

Stretching and Strengthening for Runners

FINISH LINE

physical therapy

*Taking you there
one stride at a time*

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INTRODUCTION

Stretching and Strengthening for Runners was created to provide you, the runner or triathlete, with the basic tools to stay healthy and injury-free throughout your training. These tools include the most basic exercises to improve both your lower extremity flexibility and strength, as well as your abdominal (“core”) strength and stabilization.

The stretching section includes all the essential stretches necessary for both runners and triathletes alike. I’ve provided a variety of stretches that can be performed outdoors, immediately following your runs, or in the comfort of your home. Be sure to follow the tips below to obtain the greatest benefit from stretching:

1. Be consistent: stretch on a **daily** basis.
2. Stretch at the **end** of your workout.
3. Use the proper techniques illustrated and described in this brochure.
4. **Don’t overstretch.** Stretching should be gentle, not painful.

The strengthening section includes essential exercises for both the lower extremity and core. Unlike stretching, the strengthening aspect should **not** be performed daily. To ensure maximum benefits to improve your strength, perform strengthening exercises 2–3 times per week, unless otherwise instructed. You should **not** try to perform **all** of the exercises provided in one single session. For example:

<u>day 1</u>	<u>day 2</u>
1. Squats	Leg press
2. Step-back lunges	Skate lunges
3. Lateral step-ups	Forward step-ups
4. Static lunges	Lateral lunges
5. Hamstring curls: one leg	Hamstring curls: two legs
6. Straight leg raises	Sidelying straight leg raises
7. Core	Core

Perform 2–3 sets of 12–15 repetitions for **each** exercise. (**Note:** Upper extremity exercises are encouraged and also should be implemented into your program.)

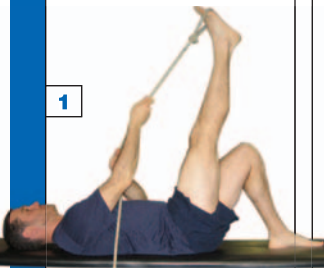
Stretch daily and maintain a consistent strength training regimen, and you’ll stay in top shape throughout your training and cross the finish line even stronger than you imagined.



Michael Conlon
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STRETCHING

1



1 hamstring (straight knee)

Lie supine with your right leg straight (opposite leg is bent to support lower back). Lift right leg until stretch is felt in hamstring, use rope to emphasize stretch at end range of motion.

Hold: 30 seconds

Repetitions: 3 times on each leg

2



2 standing hamstring

Standing with your right leg straight and your head and chest upright. Slowly move your chest forward until a stretch is felt in your right hamstring. Bring your toes to your shin to emphasize the stretch.

Hold: 30 seconds

Repetitions: 3 times on each leg

3



3 calf (straight leg)

(a) Stand on a stool with your right leg straight and your heel dropped off the edge of the stool. Drop your heel toward the floor until a stretch is felt in the right calf.

Hold: 30 seconds

Repetitions: 3 times on each leg



(b) Stand on a stool with your right knee slightly bent and your heel dropped off the edge of the stool. Drop your heel toward the floor until a stretch is felt in the right calf.

Hold: 30 seconds

Repetitions: 3 times on each leg

4 calf (standing)

(a) Starting position as shown.

Move your body forward keeping your left knee straight and your left heel on the floor until a stretch is felt in your left calf.

Hold: 30 seconds

Repetitions: 3 times on each leg

(b) Starting position as shown.

Move your body forward keeping your left knee bent and your left heel on the floor until a stretch is felt in your left calf.

Hold: 30 seconds

Repetitions: 3 times on each leg

4



a

4



b

5 hip abductor

Lie supine with both legs straight. Lift leg across your right leg until stretch is felt on the outer portion of your left outer thigh. Use rope to emphasize stretch at end range of motion. (Keep your left hip on the floor to avoid excessive rotation in your lower back.)

Hold: 30 seconds

Repetitions: 3

5



6 hip adductor

Lie supine with legs straight.

Move your left leg away from your body until stretch is felt in your inner thigh. Use rope to emphasize stretch at end range of motion.

Hold: 30 seconds

Repetitions: 3

6



STRETCHING

7



7 hip adductor (standing)

Stand with your feet more than shoulder-width apart. Bend your right knee as you transfer your body weight to the right side, keeping your trunk upright. Keep the left leg straight until a stretch is felt in the inner thigh of the left leg.

Hold: 30 seconds
Repetitions: 3-5

8

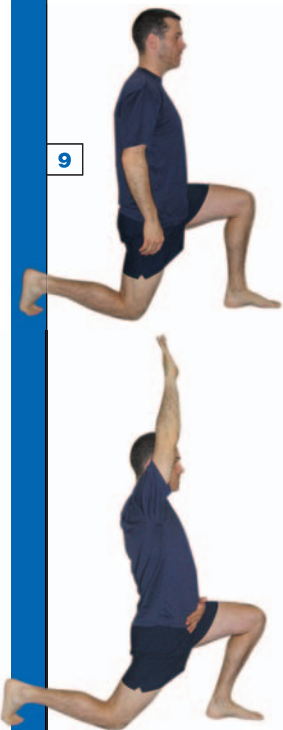


8 quadricep

Standing upright, with your right hand pull your right heel toward your butt while keeping your knees together until you feel a stretch on the front of your right thigh.

