

Strength Training Plan

Why is Strength Training Important?

Strength training is an essential component of a triathlete's training program as it can provide many benefits including:

- Improved Performance: Strength training can help to improve power and endurance, which are essential for triathletes. By improving the strength of the muscles, triathletes can generate more power and maintain a higher level of intensity throughout the race
- **Improved Endurance**: Strength training can help improve muscular endurance, which is essential for triathletes who need to maintain a high level of intensity over long distances.
- **Injury Prevention**: Strength training helps to improve the stability and strength of muscles, tendons, and ligaments, which helps to reduce the risk of injury. This is especially important for triathletes who put much stress on their bodies through endurance training.
- **Improved Bone Density:** Strength training has been shown to improve bone density, which can reduce the risk of stress fractures and other bone-related injuries.
- **Improved Posture**: Triathletes spend a lot of time in a forward-leaning position, which can lead to imbalances in the body. Strength training can help to improve posture and reduce the risk of injury.
- **Improved Mental Toughness:** Strength training can help triathletes develop mental toughness and resilience, which can translate to improved performance on race day.
- **Injury Rehabilitation:** If a triathlete does experience an injury, strength training can be an effective form of rehabilitation, helping to rebuild strength and prevent further injuries.

How Often Should I Strength Train?

The frequency of strength training for a triathlete will depend on their individual goals, training program, and experience level. However, a general guideline is to perform strength training exercises two to three times a week. It is important to incorporate rest days into the training program to allow the muscles to recover and repair.

It is also important to note that strength training should not interfere with the triathlete's swim, bike, and run training. The strength training sessions should be scheduled in a way that complements the triathlon training and does not result in overtraining.

Team Go Big Strength Training Plan

The Team Go Big Strength Training Plan is split into two phases to ensure that athletes that are new to strength training can adapt to the strength training plan with minimal risk of injury.

Phase I: Adaptation - 1 set with 15 reps. The weight you select should be challenging enough to complete the desired number of reps with proper form. If you can easily perform more reps than the targeted range, the weight is likely too light. Conversely, if you struggle to complete the minimum number of reps or compromise your form, the weight is too heavy. The adaptation phase can last 2-4 weeks and is recommended to move to the Endurance phase when you can complete and Adaptation phase without soreness the next day

Phase II: Endurance - 2 sets with 15 reps. During the Endurance phase, As you gain strength and experience, you will need to progressively increase the weight to continue making progress. Aim to increase the weight or reps when you can comfortably perform more than your targeted rep range for multiple sets with good form.

With the Go Big Strength Training Plan - you can perform these exercises in three ways:

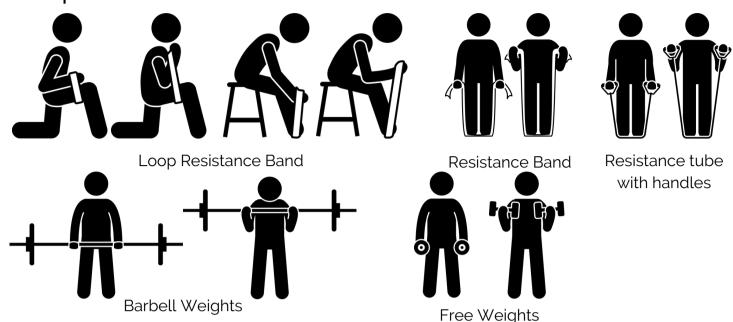
- Resistance Bands
- Weight Machines
- Free Weights/Barbell Weights

There is no right way or wrong way or easy way or hard way to perform this strength training plan. All are going to give you the desired results; select the method to perform this strength training plan that works with your lifestyle and your comfort level with strength training.

Before each strength workout, do a 10-minute cardio warm-up - run, jog, walk, bike, row, or elliptical trainer. Doing this will increase blood flow, body temperature, and heart rate before engaging in strength training. This helps to reduce the risk of injury and improve overall performance.

