

WEB EXCLUSIVE | Supplemental content for:

EXERCISE TO IMPROVE OUTCOMES IN KNEE OSTEOARTHRITIS

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Sample Home Exercise Program

Exercises for flexibility and strength

Perform each exercise five times a day for the first week and then increase gradually to 10 repetitions.

1. Knee bending

Sit on the floor or firm surface. Keep your foot flat and bend your knee as far as you can until you feel a slight pull or tension. Hold this position for 10 to 30 seconds. Breathe normally and relax. Then straighten out your leg completely and rest in that position for 10 to 30 seconds before repeating.



2. Knee straightening

Sit on a firm surface with a rolled towel under your knee. If you feel a pull behind your knee or it is difficult to straighten your knee, lean back slightly to lessen the tension at the back of your knee. Start by tightening up the muscles on the front of your thigh, pushing the back of your knee into the rolled towel and at the same time, raising your heel slightly up off the surface. Hold for a count of 10. Once you can do this 10 times comfortably, begin to lift your knee up off the towel, raising your straight leg up in the air. Hold for a count of five and relax. It is important to make sure you get your knee completely straight before you raise your leg.



3. Knee and hip strengthening

Lean up against a wall with your feet shoulder width apart and heels about 12 to 14 inches from the wall. Place a sturdy chair close by or stand close to a counter or table for support. Slowly slide down the wall, bending your knees slightly. It is not necessary to bend your knees very much at first. Never bend them so far that you feel pain or more than 90 degrees. Hold this lowered position for 10 seconds and then slide back up the wall. Rest and repeat.



Endurance activity

Combine these three exercises done daily with a walking or stationary bicycle program on most days of the week. Start walking or cycling for five to 10 minutes at a moderate speed. Walk on flat, even ground and cycle without resistance at 50 to 70 rpm. Your goal can be three 10-minute sessions to accumulate 30 minutes of activity or to exercise continually for 30 minutes. As you get more endurance and strength, add some hills or resistance to your program. Walk or cycle at a speed that is no more than moderate intensity. (Moderate intensity means that you can carry on a conversation while exercising, your breathing is deeper and a bit faster, you start to feel warm, and you might begin to sweat after 10 minutes.)