



Z2 ENDURANCE

COACHING



Strength Exercise Guide

How to use this guide

Each strength workout in your TrainingPeaks or custom plan will list an exercise, a number of sets and reps, and a number referencing the Strength Exercise Guide where you can view a brief video demonstration of the exercise if you are unfamiliar with it. Save the Z2 Endurance Coaching Strength Guide Playlist on YouTube for all exercises. Generally, over time you will progress each month by adding weight to each exercise or increasing the number of sets/reps of the exercise.

Why strength is important

Strength training while training for a triathlon/run event helps by increasing your power, flexibility, stability, coordination, and efficiency. It enhances your performance in all other sports/activities by creating a strong base and helps avoid injury if done correctly.

When to do strength

A few rules of thumb when it comes to strength training and triathlon/running:

- Do strength workouts the same days as speed workouts, and do your run/bike/swim session first each day. Avoid concurrent strength & endurance sessions on the same day
- Number of strength workouts per week
 - Off season - 2-3 strength sessions each week. Best time to add variety into strength training.
 - Pre-season – 2 strength sessions per week. Power/speed/plyometric focus.
 - Competition season – 1 strength session per week.

Equipment

If you do not have access to weights or a gym, all exercises can be done using body weight or resistance bands. To get the most benefit from the workouts, I recommend a basic set of medium weight dumbbells, a set of kettlebells, or a medicine ball. If you plan to workout at home, to start I would recommend a 10-30lb. pair of weights depending on what is semi difficult for you over 3 sets of 10 reps, however there are also interchangeable weight sets ([Example on Amazon linked here](#)), that will allow you to increase weights and progress over time.

During each strength workout

Start each strength workout by doing body weight squats, lunges, arm circles, push ups, or anything you need to get loose. Take a 1-2 min rest between each set, unless you are doing a superset, where you immediately start the next set. Finish each workout with 5-10 min of flexibility.

Flexibility

Strength workouts should be followed by 5-10 minutes of full body stretching. Below are links to some common stretching routines and exercises. These should be used as a guide for daily or post workout flexibility sessions, however you will likely develop your favorites and those that work best for you and your body's needs. [Stretch Video Link](#) [Stretch List Link](#)

Leg Exercises

Exercise 1: Lunges



Tips: Front knee should be over your toes, keep your back straight

Progressions: Add weight (dumbbells), increase reps, reduce rest

Modify: Alternate legs, remove weights

Video Link: <https://youtu.be/h1ojkEgY5lg>

Exercise 2: Reverse Lunges



Tips: Front knee should be over your toes, keep your back straight

Progressions: Add weight (dumbbells), increase reps, reduce rest

Modify: Alternate legs, remove weights for easier reps

Video Link: <https://youtu.be/ASkaAX0Rval>

Exercise 3: Step-Ups



Tips: Back straight, raise knee to 90 degree angle

Progressions: Add weight (dumbbells), increase reps, reduce rest

Modify: Use stair step, box, or perform on flat ground to work on balance

Video Link: <https://youtu.be/0XtHD7uAWhQ>

Exercise 4: Squat



Tips: Back straight, legs should bottom out at about 90 degrees

Progressions: Add weight, increase reps

Modify: Use squat rack/machine, hold onto something for balance while squatting as you are starting out

Video Link: <https://youtu.be/AFYMT9Gq20Q>

Exercise 5: Bulgarian Squat



Tips: Front knee should be over your toes, keep your back straight

Progressions: Add weight (dumbbells), increase reps, reduce rest

Modify: Remove weights, do lunges (exercise 1) instead until you are able to balance on a bench

Video Link: <https://youtu.be/hWXipCxpce4>

Exercise 6: Single Leg Squats



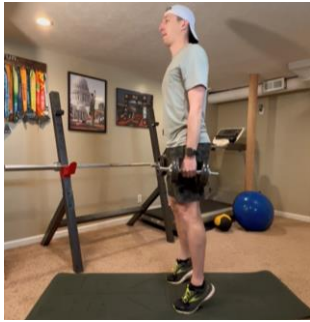
Tips: Try to keep your bent knee over your toes, and other leg as straight as possible

