

Preparing for your Total Joint Replacement Surgery

As part of the process of a hip or knee replacement, it is recommended that you prepare physically for the surgery with a targeted exercise program. These exercises are important to the success of your total joint replacement. Studies show that exercising prior to joint replacement results in better outcomes after surgery. The goal is to start training your muscles and tissues for what will be needed after your surgery.

The exercises are grouped into four categories: *range of motion, strengthening, balance and aerobic exercise*. Over time, having an arthritic joint can result in less movement. This movement does not improve on its own as a result of surgery, since your soft tissue is responsible for some of the restriction. Stretching the soft tissue ahead of surgery is incredibly important to how well you will recover after surgery.

Low impact aerobic exercises are also beneficial not only for your joint replacement, but for your level of fitness in general. These types of activities can include biking (including stationary), walking, swimming, etc. Although it may be more difficult to do these activities with sore joints, being able to do these things is great for all around cardiovascular health. Generally speaking, it is recommended to do 150 total minutes of cardiovascular exercise per week.

After receiving your surgery date, you will be asked to attend a pre-admit education and assessment 2-6 weeks before your surgery.

We hope that you are staying safe and healthy during this unprecedented time. We look forward to seeing you in the near future!

Pre-Operative Exercises

Total Knee Replacement

Bending Range of Motion:

Choose 1 of the following 2 options:



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Sit on a chair with a towel under one foot. Slide the foot under the chair as far as you can. Move your knee forward keeping the sole of your foot in contact with the floor.

Hold 5 seconds
Repeat 10 times
Complete 3 times per day to maintain mobility



Lying or long sitting with legs straight. Put a strap or belt around your foot. Bend your knee as far as possible. Gently pull the strap to bend your knee a little more.

Hold 5 seconds
Repeat 10 times
Complete 3 times per day to maintain mobility



Straightening Range of Motion:



Stand tall and take a long step forward. Move your weight forwards but keep the heel of the rear leg on the floor and feel a stretch in your calf. Return to the starting position.

Hold 30 seconds

Repeat 4 times

Complete 3 times per day to maintain mobility



Sitting on a chair, with the leg to be exercised supported on a chair as shown. Do not round your back. Let your leg straighten in this position. If you need a more intense stretch, then keep chest up and hinge forward at the hips.

Hold 30 seconds

Repeat 4 times per day

Complete 3 times per day to maintain mobility

Knee Strengthening: Phase I

Choose 1 of the following 3 options: (options get progressively more difficult)



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Lying or long sitting with legs straight.
Push your knees down firmly against the bed. **This is very important if your knee does not easily straighten on its own.**
You may feel tightness in the back of your knee- this is normal.

Hold 5 seconds
Repeat 10 times
Complete 3 - 4 times a week



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Lying or long sitting with legs straight.
Place a roll under the straight knee.

Straighten the knee using your front thigh muscles. Keep the back of your knee against the towel roll.
Keep the tension for a moment and then relax.

Hold 5 seconds
Repeat 10 times
Complete 3 - 4 times a week



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Sit on a chair with a cushion under your knee
Tighten the front of your thigh muscle and straighten your knee slowly.

Hold 5 seconds
Repeat 10 times
Complete 3 - 4 times a week

Knee Strengthening: Phase II

Choose 1 of the following 2 options: (options get progressively more difficult)



Sitting with your arms crossed at the front edge of your seat.

Stand up and then sit down slowly on a chair. (This can be made easier and more difficult by changing the height of the chair). Be mindful to not use momentum to rock yourself forward.

Hold 5 seconds

Repeat 10 times

Complete 3 - 4 times a week



Stand leaning with your back against a wall and your feet about 20 cm from the wall. Wear shoes if your floor is slippery

Slowly slide down the wall until you feel your thigh muscles activate. Hold for 5 seconds. Return to starting position. As this becomes easier, you can deepen your squat.

Hold 5 seconds

Repeat 10 times

Complete 3 - 4 times a week

Balance:



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Stand on one foot.
Keep your balance. Hold onto counter for support if needed

Hold 30 seconds
Repeat 3 times
Complete 3 times per day

Low Impact Aerobic Exercise:



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- Cycling/Stationary biking is great for both before and after surgery
- Swimming / water walking / water aerobics
- Walking

Time: 10-30 minutes, as tolerated

Goal: 3-5 days per week