

12 Best Barbell Quad Exercises for Growth

THEFITNESSPHANTOM.COM

A compact illustrated guide to the best barbell movements for building stronger, more muscular quads.

Exercise	Sets × Reps	Level
High-Bar Back Squat	3-4 × 6-10	Intermediate
Front Squat	3-4 × 6-10	Intermediate
Bulgarian Split Squat	3 × 8-12/leg	Intermediate
Reverse Lunge	3 × 8-12/leg	Intermediate
Barbell Hack Squat	3 × 8-12	Intermediate
Forward Lunge	3 × 8-12/leg	Intermediate
Barbell Split Squat	3 × 8-12/leg	Beginner
Zercher Squat	3 × 6-10	Intermediate
Landmine Squat	3 × 10-15	Beginner
Barbell Step-Up	3 × 8-12/leg	Intermediate
Barbell Box Squat	3 × 6-10	Beginner
Overhead Squat	2-3 × 6-10	Advanced

1. High-Bar Back Squat

High-Bar Back Squat

The high-bar back squat is one of the best barbell exercises for building bigger and stronger quads.

It involves placing the bar on your upper traps and squatting down by bending your knees and hips.

Compared with a low-bar squat, the high-bar variation generally allows a more upright torso and greater knee flexion, making it a good choice when you want to emphasize the quads.

Besides the quadriceps, it also works the glutes, adductors, core, and other lower-body muscles.

How to Perform

Place the bar across your upper traps and hold it firmly.

Stand with your feet about shoulder-width apart.

Keep your chest up and brace your abdominal muscles.

Bend your knees and hips and squat down in a controlled manner.

Descend as far as your mobility and technique comfortably allow.

Push your feet into the floor and extend your knees and hips to stand.

Repeat for the desired number of reps.

Recommended: 3-4 sets of 6-10 reps.

Tip: Keep your feet firmly planted and avoid adding weight if it compromises your squat depth or technique.



High-Bar Back Squat

2. Barbell Front Squat

Barbell Front Squat

The front squat is another excellent exercise for strengthening and growing the quadriceps.

Unlike the back squat, you hold the bar across the front of your shoulders.

This position helps keep your torso more upright and places significant demand on the knee extensors.

Front squats also engage your glutes, upper back, and core and can help improve overall squat strength.

How to Perform

Place the bar across the front of your shoulders.

Keep your elbows high and chest upright.

Stand with your feet around shoulder-width apart.

Brace your core and bend your knees to squat down.

Descend under control while keeping your heels on the floor.

Push through your feet and return to standing.

Recommended: 3-4 sets of 6-10 reps.

Tip: If holding the bar in the traditional front-rack position is difficult, work on wrist, shoulder, and upper-back mobility before using heavy loads.



Barbell Front Squat

3. Barbell Bulgarian Split Squat

Barbell Bulgarian Split Squat

The Bulgarian split squat is one of my favorite unilateral exercises for training the quads.

It involves placing your rear foot on a bench while the front leg performs most of the work.

Training one leg at a time can also help you improve balance and minimize strength differences between your left and right legs.

How to Perform

Stand a few feet in front of a flat bench.

Place the bar across your upper back.

Put the top of your rear foot on the bench.

Keep your front foot firmly on the floor.

Bend your front knee and lower your body toward the floor.

Go as low as you comfortably can.

Press through your front foot to return to standing.

Complete the reps and switch legs.

Recommended: 3 sets of 8-12 reps per leg.

Tip: Keep most of your body weight on the working leg rather than pushing through your rear foot.



Barbell Bulgarian Split Squat

4. Barbell Reverse Lunge

Barbell Reverse Lunge

The reverse lunge is an excellent exercise for developing your quads and glutes while training one leg at a time.

Instead of stepping forward, you step backward and lower your rear knee toward the floor.

I particularly like reverse lunges because many lifters find them easier to control than forward lunges.

How to Perform

Place the bar comfortably across your upper back.

