QUADRICEPS

The four quadricep muscles are labeled to the right.

- Rectus femoris
- Vastus intermedius (not pictured)
- Vastus Medialis
- Vastus Lateralis

Muscle action

- Extend, or straighten, the knee
- Flex, or bend, the hip

Stretch the Quad

- Flex, or bend, the knee
- Extend, or straighten, the hip



Lying Side Quad Stretch

- Lie down on one side and prop your head up with your hand. Pull your foot toward your butt; bend your bottom knee if you're having trouble staying steady.
- Hold for 30 seconds, then switch sides.



Standing Quad Stretch

- Stand on one leg with your knees touching. If you need to, grab hold of a chair or wall for support.
- Grab your foot with your hand and pull toward your butt. Keep your chest upright, and knee pointed straight to the floor. Don't worry about how close your foot is to your butt.
- Hold for 20 to 30 seconds, then stretch the other leg.



Kneeling Quad Stretch

- Start in a high lunge position, with your foot forward. Then, slowly drop your knee to the ground.
- Find balance, once you're stabilized, reach back for your toes and pull heel up to your butt.
- Hold for 30 seconds. Slowly release your hold on your foot. Come back to the high lunge position, then switch sides.
 Perform this move on both sides.



Hamstring

The three hamstring muscles are labeled to the right.

- Biceps femoris
- Semitendinosus
- Semimembranosus

Muscle action

- Flex, or bend, the knee
- Extend, or straighten, the hip
- Rotate the hip

Stretch the Hamstring

- Extend, or straighten, the knee
- Flex, or bend, the hip
- Goal is to increase the distance from the back of your knee and the bottom of your butt



Seated Hamstring Stretch

- Sit on the front edge of a chair
- Extend your knee with your foot directly in front of your hip
- Lean your upper body forward, keeping a straight lower back



Standing Hamstring Stretch

- Stand with feet shoulder width apart
- Slide the foot of the focus leg 3 inches forward
- Hinge at your hips to move your chest toward the floor, keeping your back & knees straight.
- Hold for 30 seconds. Perform on both sides.



Towel/Strap Assisted Hamstring Stretch

- Lie on your back.
- Place the towel around your foot, with the towel going through your arch
- Use a towel to pull your leg towards your chest
- Hold for count of 15-20 seconds
- Repeat 3 times with each leg



Calves

The two muscles of your calf are labeled to the right

- Gastrocnemius
- Soleus

Muscle action

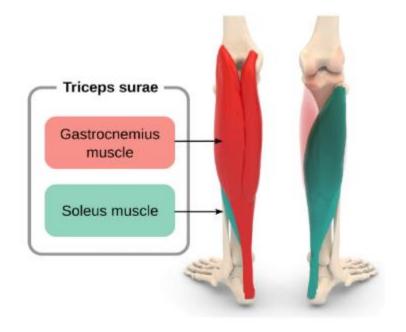
- Plantarflex the ankle, or point the toes
- Flex, or bend, the knee

Stretch the Calves

- Dorsiflex the ankle, bring the toe up toward your shin
 - Straight knee for gastrocnemius
 - Bent knee for soleus

Towel Assisted Calf Stretch

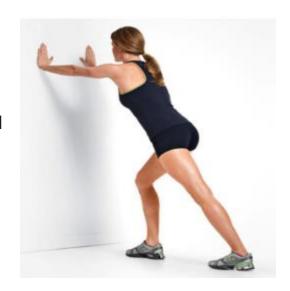
- Sit with your legs out straight, loop a towel around the ball of your foot.
- Keeping your knee & back straight.
 Using your arms pull the ends of the towel towards you.
- Hold for 30 seconds. Repeat 3 times each side.





Lunge Stretch

- Stand at arm's length away from a wall
- Place one foot behind the other. Bend your front knee, keeping your back leg straight and heel on the floor. Engage your core muscles.
- Drive your hands in to the wall and your heel into the floor
- Hold for 30 seconds. Relax. Repeat 3 times.
 Perform on both legs.



