASE (B): Minimum of 10 seconds per spot. Spend more time as needed.

Tennis Ball: Calf / Achilles

Piriformis Infraspinatus Latissimus Dorsi Wrist Extenor / Flexor

Foam Roller: Hip Flexor / TFL

Hamstring Gluteus Maximus Rhomboids

FLEXIBILITY (B): 10 seconds per stretch MOBILITY

Wall Latissimus Doris Rocking Ankle Pike (x 10 each ankle)

Standing Hamstring Transverse Lunge w/ Driver T-Spine Rotation (x 10 each leg)
Half Kneeling Psoas Stretch Spiderman Shift + Extension + T-S Reach (x 10 each segment

Standing Shin Grab / each side)

Stability Ball Knee to Knee (x 10 reps)
3-Point Plank w/ T-Spine Rotation (x 10 each side)

ACTIVATION

Single Leg Hip Lift w/ Tennis Ball (x 10 each side) Backward Crab Walk (x 10 alternating steps) Waiter Carry (x 10 yards each arm) Plank Hand Switch (x 5 reps over-and-back) Reach, Roll, & Lift (x 10 each arm) Prone Trap (T) Raise (x 10 reps)

STRENGTH TRAINING PLUS FILLERS

DMB Plank Row (x 8 each arm) à reach, roll, & lift (x 10 each arm)

Plate Lift (x 8 each side) à plank hand switch (x 5 reps over-and-back)

Stability Ball Push-up (x 8 reps) à prone trap (t) raise (x 10 reps)

DMB Goblet Lateral Lunge (x 8 each leg) à 3-point plank w/t-spine rotation (x 10 each side)

Session #18 begins by performing Self Myofascial Release series B.

You will be performing Flexibility series B in today's session.

Mobility work will begin with the rocking ankle pike again. Next, you will progress to rotational movement while performing the driver lunge with t-spine rotation. You will also integrate all 3 pieces of the spiderman series by combining the shift, reach, and extension. You will conclude your last session's mobility work with the stability ball knee to knee and 3-point plank with t-spine rotation that you performed in previous sessions.

The same activation series that was used in session #17 will be used in session #18.

Your final strength training session leads off with the plank row. You will employ the rowing fundamentals you've executed from previous sessions while doing so in a plank position. The objective is to row the dumbbells without upsetting the stability of your plank. Lower trapezius activation will be reinforced with the reach, roll, and lift. The cable/band lift will progress to utilizing a plate or weighted object instead. This will allow for more freedom of movement and create a greater demand for stability in the body. Core stability will be enhanced afterward with the plank hand switch. The push-up will be performed today on a stability ball instead of the floor. The ball will create a more unstable environment, so you will have to work hard to stabilize the ball before executing the push-up pattern. The "filler" will address lower trapezius activation in the form of the prone trap raise, or "T". Your final strength training exercise is the goblet lateral lunge. You have performed this movement pattern several times during mobility work, and now you will load it for strength. The 3-point plank with t-spine rotation will serve as the "filler" afterward to enhance thoracic mobility and activate the core and glutes.

Conclusion

Upon completing this therapy program, you should not only be relieved of your chronic low back pain, but you will also be equipped with the knowledge and tools to remain pain free for a lifetime.

This isn't a Band-Aid approach to curing what ails you. Our method of instruction was designed to empower you with the knowledge to apply functional movement patterns not only during your therapy sessions but also throughout your everyday activities. As we stated from the beginning, your quality of movement will determine the health of your back, and the rest of your body, for that matter.

Throughout this process, we hope that you can embrace the global therapy approach to treating the pain source rather than simply treating the pain site. Direct attention to the low back can provide temporary relief. However, addressing all of the variables surrounding the low back gets to the root of the problem and produces sustainable results.

Throughout this therapy program and beyond, you must remain conscious of the factors that will determine the health and feel of your lower back, such as:

- → soft tissue quality
- → muscle flexibility
- → joint mobility or stability depending on location
- → activation and strength of the gluteus to promote hip extension instead of lumbar extension
- → activation and strength of the muscles of the upper back to promote sound posture
- → activation and strength of the core musculature to stabilize the lumbar spine
- → balance of strength throughout the body in fundamental movement patterns

Having said all this, the key to your success with this therapy program is consistency. If a healthy low back is top priority, you must treat it as such. At the very least, you are blocking off about 45 minutes per day, 3 days per week, for 6 weeks.

Think about the consistent, repeated poor patterns over time that put you in this shape. That should give you an appreciation for the task at hand. Skipping therapy sessions on the designated days cannot be an option. And, if it seems inconvenient to set aside that time or you'd rather watch TV instead, think about the pain and inconvenience you will experience for years on end until your low back issues are resolved.

You must be focused during your sessions. No distractions. This is your therapy session time, and you have to have your mind on the session to achieve the best results. We have a lot bad habits to undo, and any slip in focus will compromise our objectives.

This program is cumulative by nature. Sure, there will be some breakthrough moments over the course of the 18 sessions, but you are more likely to experience subtle and gradual improvements from session to session that accumulate to create the relief and results you're hoping for. Again, this only takes place when you provide the consistency and focus that we know you're capable of.

Congratulations on taking the first step toward a better quality of life!