

Knee Exercises

If my knee hurts, why exercise?

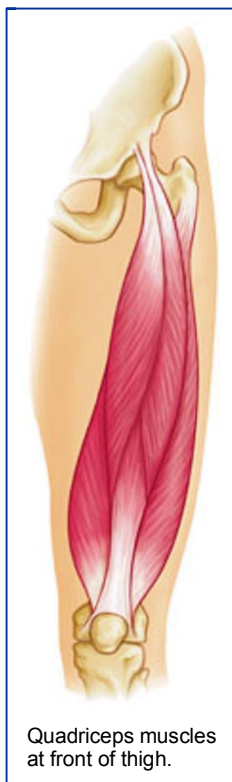
Having strong, flexible muscles is the best way to keep knees healthy and prevent further injury.

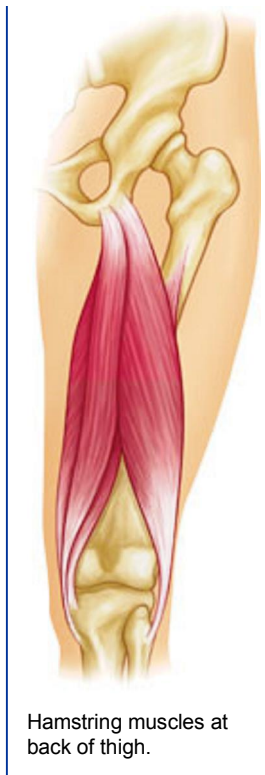
Strength

Strengthening the muscles that support your knee will reduce stress on your knee joint. Strong muscles in the front of your thigh (quadriceps) and back of your thigh (hamstrings) help your knee joint absorb shock. The less strain on your knee, the better the chances are for pain relief and preventing further injury.

Flexibility

Stretching the muscles that you strengthen is an important part of preventing injury. Strengthening exercises build muscle to help support your knee, but can also tighten the muscles. Tight muscles are more prone to injury. Gentle stretching after strengthening exercise reduces muscle soreness and will keep your muscles long and flexible.





Hamstring muscles at back of thigh.

How do I start exercising?

□our doctor or physical therapist will tell you which exercises are right for you.

Start slowly. □uilding muscle strength takes time. □s you get stronger, gradually increase the number of exercise repetitions or add weight to an exercise.

Do not ignore pain. □ou should not feel serious pain during an exercise. □ou might feel discomfort because you are challenging your muscles, but not pain. □f an exercise hurts, stop the exercise.

Do not overdo it. □ou should not feel serious pain after exercise. □is typical to feel stiff or a bit sore the day after you exercise. □f you feel so sore that it is difficult to move, then you have overdone your exercise. □est is the best thing for your sore muscles.

Ask questions. Talk to your doctor or therapist if you have any pain or are unsure of how many exercises to do, or how often to do them.

Strengthening Exercises

Warm up with 5-10 minutes of low impact activity, like walking or cycling, before doing these exercises

Straight-Leg Lift



You should feel this exercise mostly in the front of your thigh.

lie on your back with one leg bent and the other straight. Tighten the thigh muscles in your straight leg and slowly lift it until it is about a foot off the floor. Hold it for 10 to 15 seconds. Slowly lower your leg to the floor. Repeat and switch sides.

Do Keep your upper body relaxed and tighten your stomach muscles to keep your low back flat against the floor.

Do not Arch your back. Do not lift your leg too high with a jerking motion.

Single-Leg Dip



You should feel this exercise in the front and back of your thigh, hip, and buttocks.

Place two chairs on either side of you to help with balance. Lift one leg slightly in front of you. Plant your weight on the other leg. Slowly lower yourself down a few inches, pushing your weight onto the heel of your supporting leg. Hold for 10 to 15 seconds. Slowly straighten up. Repeat and switch sides.

Do Sit back as if there was a chair behind you.

Do not Let the knee of your supporting leg move forward over your toes.

Hamstring Curls



You should feel this exercise at the back of your thigh.

Hold on to the back of a chair for balance. Plant your weight onto your supporting leg. Lift the other foot and bring the heel up toward your buttocks. Hold for 10 to 15 seconds. Slowly lower your leg. Repeat and switch sides.

Do keep your knees close together.

Do not lock the knee of your supporting leg. Do not bring your heel up past a 90 degree angle.

Knee Stabilization Series



You will feel these exercises on all sides of your thigh, your hip and buttocks.

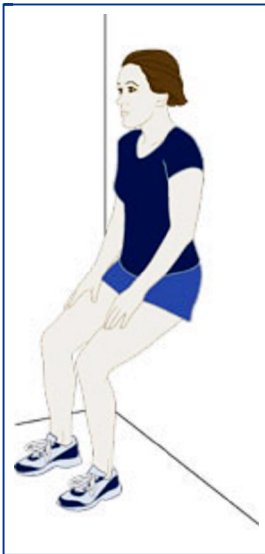
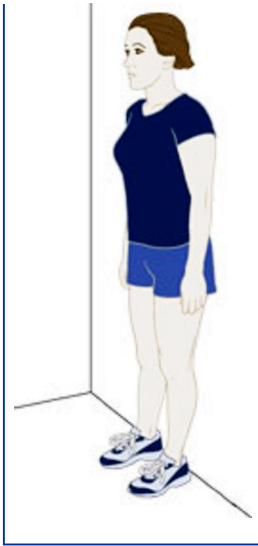
Hold onto the back of a chair for balance. Slightly lift one leg. Plant your weight on your supporting leg. Tighten your thigh muscles in your lifted leg and slowly move it in the direction shown. Hold for 10 to 15 seconds. Slowly return to start and repeat. Turn your body 90 degrees to begin the next exercise in the series.

Do focus on your supporting leg. It is working just as hard as the moving leg.

Do not lock the knee of your supporting leg. Do not arch your back or lean to either side during these exercises.

Wall Squat





You should feel this exercise mostly in the front of your thighs.

Stand with your head, back, and hips against a wall. Step your feet out about 1 foot from the wall, hipwidth apart. Slowly slide down the wall until you are almost in a sitting position. Hold for 15 to 30 seconds, then slowly slide up. Repeat.

Do keep your abdominal muscles tight. Hold the position longer as you get stronger.

Do not slide your hips down lower than your knees. Do not let your knees move forward over your toes.

Step Ups





You should feel this exercise in the front and back of your thigh, your hip, and buttocks.

Do:

Do not:

Stretching Exercises

Quadricep Stretch



You should feel this stretch in the front of your thigh.

Do:

Do not:

Hamstring Stretch



You should feel this stretch at the back of your thighs and behind your knees.

Do:

Do not:

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