The 27 Best Knee Strengthening Exercises You Can Do At Home

The best knee strengthening exercises all in one place: build stronger legs at home in just 10 minutes per day.

To learn more about the individual exercises, click here.

Knee Strengthening Exercises for Runners
The following exercises can help you run fast and injury-free.

Banded Squat
- Feet hip-width apart
- Feet point forward
- Strong elastic loop band above or below knees
- Sit back rather than down
- Take about 10 second per repetition
- As a warm-up: 1 set of 3 reps
- As a workout: 3 sets of 10 reps

Glute Bridge
- Two-legged or single-leg
- Straight line from knees through hips to shoulders
- Keep hip parallel to the ground with single-leg version
- Push up high enough
- Hold top position for a second
- Use weight on your hip to make it heavier
- Slide feet out to make it easier on the knees
Hip Flexor Training

- Lift one knee up to hip-height
- Hold for 30 – 60 seconds
- Strap weights to your foot once this has become easy and go for repetitions

Hip Flexor Stretch

- Brace your core and buttocks muscles to keep the spine neutral
- Don’t hyper-extend the lower back
- [Click here for a video explanation](#) of the correct technique
Clamshell
- Bend the knees slightly
- Tilt the top of the hip forward
- Tuck your pelvis under
- Go for 3 sets of 15 repetitions
- Use an elastic band to make it harder

Samurai Sit
- Kneel down on some padding
- Sit back onto your heels
- Keep your feet together
- Stretch the toes for 60 seconds

Hip Abductions
- Keep your body in a straight line
- Title the top of the hip forward
- Lead with the heel
- Exertion should be felt on the outside of the hip
- Hold the top-position for a second
- Go for 3 sets of 15 reps per side
Adductor Bridge

- Hold for 60 seconds per side

Prone Leg Raises

- Keep your lower back flat on the ground
- Go for 3 sets of 10 – 15 reps
- Stop once your lower back loses contact with the ground
Ankle Rotations

- Go for 20 – 1000 repetitions per side

Ankle Dorsiflexion Strength

- Lift the bottom foot against the resistance of the other foot
- Alternatives:
Loop an elastic band around the top of your foot
Pull against it for repetitions

Pull the front of the foot up forcefully and hold for 2 seconds
Go for as many reps as needed to achieve a burn

**Knee Strengthening Exercises for Athletes**
The following knee exercises for athletes are advanced drills. If you don’t feel safe doing them I recommend you start with the exercises for runners above. Using those you can build a good foundation for the more advanced drills.
Calf Raises

- Stand on something so that your heels can sink down
- Start with two-legged calf raises until you can do 50+ with ease
- Do single-leg calf raises for 3 sets of 15

Reverse Lunge

- Stand with your feet about hip-width apart
- Lunge backwards
- Keep the front knee tracking over the toes
- Move with little momentum
- Once this is easy you can hold on to dumbbells or other weights
**Hip Thrust**

- Pick a low bench or stack some aerobic steps
- Push the bench against the wall to keep it from sliding away
- Place your shoulder blades just above the edge
- Push up as high as you can
- Place a padded barbell on your hip to load the exercise

**Couch Stretch**

- Place your knee all the way into the back corner
- Use ample padding
- Brace your abs and push up
- Keep tension in your buttocks muscles throughout the stretch
- Relax your breathing and your face
- Stretch for 3 minutes per side

**One-Legged Deadlift**

- Stand with your feet hip-width apart
- Hinge at the hip
- Keep your back straight
- Practice with a stick behind your back in the beginning
- Bend the knee just a little bit
- Go for 3 sets of 12 reps
**ATG Split Squat**

- It’s a diagonal movement, not an up / down movement
- Squat down until your calves touch your hamstrings
- Elevate the front foot if necessary
- Brace your core to keep a neutral spine

