

Summary: This exercise is great at improving athletic and functional ability. It is used as both an exercise and as a test of functional ability. It not only works the lower leg complex but it works the upper core. Doing the unsupported version (not holding on) is a great balance challenge. It is a must to keep hip level and knee aligned with toes (knees not going in or out). This is part of my own training twice a week.

## Single Leg Squats

**GREAT ATHLETIC  
TRAINING EXERCISE  
SERIES**



# Single Leg Squats

## GREAT ATHLETIC TRAINING EXERCISE SERIES

This is an intermediate to advanced exercise depending on depth of squat and unsupported leg position and more importantly if you are holding onto something versus not (great balance challenge if not). Start by standing on your one foot. Lift your other leg out. You could also just bend your knee and keep your other leg elevated to start. Your arms can be by your side or out in front of you for balance or hold onto something if just starting with this exercise. Keep your core engaged and your torso up throughout the movement. Start by pushing your hips back as you lower into a squat position (in other words hinge at the hips). Aim to get low enough that stance leg thigh is 45 degrees to parallel to the ground. Squeeze your glutes as you push into the heel of foot to stand back up. **Keep hips levels and avoid knee collapsing in or out. That would be an improper single leg squat if you were being tested.** I also suggest trying to grip the floor with your toes. It is a must to keep your non stance leg up between reps (don't let hip drop). Perform 5 to 15 reps each leg for 1 to 3 sets. [See video here.](#) [See video here.](#)



The single leg squat (SLS) is one of my go to leg exercises. It not only works the gluteal complex and quads terrifically it also develops both balance and I feel the entire core. It does a great job working the lateral core of both sides in preventing hip drop. It is great functional exercise since it mimics single leg stance motions in running and jumping. It is also a common movement task used for assessment and intervention by clinicians. It is used to examine lower extremity alignment and may be helpful in identifying faulty movement patterns of the trunk, pelvis, and lower extremity. Prior studies examining the SLS have demonstrated that there are biomechanical differences between healthy individuals and those with lower extremity injuries, such as patellofemoral pain (PFP), anterior cruciate ligament (ACL) injuries, and hip chondropathy. For example, a study found that individuals with PFP performed the SLS with greater ipsilateral trunk lean, contralateral pelvic drop, hip adduction, and knee abduction than those without PFP. It then makes sense to prevent lower body issues to perform this exercise perfectly. Altering the non-stance leg position during the SLS may tax the neuromuscular system differently and result in different movement patterns. Therefore it is wise to perform the SLS with altering non-stance leg positions ([study](#)). [A study](#) found that single-leg squats were more effective for people with low back pain and who were in recovery from a sports injury than traditional squats when it comes to impacting the site of injury. Researchers found that the single-leg squat allowed participants to achieve the same load of muscle activity in the hamstring, calf, hip, and abdominal muscles, but with less impact on the spine. The authors also stated that the unilateral squats with the same external load per leg produced greater peak vertical ground reaction forces than bilateral squats, as well as higher barbell velocity, which is associated with greater strength and rate of force development. In certain cases I feel that unilateral squats may be superior to bilateral squats in sports performance and injury prevention. It may not be the case in terms of muscular hypertrophy. Little is still known of which is superior. More research is therefore needed.