Total Knee Exercises

Why should I exercise my knee?
Doing the exercises in this handout will strengthen the muscles that support your knee to help you recover from knee replacement surgery.

How should I exercise?
Do the exercises selected by your physical therapist in the right phase (1, 2, or 3) for your stage of recovery. Do the exercises with both your legs, exactly as you were taught. Do the best you can without getting to the point of severe pain.

What if exercising is hard?
It may feel difficult to exercise your replaced knee because it hurts or feels weak. But exercising is very important to your full recovery. The surgery alone (without exercise) will not fix your knee.

Tracking your exercises

What is a set? What is a rep?
Exercise is often measured in repetitions (sometimes called reps) and sets.
• A repetition (or rep) is doing an exercise movement once.
• A set is a certain number of reps. For example, a set might be 10 reps.

You can keep track of the sets and reps you do for each exercise in the chart below.

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<tr>
<th>Date</th>
<th>Exercise</th>
<th>Sets</th>
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**Phase 1**

**Knee extension stretch**

Hold for ____ seconds. Do ____ reps.

- Sit as shown, holding both ends of a towel or belt looped around the ball of your foot.
- Keep your knee straight and pull the towel or belt until you feel a gentle stretch behind your knee.

**Quad sets**

Hold for ____ seconds. Do ____ reps and ____ sets.

- Lie on your back or sit with your leg extended.
- Tighten your quad muscles (in the front of your thigh above your knee), to push the back of your knee downward.

**Knee stretch**

Hold for ____ minutes. Do ____ times a day.

- Lie on your back with your ankle supported by a rolled-up towel.
- Relax your leg, letting gravity straighten your knee.
- Work up to 10 minutes 3 times a day.

**Heel slides**

Do ____ reps and ____ sets.

- Lie on your back with your legs straight.
- Slide your heel in toward your buttocks.
- Return to starting position.

**Sitting knee stretch**

Hold for ____ seconds. Do ____ reps.

- Sit in a chair.
  - Beginner: Bend your operated knee as much as possible.
  - Intermediate: Use the other foot to help stretch.
  - Advanced: Plant your foot, then scoot your hips forward, bending your knee.

**Sitting knee extensions**

Do ________ reps and ________ sets.

- Sit with your legs bent to 90 degrees.
- Straighten your operated leg at your knee, then return to starting position.
Phase 2

☐ **Knee extension**
Do ______ reps and ______ sets.

- Lie on your back with a pillow or towel under your replaced knee and your leg bent 45 degrees.
- Straighten your leg, raising your foot.
- Relax your leg, letting gravity bend your leg.

☐ **Leg raise**
Hold for _____ seconds. Do ______ reps and ______ sets.

- Lie on your back with your non-operated knee bent.
- Keep your operated leg straight and raise it until it lines up with the thigh of your bent leg.

☐ **Sitting knee stretch with towel**
Hold for _____ seconds. Do ______ reps and ______ sets.

- Sit on a flat surface.
- Bend your operated knee with your foot flat.
- Loop a towel around your ankle and slide your heel toward your buttocks.

☐ **Knee squats**
Do ______ reps and ______ sets.

- Stand on both feet, holding on to a counter or wall for balance.
- Bend your knees to 45 degrees. Be sure to keep good low back posture. Don’t let your knee go past the end of your toes.
- Return to starting position.

☐ **Standing knee flex**
Do ______ reps and ______ sets.

- Stand, holding a wall or chair.
- Bend your operated leg toward your buttock through the full range. (Do not bend leg at hips.)

☐ **Heel raises and toe raises**
Do ______ reps and ______ sets.

- Stand up using a counter for balance.
- Raise up on your toes as high as you can. Return to starting position and repeat.
- Next put your weight on your heels and raise your toes.

☐ **Knee marching**
Do ______ reps and ______ sets.

- Hold onto a table, standing with feet shoulder-width apart.
- Raise one knee as high as you can, then lower it.
- Repeat with the other knee and continue.
Chair sit to stand

- Stand holding onto a counter, with a chair behind you.
- Lean forward slightly as you bend your knees and lower your buttocks toward the chair, as if you are going to sit down.
- Before you touch the chair, stand up to full upright position.

Forward lunge

- Stand with feet together and then step forward, keeping your trunk vertical.
- Push back up to your starting position.
- Repeat the lunge with your other leg.

Heel-to-toe walk

- Start in a standing position.
- Step placing one foot directly in front of your other foot.
- Continue taking steps one foot in front of the other.

Standing balance with stride

- Stand with your feet together with one foot slightly in front of your other foot. Maintain your balance.
- Repeat with the opposite foot in front.

Physical Therapy Progress Chart

Your physical therapist may use this chart to measure your progress in moving your knee.

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<th>Flexion (bend)</th>
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