Exercise	Muscle Group	Helps With
Bicep Curl	Biceps	Swim. Bike
Calf Raises	Calfs	Run
Chest Press	Pectoral, Rotator Cuff, Triceps	Swim
Hip Abduction	Gluteus Medius, Gluteus Minimus, and Tensor Fasciae Latae	Bike, Run
Lateral Raise/Lateral Pulldown	Deltoids, Latissimus Dorsi	Swim
Leg Curl	Hanstrings	Bike, Run
Leg Extension	Quadriceps	Run
Leg Press	Quadriceps, Hamstrings, Glutes, and Abdominals	Bike and Run
Leg Raise	Hip Flexors	Bike, Run
Lunge	quadriceps, hamstrings, glutes, and calves.	Bike, Run
Row	Latissimus Dorsi	Swim
Squat	Quadriceps, Hamstrings, Glutes, and Abdominals	Bike, Run
Tricep Extension	Triceps	Swim

Bicep Curl



Resistance Band

- Stand with both feet on the middle of the resistance band, shoulder-width apart.
- Grasp the handles of the resistance band with both hands, palms facing up and arms extended down by your sides.
- Keep your elbows close to your torso and slowly curl the band up towards your shoulders, bending at the elbows.
- Squeeze your biceps at the top of the movement and hold for a second.
- Slowly lower the band back down to the starting position, straightening your arms completely.
- Repeat for the desired number of repetitions

It's important to keep your elbows close to your body throughout the exercise and avoid swinging or using momentum to lift the band. Also, be sure to breathe in as you curl the band up and exhale as you lower it back down. Adjust the resistance level of the band by stepping closer or further away from the anchor point.

Free Weights/Barbell

- Stand with your feet shoulder-width apart, maintaining a slight bend in your knees for stability.
- Hold a dumbbell in each hand (or a barbell) with your arms extended by your sides, palms facing forward. This is the starting position.
- Engage your core and keep your back straight and chest up.
- Slowly bend your elbows to lift the dumbbells towards your shoulders, keeping your upper arms stationary and close to your body. This movement should isolate the biceps.
- Pause briefly at the top of the curl when your biceps are fully contracted.
- Slowly lower the dumbbells back to the starting position, controlling the movement and resisting the pull of gravity.
- Repeat for the desired number of repetitions

t's important to keep your elbows close to your body throughout the exercise and avoid swinging or using momentum to lift the weights. Also, be sure to breathe in as you curl the weights up and exhale as you lower them back down.

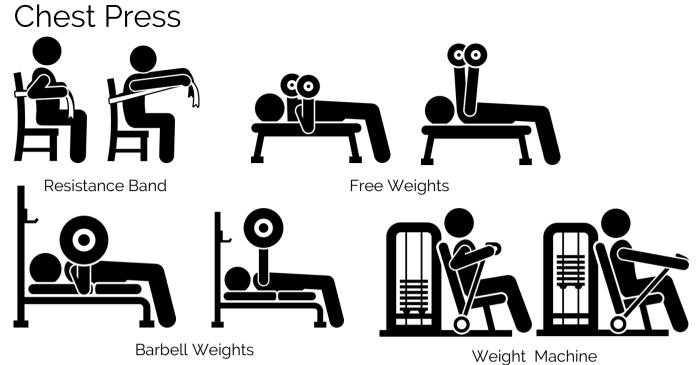
Calf Raise



Barbell Weights

- Stand straight with your feet shoulder-width apart and your toes pointing forward.
- Slowly raise yourself up onto the balls of your feet, lifting your heels off the ground.
- Hold the raised position for a few seconds, squeezing your calf muscles at the top of the movement.
- Lower your heels back down to the ground in a controlled manner.
- Repeat for the desired number of repetitions

To. help with balance you have place your hand on the wall. To make the exercise more challenging, you can hold a weight in each hand or use a barbell (as shown in the graphic)



Resistance Band

- Anchor the resistance band to a secure object such as a door, chair, post, or wall mount. Ensure the anchor point is at chest height.
- Hold the resistance band handles in each hand with an overhand grip and face away from the anchor point.
- Take a step forward so there is some tension in the band.
- Bring your hands up to your chest level with your elbows bent at a 90-degree angle.
- Push your hands forward, straightening your arms and extending them out in front of you. Be sure to keep your elbows slightly bent to maintain tension in the band.
- Slowly bring your hands back to your chest, bending your elbows and resisting the pull of the band
- Repeat for the desired number of repetitions

Remember to maintain good posture throughout the exercise, keeping your shoulders back and your core engaged. Also, adjust the distance between you and the anchor point to increase or decrease the resistance level of the band.

