

WEEK 1 KNEE REPLACEMENT EXERCISE PROGRAM

Physical Therapy Simplified: Doctor of Physical Therapy–Approved Home Routine

1. Hamstring Stretch

Purpose: Improve hamstring flexibility and support knee extension

How to Do It:

- Lie on your back and loop a strap around your foot
 - Keep your leg straight and raise it until you feel a stretch
 - Hold for 20 seconds, repeat 5 times
- Pro Tip:** Keep the opposite knee bent to support your back
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2. Calf Stretch with Strap

Purpose: Improve ankle mobility and assist full knee extension

How to Do It:

- Sit with your leg extended and loop a strap around the ball of your foot
 - Gently pull back until you feel a stretch in the calf
 - Hold for 20 seconds, repeat 5 times
- Pro Tip:** A stretch strap with loops gives better control
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3. Quad Set (Towel Behind Knee)

Purpose: Activate quadriceps and improve knee control

How to Do It:

- Place a rolled towel under your knee
 - Tighten your thigh to push the knee into the towel
 - Hold 5 seconds, repeat 10–15 times
- Pro Tip:** Look for your kneecap to lift slightly as a sign of activation
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4. Quad Set (Towel Under Ankle)

Purpose: Promote knee extension and improve quad firing

How to Do It:

- Rest with a towel under your ankle, letting the knee relax
- Tighten your quad muscles
- Hold 5 seconds, repeat 10–15 times

Pro Tip: A gentle stretch behind the knee is a good sign

👉 5. Short Arc Quad

Purpose: Strengthen quads in a small, safe range

How to Do It:

- Place a rolled towel under the knee
- Straighten the leg by lifting your foot
- Hold 5 seconds, repeat 10–15 times

Pro Tip: Don't let your thigh rise—keep the movement below the knee

👉 6. Long Arc Quad

Purpose: Build strength through a functional range

How to Do It:

- Sit with back supported and feet flat
- Straighten one leg until fully extended
- Hold 2–3 seconds, then lower slowly. Repeat 10–15 times

Pro Tip: Slow movement = better strength gains

👉 7. Heel Slides

Purpose: Gently improve knee flexion range

How to Do It:

- Lie on your back with both legs extended
- Slide the heel toward your buttocks, then return
- Repeat 10–15 times

Pro Tip: Use a towel under your heel for assistance if needed

8. Heel Prop

Purpose: Regain full passive knee extension

How to Do It:

- Lie back and rest your heel on a rolled towel
- Let the knee relax into full extension
- Hold for 5–10 minutes

Pro Tip: You can ice during this stretch to reduce swelling

BONUS: Ice & TENS for Pain and Muscle Activation

Purpose: Reduce pain, swelling, and re-engage the quadriceps

How to Use:

- **Ice:** Apply for 15–20 minutes, 3–5x daily with leg elevated
 - **TENS:** Use as directed by your PT for quad activation or pain relief
 - **Combo:** Use during quad sets or rest periods
- Pro Tip:** Always use a barrier under the ice and follow TENS safety guidelines



WEEK 1 EXERCISE TRACKER

Exercise	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Hamstring Stretch							
Calf Stretch with Strap							
Quad Set (Behind Knee)							
Quad Set (Under Ankle)							
Short Arc Quad							
Long Arc Quad							
Heel Slides							
Heel Prop							
Ice / Elevation							
TENS (if applicable)							

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