

To view the stretches on YouTube [click here.](#)

Precautions

By each picture there are notes about precautions you should take.

Balance. Be careful to maintain your balance. Hold on to a stable object (e.g., a chair, railing, wall, or counter) while doing this exercise.

Joint surgery. If you have had recent joint surgery, then check with your doctor before doing this exercise.

Muscle cramps. Stop this exercise if it causes a muscle cramp.

Osteoporosis. If you have osteoporosis or a back compression fracture, then check with your doctor before doing this exercise.

Warm Up Before Stretching

Here are 2 suggestions for warming up:

1. walk slowly for 3 to 5 minutes
2. march in place for 3 to 5 minutes.

Marching in place

PRECAUTIONS: JOINT SURGERY, BALANCE

- Stand, holding on to a supportive railing or the back of a chair.
- Hold on to two chairs if you feel unsteady.
- Alternate lifting knees up and down as if marching in place.
- March in place for 3 to 5 minutes.
- Gradually try to lift knees higher and/or march faster toward the end.



Key Stretches To Do Before and After You Walk

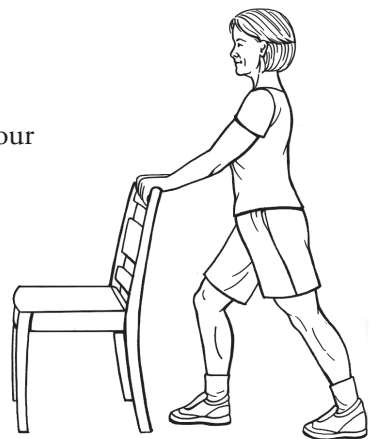
Before you walk, stretch your calf muscles, your hamstrings, your hip flexors and quadriceps, and your iliotibial bands. If you have concerns about your balance, do the seated version of the exercises. Here are some additional hints about stretching:

- Stretch just until you feel tension, and then hold the stretch in that place.
- Stretch gently and smoothly, and do not bounce.
- Be sure to do each stretch on both right and left sides.
- Breathe naturally as you hold the stretches. Don't hold your breath.

1. Stretch your calf muscles.

PRECAUTIONS: JOINT SURGERY, BALANCE

- Lean against a wall, tree, or chair for support.
- Place your right foot back and keep your toes facing forward.
- Slightly bend the knee of your left leg, never letting your knee go beyond your toes.
- Keep your head up and spine straight.
- Press the heel of your right foot into the ground.
- Hold and then repeat with your left leg.





2. Stretch Your Hamstrings – Standing

PRECAUTIONS: MUSCLE CRAMPS, BALANCE

- Holding onto a supportive railing or wall, place your right leg on a slightly raised surface, like a step or a curb.
- Keep your hips facing forward and your standing knee bent.
- Slowly bend your left knee until you feel a very mild tension or stretch on the back of your right thigh.
- To stretch a little more, bend forward just a little at your hips, keeping your back straight.
- Hold and then repeat with your other leg.

Stretch Your Hamstrings – Seated (if concerned about your balance)

PRECAUTION: MUSCLE CRAMPS

- Sit on the edge of a bench, chair, or other low, firm surface.
- Stretch out your right leg with your toes pointing up, and place your hands on your left thigh.
- Keep your left foot flat on the ground.
- Keeping your back straight, gently lean forward from your hips until you feel a stretch in the back of your right thigh.
- Pull your foot back, pointing your toes up.
- You may feel a stretch by just straightening up your back.
- Hold and then repeat with your left leg.



3. Stretch Your Hip Flexors and Quadriceps – Standing

PRECAUTIONS: JOINT SURGERY, BALANCE

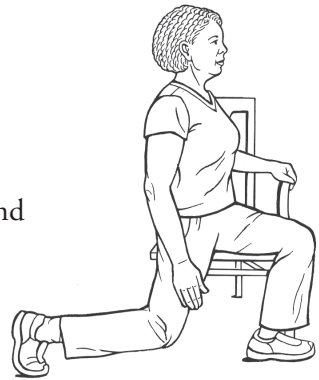
- Step forward with your left foot, keeping your right knee bent.
- Tuck your buttocks tightly under your hips.
- You will feel a stretch on the front of your right hip and upper thigh.
- Hold and then repeat with your left leg.