Free Weights/Barbell

- Lie flat on a bench with your feet flat on the floor.
- Hold a barbell or dumbbells with an overhand grip, with your hands shoulder-width apart.
- Bring the weight down to your chest, with your elbows at a 90-degree angle.
- Push the weight up, extending your arms fully.
- Lower the weight back down to your chest in a controlled manner.
- Repeat for the desired number of repetitions.

It's important to keep your back flat on the bench and your feet firmly planted on the ground throughout the exercise. Additionally, make sure to exhale as you push the weight up and inhale as you lower it back down.

Hip Abduction



Loop Resistance Band

Weight Machine

Resistance Band

- Place a resistance band around both ankles and stand with your feet hip-width apart.
- Engage your core muscles and slowly lift your right leg out to the side, keeping your toes pointing forward and your knee straight.
- Hold for a second, then slowly lower your leg back down to the starting position.
- Repeat with your left leg.
- · Repeat for the desired number of repetitions

It's important to keep your upper body stable and avoid leaning to one side as you lift your leg. Also, be sure to keep your knee straight throughout the movement and avoid letting it bend.

Weight Machine

- Stand facing the cable machine with your feet shoulder-width apart.
- Attach an ankle strap to the cable machine and strap it around your right ankle.
- Stand tall and shift your weight onto your left leg.
- Engage your core muscles and slowly lift your right leg out to the side, keeping your toes pointing forward and your knee straight.
- Hold for a second, then slowly lower your leg back down to the starting position.
- Switch to your left leg and repeat the exercise.

It's important to keep your upper body stable and avoid leaning to one side as you lift your leg. Also, be sure to keep your knee straight throughout the movement and avoid letting it bend

Lateral Raise





Resistance tube with handles

Resistance Band

- Stand with both feet on the middle of the resistance band, shoulder-width apart.
- Grasp the handles/end of the resistance band with both hands, palms facing in and arms extended down by your sides.
- Engage your core muscles and slowly lift your arms out to the sides, keeping your elbows slightly bent.
- Lift your arms until they are parallel to the ground or slightly higher.
- Hold for a second, then slowly lower your arms back down to the starting position.
- Repeat for the desired number of repetitions

It's important to keep your shoulders down and avoid shrugging them up towards your ears as you lift the band. Also, be sure to breathe in as you lift your arms up and exhale as you lower them back down.

Lateral Pulldown



Weight Machine

Weight Machine

- Sit at a lat pulldown machine and adjust the thigh pad so that it fits snugly against your thighs.
- Grasp the bar with an overhand grip, with your hands slightly wider than shoulder-width apart.
- Sit tall and engage your core muscles.
- Pull the bar down towards your chest, keeping your elbows close to your body and squeezing your shoulder blades together.
- Hold for a second, then slowly release the bar back up to the starting position.
- Repeat for the desired number of repetitions

It's important to avoid using momentum to pull the bar down and to focus on using your back muscles to do the work. Also, be sure to breathe in as you pull the bar down and exhale as you release it back up.





Resistance Loop Band

Weight Machine

Resistance Band

- Place a resistance band around both ankles and stand with your feet hip-width apart.
- Keep your core engaged and slowly bend your knees, bringing your heels towards your buttocks.
- Squeeze your hamstrings at the top of the movement, then slowly lower your legs back down to the starting position.
- Repeat for the desired number of repetitions

It's important to keep your hips and upper body flat on the mat throughout the exercise and avoid lifting your hips or arching your back. Also, be sure to breathe in as you bend your knees and exhale as you extend your legs back out. To help with balance you have place your hand on the wall

Weight Machine

- Adjust the leg curl machine to fit your body, ensuring that the knee pad is just above your ankles.
- Lie face down on the machine with your legs straight and your toes pointed towards the ground.
- Grasp the handles or sides of the machine and engage your core muscles.
- Slowly bend your knees, lifting your heels towards your buttocks.
- Hold for a second, then slowly release your legs back to the starting position.
- Repeat for the desired number of repetitions

It's important to avoid lifting your hips or arching your back as you lift the weight. Also, be sure to breathe in as you bend your knees and exhale as you extend your legs back out.

Leg Extension



Resistance tube with handles

Resistance Band

- Lie flat on your back on a mat with your legs straight and loop the resistance band around your ankles.
- Engage your core muscles and slowly lift your right leg up towards the ceiling, keeping your knee straight and your toes pointed up.
- Hold the position for a second, then slowly lower your leg back down to the starting position.
- Repeat for the desired number of repetitions on one leg before switching to the other leg.