Progressions: Add weight (dumbbells), increase reps, reduce rest, balance without holding anything

Modify: Hold onto something to start, keep second foot on the ground to balance when starting out

Video Link: <https://youtu.be/oeD24erFMJI>

Exercise 7: Calf Raises



Tips: Hold each rep for 1-2 seconds

Progressions: Add weight (dumbbells), increase reps, reduce rest, do on a stair step for better extension

Modify: Remove weights for easier reps, balance on one leg or perform on a step/box for more difficult reps

Video Link: <https://youtu.be/D3acVD1AiM4>

Exercise 8: Goblet Squat



Tips: Squat as deep as you can while maintaining posture, balance on the balls of your feet

Progressions: Add weight (kettlebell, medicine ball), increase reps, reduce rest

Modify: Remove weight, squat and hold instead of doing reps

Video Link: <https://youtu.be/-QqGk3smPy4>

Exercise 9: Deadlift



Tips: Back straight, knees over toes, neck neutral

Progressions: Add weight, increase reps

Modify: Use Olympic bar and plates instead of dumbbells, do Squats (Exercise 4) instead

Video Link: <https://youtu.be/FrPQPbkgAeM>

Exercise 10: Lateral Lunge



Tips: Eyes forward (don't look at the ground), back straight, don't let your knee go out past your toes

Progressions: Increase reps, reduce rest

Modify: Remove weight (keep hands together in front of you),

Video Link: <https://youtu.be/Mm0oQf0o-40>

Exercise 11: Squat Jumps



Tips: Take your time to get down into a solid squat, take each rep slowly

Progressions: Add weight (light dumbbells), increase reps, reduce rest

Modify: Body squat instead – progressively work toward a small jump

Video Link: <https://youtu.be/XBE5D6VI3h8>

Arm Exercises

Exercise 12: Bench Press



Tips: Engage your core/do not arch your back

Progressions: Add weight, increase reps

Modify: Use Olympic bar/bench, use bench press machine, do push ups (Exercise 13) instead, rep one arm at a time for easier reps

Video Link: <https://youtu.be/gNmLErxs35M>

Exercise 13: Push Ups



Tips: Bottom out about 2-4" from the ground, take it slow (2-3sec per rep)

Progressions: Increase reps, reduce rest

Modify: Rest on your knees instead for an easier push up, or slow down for more difficult reps

Video Link: <https://youtu.be/BUokb2PbLJE>

Exercise 14: Tricep Dip



Tips: Keep arms wider, take it slow (2-3sec per rep), use other tricep exercises if this causes shoulder pain or is uncomfortable for you

Progressions: Add weight (plates placed on quads), increase reps, reduce rest

Modify: Tricep kick backs (Exercise 15), tricep pull machine

Video Link: <https://youtu.be/jcVS73ehD1Y>

Exercise 15: Tricep Kick Back



Tips: Back straight, neck neutral, don't swing your arms, take it slow (2-3sec per rep)

Progressions: Add weight (dumbbells), increase reps, reduce rest

Modify: Rest with your knee on a bench instead of standing, use tricep pull machine, rep one arm at a time for easier reps

Video Link: <https://youtu.be/M5hvez8XLOyE>

Exercise 16: Bent over Row



Tips: Back straight, neck neutral, don't twist your spine if doing 1 side at a time, take it slow (2-3sec per rep)

Progressions: Add weight (dumbbells), increase reps, reduce rest

Modify: Rest with your knee on a bench instead of standing, use row machine, rep one arm at a time for easier reps

Video Link: <https://youtu.be/LQxOss5ocNA>

Exercise 17: Narrow Push Ups



Tips: Bottom out about 2-4" from the ground, take it slow (2-3sec per rep)

Progressions: Increase reps, reduce rest

Modify: Rest on your knees instead for an easier push up, or slow down for more difficult reps

Video Link: <https://youtu.be/oeNB07g52nc>

Exercise 18: Wide Push Ups



Tips: Bottom out about 2-4" from the ground, take it slow (2-3sec per rep)

Progressions: Increase reps, reduce rest

Modify: Rest on your knees instead for an easier push up, or slow down for more difficult reps