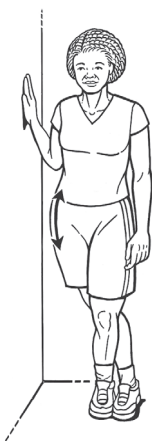


Seated (if concerned about your balance)

PRECAUTION: JOINT SURGERY

- Sit on the side of a stable chair, bench, or other low firm surface.
- Gently move your right leg back and behind you.
- Tuck your buttocks tightly under your hips.
- You will feel a stretch on the front of your right hip and upper thigh.
- Slide to the opposite side of the chair.
- Repeat with your left leg.





4. Stretch your Iliotibial bands (ITBs)

PRECAUTIONS: JOINT SURGERY, BALANCE

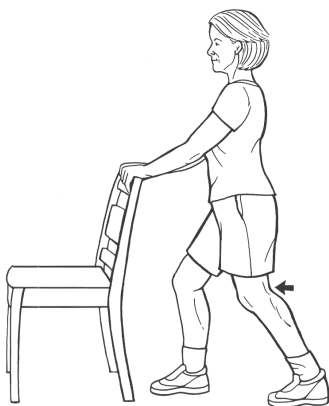
- Stand with your right hip less than foot from a wall.
- Cross your left leg in front, but don't put weight on it, and use your right arm against the wall for support, keeping both knees slightly bent.
- Lean toward the wall with your right hip until you feel a stretch on the outside of your right hip.
- Turn around and repeat on the other side.

Additional Stretches You May Wish to Try

Bent leg calf stretch

PRECAUTIONS: JOINT SURGERY, BALANCE

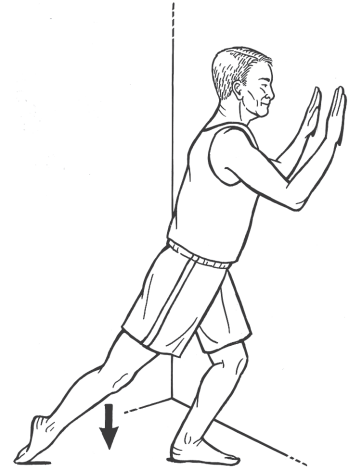
- Lean against a wall, tree, or chair for support.
- Place your right foot back, keeping your toes facing forward.
- Slightly bend your left knee, never letting it go beyond your toes.
- Slightly bend your right knee, as well.
- Keep your head up and spine straight.
- Press the heel of the right foot into the ground.
- Hold and then repeat with the left leg.



Front of calf and toe stretch

PRECAUTIONS: JOINT SURGERY, BALANCE

- Lean against a wall, tree, or chair for support.
- Bend your left knee slightly, never letting it go beyond your toes
- Put your right leg back with the toe pointing straight back.
- Keep your head up and spine straight.
- Gently press front of back foot and lower leg toward floor.
- Hold and then repeat with your left leg.



Strengthening Exercises for Walking

Do these exercises three times each week to help strengthen the muscles and joints you use when you walk. Start with 5 to 10 repetitions on each side; increase to no more than 30 repetitions. As for the stretching exercises, if you have concerns about your balance and a seated version is suggested here, do that one. If you have ongoing, severe pain in your knees, ankles, or hips, talk to your health care practitioner to get specific exercise recommendations. Here are some more hints.

- Be sure to do each exercise with both right and left sides.
- Go slowly, and do each movement with control.
- Breathe naturally. Don't hold your breath!
- If you have increased pain that lasts for more than two hours after exercising, next time do fewer repetitions.