It's important to keep your lower back flat on the mat throughout the exercise and avoid arching your back. Also, be sure to breathe in as you lift your leg up and exhale as you lower it back down.

Weight Machine

- Adjust the leg extension machine to fit your body, ensuring that the knee pad is just above your ankles.
- Sit on the machine with your back straight and your feet flat on the ground.
- Grasp the handles or sides of the machine and engage your core muscles.
- Slowly extend your legs out in front of you, straightening your knees and lifting the weight.
- Hold for a second, then slowly release your legs back to the starting position.
- Repeat for the desired number of repetitions.

It's important to avoid lifting your hips or arching your back as you lift the weight. Also, be sure to breathe in as you extend your legs out and exhale as you lower them back down.

Leg Press



Resistance Band

Weight Machine

Resistance Band

- Sit on a sturdy chair with your back straight and loop the resistance band around the bottom of your foot with your knee raised
- Press your heels into the ground to create tension in the band.
- Engage your core muscles and slowly press your feet forward, straightening your legs and pushing against the resistance of the band.
- Hold for a second, then slowly release your legs back to the starting position, keeping tension in the band.
- Repeat for the desired number of repetitions.

It's important to avoid locking your knees and to maintain control throughout the exercise. Also, be sure to breathe in as you press your feet forward and exhale as you release them back to the starting position.

Weight Machine

- Adjust the seat and footplate of the leg press machine to fit your body.
- Sit on the machine with your back flat against the backrest and your feet on the footplate, shoulder-width apart.
- Grasp the handles or sides of the machine and engage your core muscles.
- Push the footplate forward by extending your legs, keeping your knees slightly bent.
- Hold for a second, then slowly release the footplate back to the starting position.
- Repeat for the desired number of repetitions.

It's important to avoid locking your knees and to maintain control throughout the exercise. Also, be sure to breathe in as you push the footplate forward and exhale as you release it back to the starting position

Leg Raise



Loop Resistance Band

Resistance Band

- Lie flat on your back on a mat with your legs straight and loop the resistance band around your ankles.
- Keep your arms flat on the mat by your sides and engage your core muscles.
- Slowly lift your legs up towards the ceiling, keeping your knees straight and your toes pointed up.
- Hold the position for a second, then slowly lower your legs back down to the starting position.
- Repeat for the desired number of repetitions and change sides

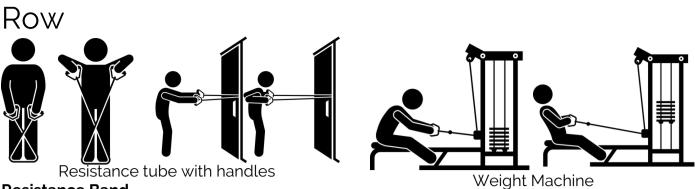
It's important to keep your lower back flat on the mat throughout the exercise and avoid arching your back. Also, be sure to breathe in as you lift your legs up and exhale as you lower them back down. This exercise can also be done without an resistance band

Lunges



- Stand with your feet shoulder-width apart and engage your core muscles.
- Take a big step forward with your right foot, keeping your left foot in place.
- Lower your body down by bending your right knee and dropping your left knee towards the ground.
- · Keep your upper body straight and your chest lifted.
- Push off your right foot and return to the starting position.
- Repeat on the other side by stepping forward with your left foot and lowering your body down.

It's important to avoid letting your front knee go beyond your toes and to keep your back knee close to the ground without touching it. Also, be sure to breathe in as you step forward and exhale as you lower your body down. You can hold dumbbells to add more challenge to the exercise.



Resistance Band

Upright Row

- Stand with both feet on the middle of the resistance band, shoulder-width apart.
- · Grasp the handles of the resistance band with both hands, palms facing in and arms extended down by your sides.
- Engage your core muscles and slowly pull the handles up towards your chest, keeping your elbows close to your body and squeezing your shoulder blades together.
- Hold for a second, then slowly release the handles back down to the starting position.
- Repeat for the desired number of repetitions.

