Pre-operative Exercises, Goals, & Activity Guidelines – Exercising Before Surgery

It is important to be as fit as possible before undergoing a total knee replacement. This will make your recovery much faster. Eleven exercises are shown here that you should begin now and continue until surgery. You should be able to complete them in 15-20 minutes (excluding exercise 11) and it is recommended that you do all of them 2x/day. Consider this a minimum amount of exercise prior to surgery.

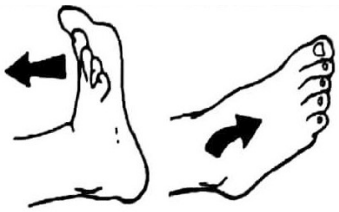
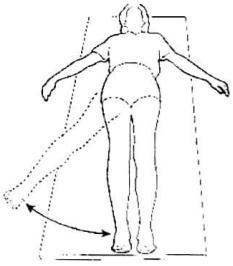
Also, remember that you need to strengthen your entire body, not just your leg. It is **very important** that you strengthen your arms by chair push-ups (Exercise 8) because initially you will be relying on your arms to help you get in and out of bed/chair, walk, and to do your exercises postoperatively.

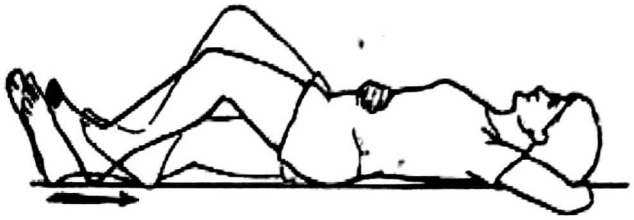
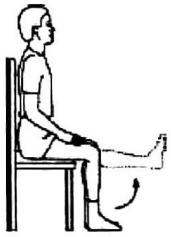
Stop doing any exercise that is too painful.

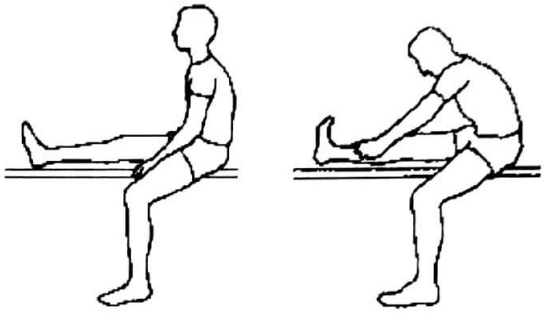
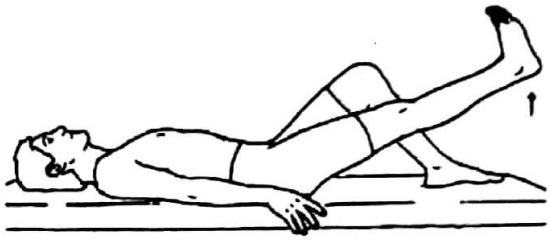
1.	Ankle Pumps	20 reps.	2 times/day
2.	Quad Sets	20 reps.	2 times/day
3.	Gluteal Sets	20 reps.	2 times/day
4.	Hip Abduction/Adduction	20 reps.	2 times/day
5.	Heel Slides	20 reps.	2 times/day
6.	Short Arc Quads	20 reps.	2 times/day
7.	Long Arc Quads	20 reps.	2 times/day
8.	Armchair Push-ups	20 reps.	2 times/day
9.	Seated Hamstring Stretch	20 reps.	2 times/day
10.	Straight Leg Raises	20 reps.	2 times/day
11.	Knee Extension Stretch	20 mins	2 times/day

Pre-op Knee Exercises (see the following pages for descriptions)

Range of Motion and Strengthening Exercises

Ankle Pumps Move ankle up and down. Repeat 20 times.	
Quad Sets Lie on back, press knee into mat, tightening muscles on front of thigh. Hold for 5 secs. Do NOT hold breath. Repeat 20 times.	
Gluteal Sets Squeeze bottom together. Hold for 5 secs. Do NOT hold breath. Repeat 20 times.	
Hip Abduction/Adduction Lie on back, slide legs out to side. Keep toes pointed up. Bring legs back to starting point. Repeat 20 times.	

Heel Slides Lie on couch or bed. Slide heel towards your bottom. Repeat 20 times.	
Short Arc Quads Lie on back, place towel roll under thigh. Lift foot, straightening knee. Hold for 5 secs. Repeat 20 times.	
Long Arc Quads Sit with back against chair. Straighten knee. Hold for 5 secs. Repeat 20 times.	
Armchair Push-ups Sit in an armchair. Place hands on armrests. Straighten arms, raising bottom off the seat, if possible. Feet should stay flat on floor. Repeat 20 times.	

Seated Hamstring Stretch Sit on couch or bed with leg extended. Lean forward and toes back. Stretch until pull is felt behind the knee. Hold for 20-30 secs. Repeat 5 times.	
Straight Leg Raises Lie on back, unaffected knee bent and foot flat. Lift opposite leg up 12 inches. Keep knee straight and toes pointed up. Repeat 20 times.	
Knee Extension Stretch Prop foot of affected leg up on chair. Place towel roll under ankle and a bag of ice (or nothing) on top of knee. Do this for 20 minutes.