Stand upright with your feet about hip-width apart.

Step one foot backward.

Bend both knees and lower your body toward the floor.

Keep your front foot firmly planted.

Push through your front foot and return to standing.

Repeat with the opposite leg.

Recommended: 3 sets of 8-12 reps per leg.



Barbell Reverse Lunge

5. Barbell Hack Squat

Barbell Hack Squat

The barbell hack squat is an old-school exercise that primarily works the quads while also engaging the glutes and other lower-body muscles.

It is different from the machine hack squat.

You perform this exercise by holding a barbell behind your legs and standing up with it.

The movement can feel awkward initially, so start with a light weight until you're comfortable with the technique.

How to Perform

Place a loaded barbell behind your legs.

Stand with your feet about shoulder-width apart.

Squat down and grab the bar with an overhand grip.

Keep your chest up and back in a stable position.

Push through your feet and extend your knees and hips.

Stand upright with the bar behind you.

Lower the bar slowly to the floor and repeat.

Recommended: 3 sets of 8-12 reps.

Tip: This isn't an essential exercise. If the position feels uncomfortable, stick with squats, lunges, or split squats.



Barbell Hack Squat

6. Barbell Forward Lunge

Barbell Forward Lunge

The forward lunge is another effective barbell exercise for strengthening the quads.

It involves stepping forward and lowering your body until both knees are bent.

Besides the quads, lunges work your glutes and hamstrings and challenge your balance and coordination.

How to Perform

Place the bar across your upper back.

Stand upright with your feet hip-width apart.

Step forward with your right foot.

Bend your knees and lower your body under control.

Push through your front foot to return to standing.

Repeat with the left leg.

Recommended: 3 sets of 8-12 reps per leg.

Tip: Your knees don't have to stay behind your toes. Allow natural knee movement while keeping your foot stable and controlling the exercise.



Barbell Forward Lunge

7. Barbell Split Squat

Barbell Split Squat

The split squat is similar to a lunge, but you keep your feet in the same position throughout the set.

This makes the exercise easier to control and allows you to focus more on the working leg.

It's a simple but effective exercise for developing the quads and glutes.

How to Perform

Place the bar across your upper back.

Take a staggered stance with one foot forward.

Keep both feet in position.

Bend your knees and lower your body toward the floor.

Push through your front foot to return to the starting position.

Perform all reps before switching legs.

Recommended: 3 sets of 8-12 reps per leg.



Barbell Split Squat

8. Zercher Squat

Zercher Squat

The Zercher squat is a front-loaded squat variation where you hold the bar in the crooks of your elbows.

It works the quads while also challenging your glutes, core, arms, and upper back.

The exercise can be uncomfortable initially, so use a light load when learning it.

How to Perform

Place the barbell on a squat rack around waist height.

Position the bar in the crooks of your elbows.

Keep the bar close to your torso.

Brace your core and keep your chest upright.

Bend your knees and squat down.

Push through your feet to return to standing.

Recommended: 3 sets of 6-10 reps.



Zercher Squat

9. Landmine Squat

Landmine Squat

The landmine squat is a beginner-friendly barbell exercise that strengthens the quads and glutes.

One end of the bar stays anchored while you hold the other end near your chest.

The fixed end provides additional stability, which can make this variation easier to learn than traditional barbell squats.

How to Perform

Secure one end of the barbell in a landmine attachment.

Hold the other end with both hands near your chest.

Stand with your feet about shoulder-width apart.

Brace your core and squat down.

Bend your knees as deeply as you comfortably can.

Push through your feet and return to standing.

Recommended: 3 sets of 10-15 reps.



Landmine Squat

10. Barbell Step-Up

Barbell Step-Up

The barbell step-up is a unilateral lower-body exercise that strengthens the quads while also engaging the glutes and hamstrings. It can help develop single-leg strength, balance, and lower-body coordination.

The height of the platform matters. Use a height that allows you to step up smoothly without jumping or excessively pushing through your trailing leg.