It's important to avoid arching your back or leaning forward as you pull the band. Also, be sure to breathe in as you pull the handles up and exhale as you release them back down

Standing Row

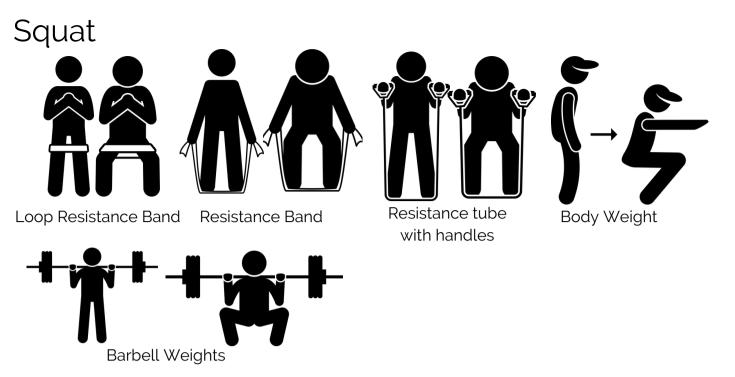
- Stand with your feet shoulder-width apart and loop the resistance band around a sturdy object at about waist height.
- Grasp the handles of the resistance band with both hands, palms facing each other and arms extended in front of your body.
- Engage your core muscles and slowly pull the handles towards your chest, keeping your elbows close to your body and squeezing your shoulder blades together.
- Hold for a second, then slowly release the handles back to the starting position.
- Repeat for the desired number of repetitions.

It's important to avoid arching your back or leaning forward as you pull the band. Also, be sure to breathe in as you pull the handles towards your chest and exhale as you release them back to the starting position.

Weight Machine

- Adjust the weight machine to fit your body and select the appropriate weight.
- Sit on the machine with your feet flat on the ground and grasp the handles or cable attachment with both hands.
- Keep your back straight and your core engaged.
- Pull the handles or cable attachment towards your chest, squeezing your shoulder blades together and keeping your elbows close to your body.
- Hold for a second, then slowly release the handles or cable attachment back to the starting position.
- Repeat for the desired number of repetitions.

It's important to avoid arching your back or using momentum to pull the weight. Also, be sure to breathe in as you pull the weight towards your chest and exhale as you release it back to the starting position.



- Stand upright with your feet shoulder-width apart, toes pointing slightly outward. You can either keep your arms at your sides or extend them straight in front of you for balance.
- Engage your core muscles by tightening your abdominal and lower back muscles. This helps maintain stability and protect your spine during the squat.
- Push your hips back and start bending your knees as if you were sitting down in a chair. Keep your chest lifted and maintain a neutral spine by looking straight ahead or slightly upward. Avoid rounding your back or letting your knees cave inward.
- Lower your body until your thighs are parallel to the ground, or as low as you can comfortably go while maintaining good form. Your knees should be aligned with your toes and not extend past them. In the bottom position, your weight should be distributed evenly across your feet, and your heels should stay firmly planted on the ground.
- Press through your heels and midfoot to straighten your legs and return to the starting position. Keep your chest lifted and core engaged as you rise
- Repeat for the desired number of repetitions

It's important to use proper form when doing squats to avoid injury. Some common mistakes to avoid include leaning too far forward, letting your knees cave in, or rounding your back. If you're new to squats, you may want to start with bodyweight squats or use a chair for support until you feel comfortable with the movement.

Tricep Extension



Loop Resistance Band



Resistance tube with handles



Free Weights

Resistance Band

- Start by standing with your feet shoulder-width apart and placing the resistance band underneath the arches of your feet. Hold the handles of the resistance band with both hands, palms facing inward.
- Raise your hands above your head, keeping your elbows close to your ears and your arms straight.
- Slowly lower the handles behind your head, bending your elbows to create tension in the band. Keep your upper arms stationary and close to your head throughout the movement.
- Pause when your forearms are parallel to the ground, then slowly straighten your arms to return to the starting position.
- Repeat for the desired number of repetitions.

It's important to maintain proper form throughout the exercise. Avoid arching your back or flaring your elbows out to the sides

Free Weights

- Begin by standing with your feet shoulder-width apart and holding a dumbbell or weight plate in both hands.
- Bring the weight behind your head, keeping your elbows close to your ears and your upper arms stationary.
- Slowly lower the weight toward your shoulders, bending your elbows to create tension in the triceps.
- Pause when your forearms are parallel to the ground, then slowly straighten your arms to return to the starting position.
- Repeat for the desired number of repetitions

It's important to maintain proper form throughout the exercise. Avoid arching your back or flaring your elbows out to the sides. You can also do this exercise sitting down on a bench or chair, which can help you maintain good posture and stabilize your upper body.