Standing back leg lift

PRECAUTIONS: JOINT SURGERY, BALANCE

- Hold on to a counter, table, railing, or wall for support.
- Stand straight and lift your right foot back (keeping your ankle bent) until only your right toes are on the floor, then bring your foot forward again.
- Keep your right leg straight as you move it back and forth.
- Stand straight and don't lean forward, so the motion comes from your hip and you feel the muscles tightening in your buttocks.
- Return only your toes to the floor between repetitions.
- Repeat with your left foot.
- Repeat 5 times on each side to start, increasing to no more than 30 times on each side.



Heel and toe raises

Standing

PRECAUTIONS: JOINT SURGERY, BALANCE, MUSCLE CRAMPS

- Hold on to a counter, table, railing, or wall for support
- Lift your toes, keeping your heels on the floor.
- Hold for a count of 5.
- Lower slowly.
- Lift your heels, keeping your toes on the floor.
- Hold for a count of 5.
- Lower slowly.
- Repeat 5 times to start, increasing to no more than 30 times.
- It is easier to do both legs at the same time. If your feet are too sore, then wear shoes or do this exercise while sitting down.



Seated (if concerned about your balance)

PRECAUTIONS: JOINT SURGERY, BALANCE, MUSCLE CRAMPS

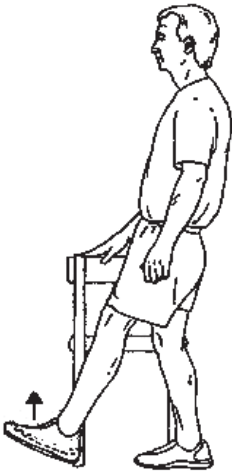
- Sit down with or without your shoes on.
- Lift your toes, keeping your heels on the floor.
- Hold for a count of 5.
- Lower slowly
- Lift your heels, keeping your toes on the floor.
- Hold for a count of 5.
- Lower slowly.
- Repeat 5 times to start, increasing to no more than 30 times.
- It is easier to do both legs at the same time.

Basic quadriceps strengthening

Standing

PRECAUTION: BALANCE

- Hold onto a counter, table railing, or wall for support.
- Stand on your right foot, keeping your right knee slightly bent.
- Bring your left leg forward so it is slightly off the ground, but tighten the muscles on the top of your left thigh before you do it.
- Repeat 5 times to start, increasing to no more than 30 times.
- Repeat standing on your left foot and using your right leg.



Seated (if concerned about your balance)

PRECAUTION: NONE

- Sitting on the edge of a chair, put your right leg out in front of you, with it resting on the ground.
- Tighten the muscles on the top of your right thigh by gently pushing the back of your right knee toward the floor.
- Hold for a count of 5.
- Repeat 5 times to start, increasing to no more than 30 times.
- Repeat with your left leg.



Additional quadriceps strengthening, lying on your back

PRECAUTION: OSTEOPOROSIS

- Bend your left knee and place your left foot flat on the bed.
- Tighten the muscle above your right knee, and bend your right ankle.
- Lift your right leg from a few inches to no higher than your left knee.
- Hold for a count of 5.
- Lower slowly.
- Repeat 5 times to start, increasing to no more than 30 times.
- Repeat with your left leg.

If you can easily do this exercise 30 times on each side without pain, you can add a 1- to 2-pound strap ankle weight to each side at a time and do the exercise as described. Start slowly, though, repeating 5 times to start and increasing to no more than 30 on each leg.



Standing mini-squats

PRECAUTION: BALANCE

(STOP THIS EXERCISE IF IT HURTS YOUR KNEES.)

- Hold onto a counter, table, railing, or wall for support.
- Stand straight with your feet hip distance apart.
- Turn your feet slightly outward.
- Squeeze your buttocks together.
- Slowly bend your knees to lower your body just a few inches.
- Keep your feet flat and do not allow your knees to go past your toes.
- Hold for a count of 5.
- Repeat 5 times to start, increasing to no more than 30 times.

