

Rehabilitative Exercises for Patients With Knee Osteoarthritis

Many of the most bothersome aspects of osteoarthritis are caused not by the disease itself, but by lack of exercise. Studies show that exercise reduces pain and improves function in patients with knee osteoarthritis. Not only can exercise help keep your joints fully mobile, it can also strengthen the surrounding muscles, which provides extra joint support.

Exercises should focus on increasing range of motion, muscle strength, and aerobic capacity. Walking is

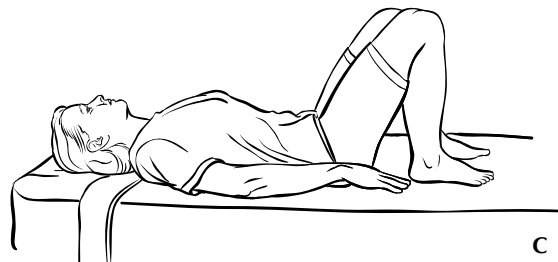
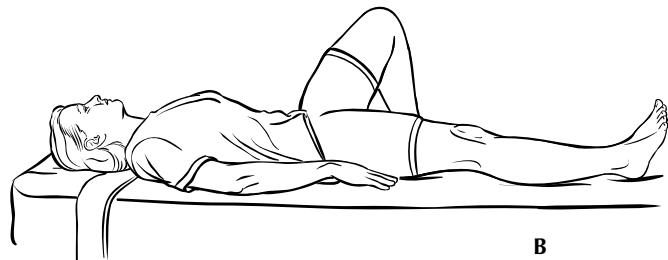
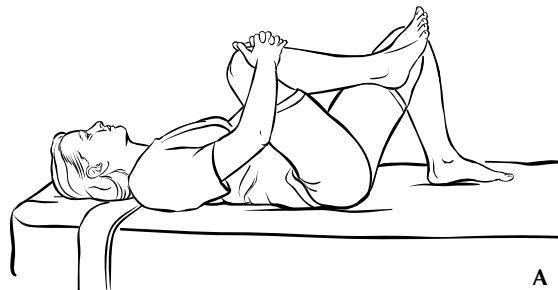
an ideal aerobic activity for people with arthritis. Your clinician may also recommend swimming and water exercises, dancing, cycling, or other types of exercise. Following are some range-of-motion and muscle-strengthening exercises specifically designed for patients with osteoarthritis of the knee. Consult your clinician to determine which exercises are best for you, and for the number of repetitions, sets, and times per week you should aim for. If you feel pain at any point during an exercise, immediately stop.

RANGE OF MOTION

Also known as *stretching* or *flexibility exercises*, range-of-motion exercises can be used as their own activities or as a warm-up before more vigorous exercise. Range-of-motion exercises provide a gentle and effective introduction to an exercise program.

KNEE TRIANGLES

1. Lie on your back with your knees bent and your feet flat on the floor or bed.
2. Bring your right knee to your chest (A). If you can, clasp your hands around your knee and draw your knee close. Hold for a few counts.
3. Release your leg and let it unbend onto the floor (B).
4. Shake your leg slightly to relax the muscles.
5. Return to the starting position, with both knees bent and your feet flat.
6. Slide your right foot back, bringing it as close to your buttocks as you can (C). You may pull your foot with your hand. Hold for a few counts.
7. Return to the starting position, and repeat with your left leg.