How to Perform

Place a barbell across your upper back.

Stand in front of a sturdy box or bench.

Place one foot completely on the platform.

Push through the elevated foot and step onto the platform.

Extend your knee and hip to stand upright at the top.

Step down slowly and under control.

Complete the reps and switch legs.

Recommended: 3 sets of 8-12 reps per leg.

Tip: Keep most of the work on the elevated leg and avoid using momentum or pushing excessively through the trailing foot.



Barbell Step-Up

11. Barbell Box Squat

Barbell Box Squat

The barbell box squat is a useful squat variation for developing lower-body strength and power while training the quads and other lower-body muscles.

The box also provides a consistent depth target, which can help you practice control and maintain a repeatable squat depth from rep to rep.

It involves squatting down onto a sturdy box or bench, briefly pausing in a controlled position, and then driving back to standing.

How to Perform

Position a sturdy box or bench behind you.

Place the bar across your upper back and stand with your feet in a comfortable squat stance.

Brace your core and begin lowering your hips toward the box.

Bend your knees and hips and descend under control.

Sit lightly on the box while maintaining tension throughout your body.

Push through your feet and extend your knees and hips to stand.

Repeat for the desired number of reps.

Recommended: 3 sets of 6-10 reps.

Tip: Don't relax or rock backward when you reach the box. Maintain tension, pause briefly, and drive back up under control.



Barbell Box Squat

12. Barbell Overhead Squat

Barbell Overhead Squat

The overhead squat is an advanced barbell exercise that requires good shoulder mobility, balance, core stability, and squat technique.

It works the quads, but I wouldn't choose it primarily for muscle growth because the technical and mobility demands can limit how much resistance you can use.

However, it can be useful for athletes and experienced lifters who want to improve total-body stability and mobility.

How to Perform

Hold the bar overhead with a wide grip.

Keep your elbows extended and core braced.

Stand with your feet around shoulder-width apart.

Bend your knees and hips and squat down.

Keep the bar stable overhead.

Push through your feet and return to standing.

Recommended: 2-3 sets of 6-10 reps.

Which Barbell Exercises Are Best for Quad Growth?

All the exercises above can strengthen your legs, but you don't need to include every variation in your workout. If your primary goal is building bigger quads, I suggest prioritizing:



High-Bar Back Squat: Overall quad strength and size



Front Squat: Quad-focused compound training



Bulgarian Split Squat: Unilateral quad development



Reverse Lunge: Quads, glutes, and stability



Barbell Hack Squat: Additional quad-focused volume

These exercises provide a good combination of bilateral and unilateral movements and allow you to progressively increase the training stimulus.

How to Train Your Quads for Growth

Train Through a Comfortable Range of Motion

Use as much range of motion as you can comfortably control. Deeper squatting can increase knee flexion and challenge the quadriceps through a longer range, but squat depth should depend on your mobility, anatomy, experience, and ability to maintain proper technique.

Apply Progressive Overload

Try to gradually increase your reps, resistance, or quality training volume as you get stronger. For example, if you can squat 70 kg for 8 reps with good form, try to perform 9-10 reps before increasing the load. Small improvements add up over time.

Train Close to Failure

You don't need to take every set to complete muscular failure. For heavy barbell exercises, stopping with roughly 1-3 good reps left in reserve (RIR) is a practical way to stimulate the muscles without unnecessarily compromising your technique.

Perform Enough Weekly Sets

Around 10-16 challenging quad-focused sets per week can be a useful starting range for many trained lifters.

However, there isn't one perfect number for everyone.

Train Quads Once or Twice Weekly

You can train your quads once or twice per week depending on your workout split. If you're performing a higher number of weekly sets, dividing them between two sessions can help you maintain workout quality.