Hold: 30 seconds
Repetitions: 3 times on each leg

9



9 hip flexor

Stand in a lunge position with both knees slightly bent (as shown). Move your right hip forward until a stretch is felt on the front of your right hip. To emphasize the stretch, raise your right arm up and over your head, as shown. Repeat this stretch with your left leg.

Hold: 30 seconds
Repetitions: 3-5

10 piriformis

Lie prone on elbows with your right leg bent and placed under your body; left leg remains straight. Move your chest toward the floor until a stretch is felt in your right hip. Repeat this stretch with your left leg.

Hold: 15 seconds
Repetitions: 3-5

Alternate positions for piriformis stretch: standing or supine, as shown.



10



11 standing iliotibial band (ITB)

Standing upright, use your left hand to pull your right heel toward your butt until you feel a stretch on the outside of your right knee (keep your knees together). Repeat this stretch with your left leg.

Hold: 30 seconds
Repetitions: 3 times on each leg

11



12 ITB (lateral knee)

Lie on your right side. Pull the heel of your left leg to your butt until a stretch is felt on the front of your left thigh. Place your right foot on the outside of your left knee (as shown). Using your right leg, gently push your left leg to the ground until a stretch is felt on the outside of your left knee. Repeat this stretch with your left leg.

Hold: 30 seconds
Repetitions: 3

12



STRETCHING

13



13 ITB (roller)

Lie on right your side with your upper thigh on top of the roller (as shown). Slowly roll the front (quad) and side (ITB) of your upper leg from your hip to your knee. Focus on areas that are most tender. Roll for 1–2 minutes as tolerated on each leg.

14 calf (roller)

Place the roller under the lower portion of your right calf (soleus muscle). With your foot relaxed, slowly roll the lower calf. Focus on areas that are most tender. Roll for 1 minute as tolerated on each leg.

14



15 prone press-ups

Lie on your stomach with your hands directly under your shoulders. Use your arms to extend (arch) your lower back while keeping your hips on the floor.

Hold: 1 second
Repetitions: 10

15



STRENGTHENING

1



1 squat

Standing with your feet shoulder-width apart, slowly bend your knees to a 90° angle, keeping your knees directly above your ankles (avoid bringing your knees forward past your toes). Exhale slowly as you return to the starting position. Do 2-3 sets of 15 repetitions.

2



2 step-up (forward)

Place your right foot on top of an 8-12" platform, step up and down with your left leg as shown. Repeat with your right leg. Do 2-3 sets of 15 repetitions on each leg.

3



3 step-up (lateral)

Standing sideways to the platform, place your right foot on top of an 8-12" platform, step up and down with your left leg as shown. Repeat with your left leg. Do 2-3 sets of 15 repetitions on each leg.

LUNGE SERIES

Choose 2-3 of the lunge variations below per workout. Do 2-3 sets of each exercise on each leg.

4 static lunge

Start in a lunge position as shown. Slowly bend both of your knees to a 90° angle, keeping your torso upright and your knees directly over your ankles. Avoid bringing your knees forward past your toes. Exhale and slowly return to the starting position.



5 step-back lunge

Starting position as shown. Step back with your right leg, bending both knees to a 90° angle. Continue exercise as above for static lunge.



6 skate lunge

Step back and to the left with your right leg (as shown). Continue exercise as above for static lunge.



7 lateral lunge

Starting position as shown. Step to the left, placing most of your body weight on your left leg (as shown). Continue exercise as above for static lunge.



STRENGTHENING



8

8 bilateral hamstring curl

Machine required. Lying on your stomach, curl both of your legs to your buttocks while exhaling. Inhale as you slowly lower your legs to the starting position. Do 2 sets of 15 repetitions.



9

9 unilateral hamstring curl

Machine required. Perform this exercise as above; however, use one leg at a time (as shown). Do two sets of 15 repetitions.



10

10 straight leg raise

Starting position as shown. Contract your right thigh (quadriceps) and slowly raise your right leg to the height of your left knee. Keeping your right thigh contracted slowly lower your right leg back to the starting position. Repeat this exercise on your left leg. Do 3 sets of 15 repetitions. NOTE: If you are experiencing knee pain, this exercise should be performed DAILY.



11

11 side-lying leg raise

Starting position as shown. Keeping your left leg straight raise it approximately 12" off the ground. Slowly lower your left leg back to the starting position. Repeat this exercise on your right leg. Do 3 sets of 15 repetitions.