Video Link: <https://youtu.be/CHEpNwNjG1E>

Exercise 19: Alternating Lateral/Front Raises



Tips: Don't swing arms, keep arms straight,

Progressions: Add weight (dumbbells), increase reps, reduce rest

Modify: Pull up on resistance bands (instead of dumbbells)

Video Link: <https://youtu.be/Oe3im1unWC0>

Exercise 20: Shoulder Raises



Tips: Don't strain your neck (flex in the shoulders)

Progressions: Add weight (dumbbells), increase reps, reduce rest

Modify: Pull up on resistance bands (instead of dumbbells)

Video Link: <https://youtu.be/2mgzoi7ViZQ>

Exercise 21: Shoulder Press



Tips: Don't arch or strain your back (need to reduce weight if straining)

Progressions: Add weight, increase reps, reduce rest

Modify: Use Olympic bar and bench, use press machine, rep one arm at a time for easier reps

Video Link: <https://youtu.be/svRcb5Fshkl>

Exercise 22: Incline Bench Press



Tips: Don't arch or strain your back (need to reduce weight if straining)

Progressions: Add weight, increase reps, reduce rest

Modify: Use Olympic bar and bench, use press machine, rep one arm at a time, alternative is push ups with feet raised on bench

Video Link: <https://youtu.be/NnnE9fRyJcw>

Core Exercises

Exercise 23: Swimmer Kicks



Tips: Place hands on floor by your side or under butt to balance, don't strain your neck

Video Link: <https://youtu.be/rqsFWT5V-U4>

Exercise 24: Scissor Kicks



Tips: Place hands on floor by your side or under butt to balance, don't strain your neck

Video Link: <https://youtu.be/UltJQtXZ8QM>

Exercise 25: Glute Bridge



Tips: Lean on your shoulders, not your neck. Hold each rep for a few seconds for max effect

Modify: Add weight on top of your hips for a more difficult exercise

Video Link: <https://youtu.be/EBhqDxUAxhg>

Exercise 26: Bird Dogs



Tips: Make sure to alternate, hold each rep for a few seconds, and keep your neck neutral

Modify: Alternate arm raise/leg raise for an easier exercise

Video Link: <https://youtu.be/AOGI4T4bZNg>

Exercise 27: Forearm Plank



Tips: Keep your back flat and neck neutral

Modify: Drop to your knees instead of balancing on your toes

Video Link: <https://youtu.be/9CvVS4ylxWI>

Exercise 28: High Plank



Tips: Keep your back flat and neck neutral

Modify: Drop to your knees instead of balancing on your toes

Video Link: <https://youtu.be/DVD9q3Ujblw>

Exercise 29: Side Planks



Tips: Keep your back flat & neck neutral

Modify: Drop to your knees instead, keep arm at your side instead of up

Video Link: <https://youtu.be/qhLZg9Y6qJk>

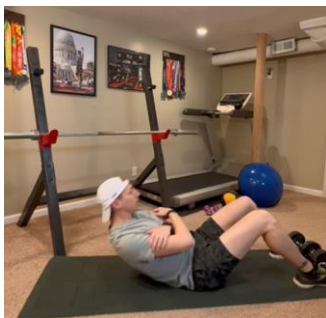
Exercise 30: Bicycle



Tips: Try to touch your opposite knee to your elbow for each rep, point your toes

Video Link: <https://youtu.be/BfpwFHIErOs>

Exercise 31: Sit Ups



Tips: Don't strain your neck, slow down for each rep

Modify: Place weights on your feet for easier sit ups, place arms either behind head or crossed on your chest

Video Link: <https://youtu.be/mW0kpuLzXJw>

Exercise 32: Reverse Crunch



Tips: Flex your shoulders/back, not your neck with each rep

Modify: Place hands out front for a more difficult exercise

Video Link: <https://youtu.be/D3uYSm9ai7k>

Exercise 33: Russian Twists



Tips: Slow each rep down, try to touch the floor with each rep

Modify: Add or remove weight for a more difficult/easier exercise, place feet on ground instead of hovering

Video Link: <https://youtu.be/wHlu1MufIZM>