Core Training

Core training is an important component of overall fitness, as it can help improve flexibility, balance, and stability. Triathletes who prioritize core training as part of their overall fitness program are likely to see benefits in other areas of their training, such as improved endurance and faster recovery times. It is recommended to add these core exercises at the end of your strength training sessions

Exercise	Muscle Group	Helps With
Plank	Abdominals, Glutes, Hamstrings, Quadriceps, Shoulders and Back Muscles	Swim, Bike, Run
Hip Raises	Glutes, Hamstrings, and Lower Back Muscles	Swim. Bike. Run
Cycling Crunch	Abdominals	Swim, Bike, Run
Flutter Kick	Abdominals and Hip Flexors	Swim, Bike, Run

Plank







Elbow Plank (knee)

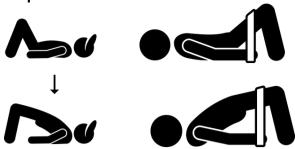
Flbow Plank

Basic Plank

- Start by getting into a push-up position, with your arms straight and your hands shoulder-width apart.
- Lower your forearms to the ground, keeping your elbows directly beneath your shoulders.
- Extend your legs straight behind you, with your toes on the ground.
- Engage your core muscles and keep your body in a straight line from head to heels.
- Hold the position for as long as you can, aiming for 15 seconds to start and working your way up to a minute or more over time.
- When you're finished, lower your knees to the ground and rest for a few seconds before repeating the exercise.

It's important to maintain proper form throughout the plank to avoid injury and get the most benefit from the exercise. Avoid sagging your hips or arching your back, as this can put unnecessary strain on your lower back. Instead, focus on engaging your core muscles and keeping your body in a straight line. You can also modify the plank by dropping to your knees if the full plank is too challenging.

Hip Raises



- Lie on your back with your knees bent and your feet flat on the ground.
- Place your arms at your sides with your palms facing down.
- Engage your core muscles and push through your heels to lift your hips off the ground.
- Keep your feet and shoulder blades on the ground and maintain a straight line from your shoulders to your knees.
- Pause at the top of the movement, then slowly lower your hips back down to the starting position.
- Repeat for the desired number of repetitions

To increase the challenge of this exercise, you can hold a weight on your hips or use a resistance band while performing the movement. It's important to maintain proper form throughout the exercise, avoiding arching your back or lifting your feet off the ground. If you feel any discomfort in your lower back, you may need to reduce the range of motion or modify the exercise to better suit your abilities.

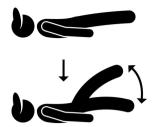
Cycling Crunch



- Lie on your back with your hands behind your head and your elbows out to the sides.
- Lift your shoulder blades off the ground and engage your abs.
- Lift your knees up to a tabletop position, with your shins parallel to the ground.
- Bring your right elbow towards your left knee while straightening your right leg out in front of you.
- Twist your torso and bring your left elbow towards your right knee while straightening your left leg out in front of you.
- Continue alternating sides in a pedaling motion, as if riding a bicycle.
- Continue for the desired number of reps or time, typically 15 seconds to a minute.

It's important to maintain proper form throughout the exercise to avoid straining your neck or lower back. Keep your shoulder blades lifted off the ground and your elbows out to the sides. Avoid pulling on your neck with your hands, and focus on using your abs to lift your shoulder blades. You can also modify the exercise by bending your knees more or slowing down the pedaling motion.

Flutter Kick



- ie on your back with your legs extended straight out in front of you and your arms at your sides.
- Engage your core muscles and lift your legs a few inches off the ground.
- Alternately kick your legs up and down in a rapid fluttering motion, keeping your legs straight and your toes pointed.
- Continue kicking for the desired number of reps or time, typically 15 seconds to a minute.
- Rest and repeat for additional sets.

It's important to maintain proper form throughout the exercise to avoid straining your lower back. Keep your abs engaged and your lower back pressed firmly into the ground. You can also modify the exercise by bending your knees slightly or placing your hands under your glutes for additional support. Increase the difficulty of the exercise by holding a medicine ball or weight between your feet.

Strength Training Log

Set 1

Set 2

Date	Exercise	Rep	Weight	Rep	Weight	Notes

Strength Training Log

Set 1

Set 2

Date	Exercise	Rep	Weight	Rep	Weight	Notes

Strength Training Log

Set 1

Set 2

Date	Exercise	Rep	Weight	Rep	Weight	Notes