12 calf raise

Standing, lift both of your heels off the ground so that you are on the balls of your feet. Slowly lower your heels to the starting position. Do 3 sets of 15 repetitions. To increase the difficulty, perform this exercise one leg at a time.

12



13 toe raise

Stand with your back against a wall with your feet about 12" from the wall. Lift your feet toward your shins so that you are on your heels. Slowly lower your toes to the starting position. Do 3 sets of 15 repetitions.

13



14 single leg stance

Stand on one leg with your knee slightly bent. Maintain this position for 60 seconds. Repeat 3 times on each leg. To increase the difficulty of this exercise, add either a wobbleboard or upper extremity weights (as shown below).

14



PLYOMETRICS

squat jump

Do 2-3 sets of 15 repetitions.

lunge jump

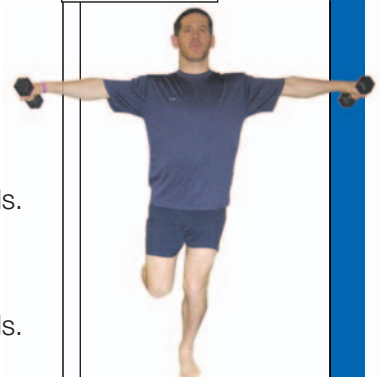
Do 2-3 sets of 15 repetitions.

double leg hop

Perform exercise for 60 seconds. Repeat 2-3 times.

single leg hop

Perform exercise for 60 seconds. Repeat 2-3 times on each leg.



CORE STRENGTHENING

1



CORE

Note: Before initiating any core exercise, begin by gently contracting your transverse abdominus by pulling your belly button in toward your spine.

1 plank

(See photo.) Gently contract your transverse abdominus. Hold this position for 30-60 seconds. Repeat 3 times with a minute's rest between repetitions.

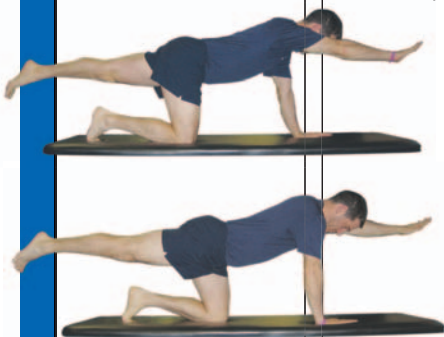
2



2 side plank

(See photo.) Gently contract your transverse abdominus. Hold for 30-60 seconds. Repeat 3 times on each side.

3



3 alternate arm/leg

Starting on your hands and knees, gently contract your transverse abdominus. While maintaining a neutral spine, extend your arm and your opposite leg as shown. Do 20 repetitions on each side, holding each rep for 1-2 seconds.

4 upper abs

Lie on your back with your hands behind your head to support your neck. Bend your hips and knees to 90° (as shown). Lift your torso up until your shoulder blades come off the ground. Slowly lower your torso back to the starting position. Repeat 10-20 times.

4



5 lower abs

Lie on your back with your hands behind your head to support your neck. Bend your hips and knees to 90° (as shown). Lift your shoulder blades off the ground and hold that position as you slowly lower your feet down toward the ground without arching your lower back. Return your legs to the starting position. Repeat 10-20 times.

5



6 obliques

Lie on your back with your hands behind your head to support your neck. Bend your knees and keep both feet flat on the floor. Place your right foot on your left knee. Bring your left elbow up toward your right knee and then slowly return to the starting position. Repeat 10-20 times. Change leg positions and repeat on the opposite side.

6



CORE STRENGTHENING

PILATES SERIES 5

1 the hundred

Lie on your back with your hands along the side of your body, with your legs straight and your shoulder blades off the ground so that your body forms a "V" position (as shown). Maintain this position as you pump both of your arms simultaneously in an up-and-down motion 50-100 times.

2 single leg

(As shown) Lying on your back bring your right knee into your chest and extend your left leg out approximately 12" off the ground (as shown). Continue the exercise by alternating positions of your left and right leg. Perform 10-20 repetitions on each side.

3 double leg (snow angel)

Lie on your back with your knees to your chest and your hands on your knees. Extend both of your legs out and reach both of your arms overhead at the same time (as shown). Simultaneously bring your legs and arms back to the starting position. Repeat 10 times.

4 scissor kick

Lie on your back with your left leg positioned so that your left foot is pointing toward the ceiling and the right leg is extended out. Place both hands behind your left calf and gently pull toward your chest. Continue the exercise by alternating positions of your left and right leg. Repeat 5-10 times on each leg.

5 double leg

Lie on your back with both legs straight and your feet pointing toward the ceiling. Place both of your hands behind your head to support your neck (as shown). Slowly lower both of your legs about 6-12" and then return to the starting position. Repeat 5-10 times.

6 criss-cross

Lie on your back with your right leg extended and your left knee toward your chest. Place both of your hands behind your head to support your neck (as shown). Move your right elbow toward your left knee and then alternate bringing your left elbow toward your right knee. Repeat 5-10 times on each side.