Barbell Quad Workout for Mass

You can combine the exercises above to create an effective quad-focused session. Here's one example:

Exercise

Sets

Reps

Rest

High-Bar Back Squat

3

6-10

2-3 min

Bulgarian Split Squat

3

8-12/leg

2 min

Barbell Hack Squat

3

8-12

2 min

Reverse Lunge

2

10-12/leg

90-120 sec

That's 11 working sets, which is plenty for a challenging quad-focused workout. If you're a beginner, start with fewer sets and exercises and increase the volume gradually as your strength and work capacity improve.

Try the [4-Day Dumbbell and Barbell Workout Routine](#)

Try the [12-Week PHUL Workout Routine](#)

Can You Build Big Quads With Only a Barbell?

Yes.

Squats, lunges, split squats, and their variations allow you to train the quadriceps effectively with little more than a barbell and weight plates.

Barbells are also excellent for progressive overload because you can gradually add resistance as you get stronger.

However, that doesn't mean barbells are inherently superior to machines.

Leg presses, hack squat machines, and leg extensions can also be useful for quad growth, particularly because they provide greater stability and allow you to train the muscles without having to balance a free weight.

If you have access to both, you can use barbell and machine exercises in the same program.

How Many Reps Should You Do for Quads?

You can build muscle across a wide range of repetitions when your sets are challenging enough. However, these ranges work well for most barbell exercises:

Goal

Reps

Strength

3-6

Strength + Muscle

6-10

Hypertrophy

8-15

Higher-Rep Accessory Work

12-20

I generally prefer 6-10 reps for heavy squats and 8-15 reps for lunges, split squats, and other moderate-load exercises. These aren't strict rules. Use the rep range that allows you to train hard while maintaining good technique.

Frequently Asked Questions

What is the best barbell exercise for quads?

The high-bar back squat is one of the best overall barbell exercises for developing the quadriceps because it allows you to train through substantial knee flexion and progressively increase resistance. Front squats, Bulgarian split squats, reverse lunges, and barbell hack squats are also excellent choices.

Are front squats or back squats better for quads?

Both exercises can effectively train the quadriceps. Front squats generally involve a more upright torso, while back squats usually allow you to handle more weight.

Can barbell squats build big quads?

Yes. Squat training can increase quadriceps muscle size when performed consistently with sufficient resistance and progressive overload.

Are 10 sets per week enough for quads?

Ten challenging weekly sets can be enough for many people, particularly beginners and intermediate lifters.

Should I train quads twice a week?

You can. Training the quads twice weekly allows you to distribute your weekly sets between two sessions instead of doing everything in one workout.

Should my knees go past my toes when squatting?

They can. Your knees naturally move forward during many squat and lunge variations. Allowing the knees to travel past the toes isn't automatically harmful.

Are barbell quad exercises suitable for beginners?

Yes, but beginners should start with simple exercises and manageable loads. Landmine squats, box squats, and basic back squats can be good starting options when performed correctly.

Final Words

Barbell exercises are excellent for developing strong and muscular quadriceps.

You can perform high-bar squats and front squats as your primary compound movements and use Bulgarian split squats, reverse lunges, hack squats, and step-ups to add more quad-focused work.

You don't need to perform every exercise from this list.

Pick a few movements that suit your fitness level, train them consistently, gradually increase the training stimulus, and give your muscles enough time to recover.

If you train at a gym, you can also combine these barbell exercises with leg presses, machine hack squats, and leg extensions to build a complete quad workout.

More from The Fitness Phantom

4-Day Dumbbell and Barbell Workout Routine

[7-Day Gym Workout Plan](#)

[12-Week PHUL Workout Routine](#)

[30-Minute Dumbbell Workout Plan](#)

[Full List of Bodyweight Exercises by Muscle Group](#)

[thefitnessphantom.com](#)

Train smart. Progress consistently.



Barbell Overhead Squat

Clickable Internal Links

[75 Barbell Exercises by Muscle Group](#)

[20 Best Barbell Exercises for Strength and Mass](#)

[4-Day Dumbbell and Barbell Workout Routine](#)

[12-Week PHUL Workout Routine](#)

[20 Barbell Complex Workouts](#)