**King Deadlift**

- Warning: Very advanced!
- Stand with your feet hip with apart
- Bend one knee and touch it gently to the ground behind you
- Do not let the rear foot touch the ground before the knee
- Move slowly
Single Leg Squat

- Warning: very advanced drill
- Start learning this drill by holding the bottom position (frame 3) for time (30 seconds or more)
- Then practice eccentric single-leg squats while supporting part of your weight with the non-working leg
- Move very slowly and under control
- For eccentric single-leg squats, squat down slowly on one leg, push up with two
- Once you can do 3 sets of 15 slow eccentric single-leg squats, try pushing up on one leg as well

Knee Strengthening Exercises for Seniors
The following knee strengthening exercises for seniors will help you regain strength and mobility, will prevent injuries, and will allow you to enjoy an active life.
Amosov Squat

- Grab on to a sling trainer or a sturdy door
- Sit back as if you’re waterskiing
- Touch your hip to the ground behind your feet
- Push through the heels
- Go only as low as you can without pain

Two-Legged Glute Bridge

- Lie down on your back and touch your heels to your fingertips
- Push up until there’s a straight line from your knees through your hips to your shoulders
- Don’t hold your breath
- Go for 3 sets of 15 reps
**Balance Drill**
- Stand on one foot
- Balance for 60 seconds
- Close your eyes to make it harder
- Lift the non-working leg to the front and to the side to get an extra workout

**Hip Hinge Practice**
- Stand with your feet hip-width apart and pointed forward
- Lean forward by bending at the hip
- Keep your back straight
- Go as low as you can with a straight back, then push back up by putting tension in your buttocks muscles
- Go for 3 sets of 10 – 20 reps

**Leg Press**
- Ask a coach at the gym to explain the machine to you
- Work both legs or one leg at a time
- Move slowly
- Go for 3 sets of 12 slow repetitions
Seated Leg Extension

- Sit down on a bench or chair
- Extend the leg in front of you
- Use ankle weights or an elastic band to load the exercise
- Reduce range of motion to make the exercise more comfortable for the knee if necessary

Wall Sit

- Sit against a wall for time
- Keep your feet parallel and pointed forward
- Slide the hip down to make it harder
- Keep your shins vertical (slide your feet out if necessary)
- Hold for 60 seconds to 3 minutes
Deep Squat Hold

- Place your feet hip-width apart
- Squat down all the way
- Relax in the bottom of the squat
- Hold on to something for counterbalance if necessary
- Go for 60 seconds to 5 minutes
- To get up, fall back onto your butt, extend your legs in front of you, then get up

Step Up

- Stand on a step
- Touch the ground gently with the other heel
- Don’t let the knee of the working leg collapse towards the mid-line of the body
Example Routines to Get You Started
Here are three simple knee strengthening routines you can use to get started.

Beginner Routine
- Amosov squat for 50 – 100 reps
- Two-legged glute bridge for 3 sets of 15 reps
- Ankle rotations for 50 – 100 reps
- Hip Abductions for 3 sets of 15
- Clamshells for 3 sets of 15

Intermediate Routine
- Wall Sit for 5 sets of 1 minute
- Banded squat for 10 very slow repetitions
- Deep squat hold for 5 minutes
- Prone Leg Raises for 3 sets of 12
- Single-leg glute bridges for 3 sets of 15

Advanced Routine
- Reverse lunge for 5 sets of 8, use weight if applicable
- One-legged deadlift for 5 sets of 8, use weight if applicable
- Hip thrust with barbell or single-leg glute bridge with weight for 4 sets of 15
- Single-leg calf raises for 3 sets of 15
- Hip flexor lift, 3 sets of 12 with adequate weight

These routines are just starting points. You can adapt them to your needs and liking by replacing exercises or adding others.

Getting Rid of Knee Pain
If you want to make your legs strong again, check out my free course on getting rid of knee pain through exercise.

Click here to learn more.

Hope to see you in the course.

- Martin