

Knee Osteoarthritis: Home Exercise Program

A printable home exercise program for knee osteoarthritis - quadriceps, calf and balance work that reduces pain and builds capacity around the knee.

At a Glance

- Exercise is one of the most effective treatments for knee osteoarthritis
- The goal is capacity: stronger muscles support the knee and reduce pain
- Expect mild soreness, not sharp pain - back off if pain climbs

The Program

Daily (start here):

- Terminal knee extension: straighten the knee against light resistance - 2 sets of 10-15
- Quad sets: tighten the front thigh, hold 5-10 seconds - 2 sets of 10
- Heel slides: bend the knee while lying or sitting - 2 sets of 10

Every other day (build strength):

- Sit-to-stand: rise from a chair with control - 2 sets of 8-10
- Step-downs: slow and controlled from a low step - 2 sets of 8
- Single-leg balance near a support - 3 holds of 20-30 seconds
- Calf raises: rise onto the toes holding support - 2 sets of 10-15

Weekly (keep moving):

- Walking, cycling or swimming: 20-40 minutes, at a pace you can talk through
- Increase distance or time gradually, one week at a time

Do This

- Start easier than you think you need to - control beats load
- Ice the knee after exercise if it feels swollen
- Progress weight or repetitions only when the current level feels comfortable

Avoid This

- Resting completely because of pain - movement is part of treatment
- Deep squats, heavy lunges or high-impact running in early stages
- Pushing through sharp pain or swelling that climbs

When to See Someone

See a physiotherapist if pain is sharp, the knee is hot and red, or symptoms are getting worse. See knee osteoarthritis for more.

References

1. NICE Guideline NG226. "Osteoarthritis in over 16s: diagnosis and management." 2022.
<https://www.nice.org.uk/guidance/ng226>
2. NICE Clinical Knowledge Summaries. "Osteoarthritis." <https://cks.nice.org.uk/topics/osteoarthritis/>

This information is for education only and is not a medical diagnosis. A hot, red, swollen knee needs prompt assessment. If pain is sharp or getting worse, stop and see a health professional.