Stair Calf Stretch

- Stand on a step with feet shoulder width apart. The balls of your feet with the edge of the stair.
- Drop your heel off the edge with a bend in the knee. Use the handrail for balance.
 - Straight knee for gastrocnemius
 - o Bent knee for soleus achilles
- Hold for 15-30 seconds. Repeat 3 times in both positions



Gastroc Soleus

Glutes

The three glute muscles are labeled to the right.

- Gluteus Maximus
- Gluteus Medius
- Gluteus Minimus

Muscle Action

- Extend, or straighten, the hip
- Abduct the leg, move away from midline
- Externally rotate of the hip, turning leg outward

Gluteus medius Femur Gluteus medius

Stretch the Glutes

- Flex, or bend, the hip
- Adduct the thigh, move toward the midline
- Externally rotate of the hip, turning leg outward

Knee to Chest Stretch

- Lie on your back on a firm surface
- Gently pull one knee up to your chest until you feel a stretch in your glutes & lower back.
- Keep your other leg relaxed and fully extended.
- Hold for about 20-60 seconds.
- Switch legs and repeat.
- VARIATION: Knee to opposite shoulder



Figure 4 Stretch

- Start in a seated position on the floor.
- Cross your right ankle over your left thigh. Gently press down on your right knee until you start to feel the stretch in your glutes.
- Hold for 20-60 seconds.
- Repeat on the opposite side.
- VARIATION: lie on your back and lace your fingers behind your left hamstring. Gently pull your left leg in toward your upper body.

Pigeon

- Start in a plank position.
- Bring your right knee toward your right wrist. Extend your left leg back behind you.
- To minimize intensity, keep the right heel closer to the body.
- To increase intensity, move the right shin perpendicular to the body.
- Lower the upper body down over the right shin.
- Hold for 20-60 seconds.
- Repeat on the opposite side.





Hip Flexors

- Iliopsoas
- Rectus Femoris
- Sartorius
- Pectineus

Muscle Action

- Flex the hip, move the leg forward
- Stabilize the spine during lift, push or pull movements
- Posture

Stretch the Hip Flexor

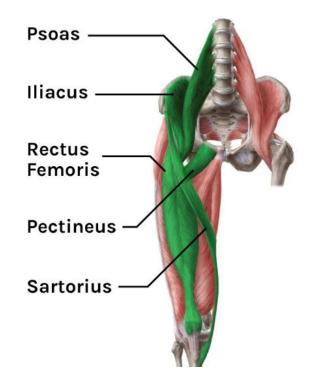
- Extend the hip, straighten the hip
- Goal increase the distance between belly button and mid thigh

• VARIATION: To deepen stretch, press down on the left knee.

Squeeze the glute to intensify the stretch

Modified Thomas Stretch

- Lay on the table on your back, with your body near the end of the table.
- Pull the right knee up to your chest. Hold the knee into position with your hands.
- Allow your other leg to dangle off the end of the table.
- Hold for 20-60 seconds.
- Repeat on the opposite side.





Half Kneeling Hip Flexor Stretch

- Start by kneeling on the floor.
- Bring the right leg in front with the knee at a 90-degrees and your foot flat on the floor.
- Left knee on the floor, shin pointed straight back (not toward the left or right).
- Contract the glutes and feel the pelvis tuck under.
- With straight back, shift weight forward.
- Hold for 20-60 seconds. Repeat on the opposite side.
- VARIATION: To deepen stretch, reach your left arm up overhead and slightly toward the right.

Standing Hip Flexor Stretch

- Start with feet hip-width apart. Tuck the tailbone, belly button to spine. Squeeze the glutes.
- Step forward with one foot and bend your front knee slightly, keeping your back leg straight.
- Push hips forward to feel a stretch through the front of your back leg's hip.
- Keep your chest upright.
- Hold for 20-60 seconds.





•	Push through your front foot to take a step back and return to your starting position.
•	Repeat on the opposite side.