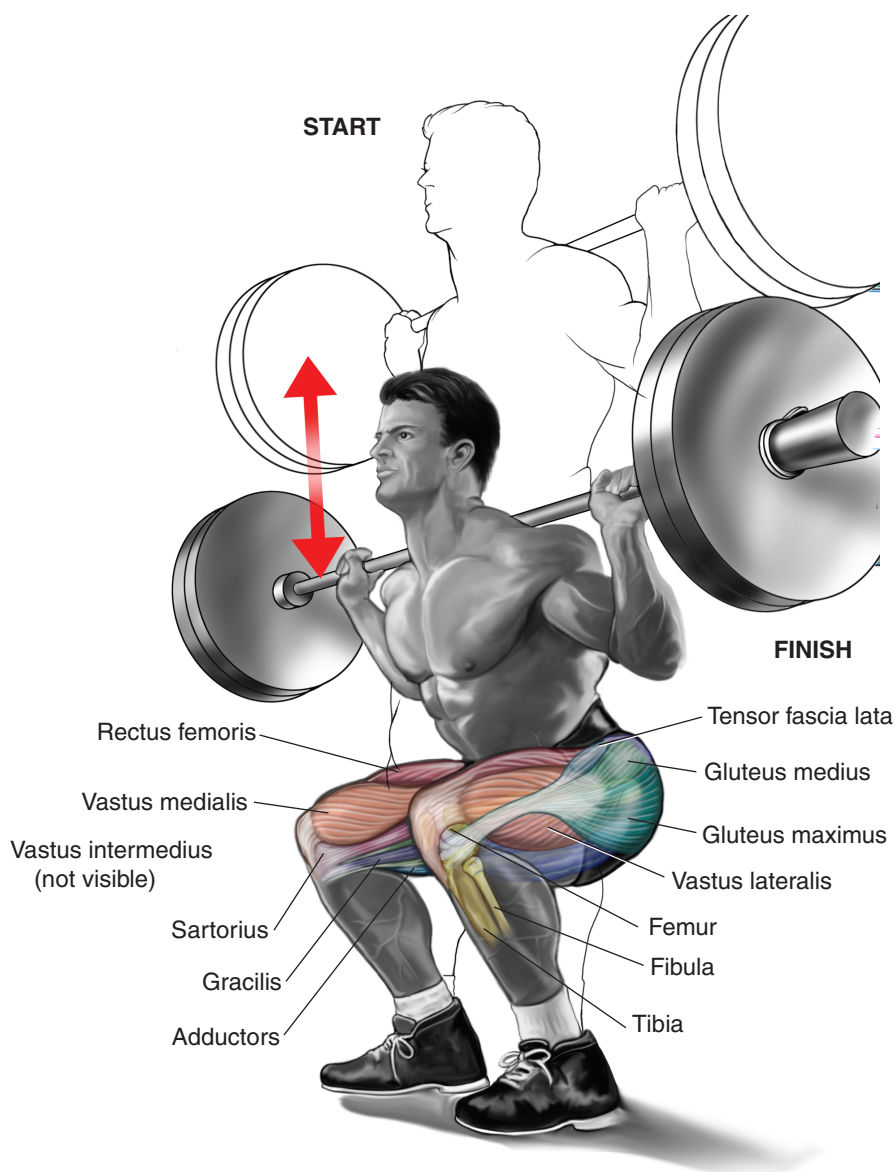


Barbell Squat



Execution

1. Stand with a barbell across your shoulders, feet shoulder-width apart.
2. Slowly bend your knees until your thighs are parallel with the floor.
3. Straighten your legs to return to the start (upright) position.

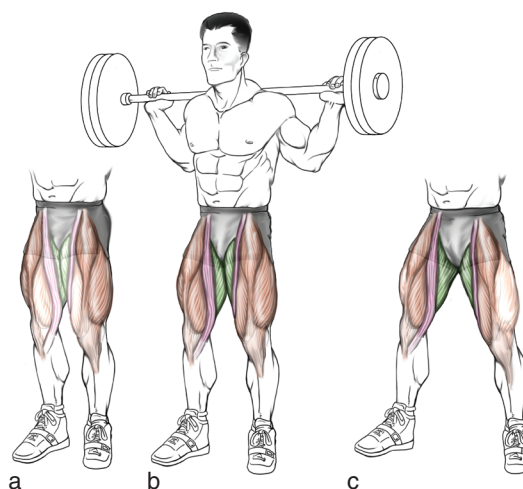
Muscles Involved

Primary: Quadriceps, gluteals.

Secondary: Hamstrings, adductors, spinal erectors, abdominals.

Anatomic Focus

Foot spacing: A narrow stance (a) shifts focus to the outer quads (vastus lateralis) and abductors (tensor fascia latae). A shoulder-width stance (b) targets the whole thigh. A wider stance (c) places more emphasis on the inner quads, adductor muscles, and sartorius.



Stance widths

Foot position: Your toes should point in the same direction as your thigh and knee: forward or slightly outward.

Positioning: Placing a 1-inch (2.5 cm) block under both heels shifts the weight forward, placing more emphasis on the quads and less on the gluteals. This adjustment is also useful for those with less flexible ankles and hips. Positioning the bar lower on the trapezius and shoulders improves balance while shifting focus to the gluteals; it is a technique used by powerlifters to lift more weight.

Body position: Keep your spine straight and head up at all times. Ensure your hands are placed equidistant from the center of the bar, and maintain a firm grip throughout the movement. Inhale deeply during the downward phase and exhale on the way up. Do not bend your torso forward, because this can cause back injury.

Range of motion: As the weight is lowered, stop when your knees bend to a 90-degree angle and your thighs are parallel to the floor. Squatting below parallel increases the risk of knee and spine injury.

VARIATIONS

Front squat: Performing the squat with the barbell held across the front of your shoulders shifts the emphasis to the quads, away from the gluteals. The front squat poses a higher degree of difficulty and requires lighter weights.

Machine squat: Performing this exercise using a machine, such as a Smith machine, helps balance and improves safety.