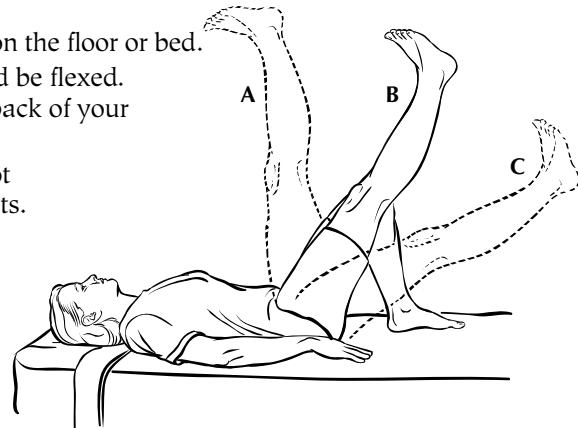


Number of repetitions: _____ Number of sets: _____ Times per week: _____

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LEG EXTENSIONS

1. Lie on your back with your knees bent and your feet flat on the floor or bed.
2. Bring your right knee to your chest. Your right foot should be flexed. If necessary, place your right hand on your leg near the back of your knee for support.
3. Straighten your right leg, so that the sole of your right foot is facing the ceiling (A). Hold this position for a few counts.
4. Bring your right knee back to your chest. Your left knee should still be bent.
5. Straighten your right leg to an angle that places your straightened knee next to the bent one (B). Hold this position for a few counts.
6. Bring your right knee back to your chest.
7. Straighten your right leg a few inches above the floor (C). Hold this position for a few counts.
8. Return to the starting position, and repeat the exercise with your left leg.

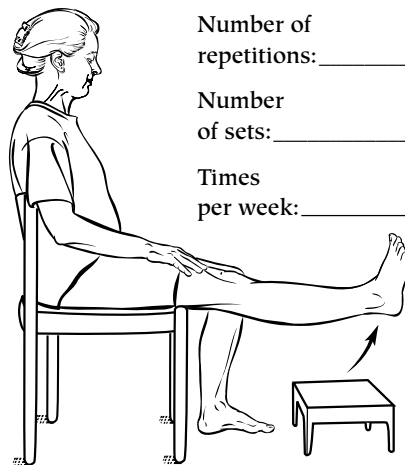


Number of repetitions: _____ Number of sets: _____ Times per week: _____

MUSCLE STRENGTH

You don't need to lift heavy weights or even to work up a sweat to increase your muscle strength. The following exercises provide resistance in simple movements.

Before you begin your muscle-strengthening exercises, always warm up with range-of-motion exercises first.



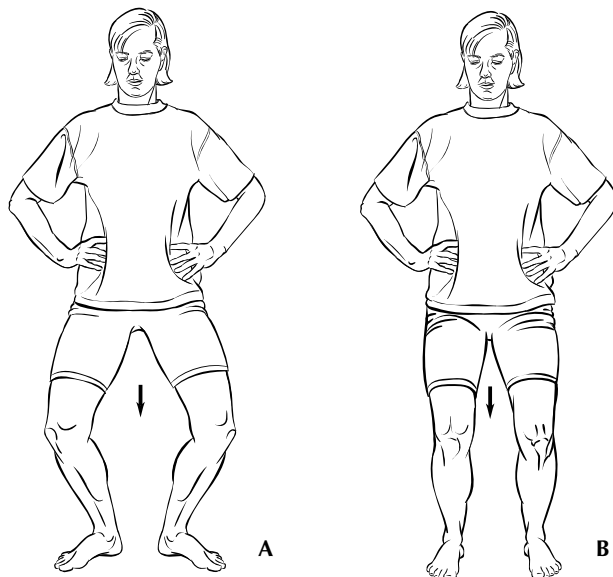
Number of repetitions: _____
 Number of sets: _____
 Times per week: _____

CHAIR LIFTS

1. Sit in a chair with both feet on the floor in front of you.
2. Straighten your right knee so that it is directly in front of you. If it is too difficult for you to bring your leg up from the floor, try starting with your leg on a low stool.
3. Place your hand on your right thigh to feel the muscle working.
4. Hold your leg as straight as possible, and see how long you can keep it up. Thirty seconds is the goal you should work toward.
5. Bring your right knee down, and repeat the exercise with your left leg.

MINI-SQUATS

1. Stand with your feet shoulder-width apart and your feet facing outward. Place your hands on your hips or, if necessary, on the back of a chair for support.
2. Bend your knees so that they are directly over your toes (A). Keep your back straight.
3. Straighten your knees so that you are back in the starting position.
4. Turn your feet so that they are facing front.
5. Again, bend your knees so that they are directly over your toes (B). Keep your back straight.
6. Straighten your knees so that you are standing again.



Number of repetitions: _____ Number of sets: _____ Times per week: _____