

# THE SPLIT SQUAT (Bulgarian Split, Rear-foot elevated squat... a movement with many names)

## COMPOUND MOVEMENT

### SET UP /PREPARATION

This movement requires a lot of practice to effortlessly set up, due to the balanced nature and the proprioception required to place the leg behind yourself without being able to actively look where the foot is being placed.

Begin by positioning a bench or specialized split squat stand roughly one stride behind yourself and stand facing away from it with your chosen pair of dumbbells/weights either side of your feet, you will need to squat down and grasp these before you begin execution of the movement and before you continue the rest of the set up.

Brace yourself and reach one leg backward resting the top of the foot (where the trainers would lace) onto the bench behind yourself or for extra support (but decreased range of motion).

Ensure your front foot is placed firmly on the ground with as little as rotation as is comfortable away from the mid-line of the body.

Your leading foot may be just off center of your shoulders for stability depending on your build.

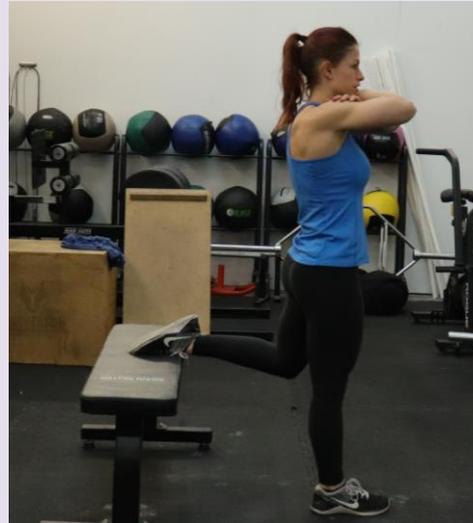
### EXECUTION

With the front foot firmly placed on the ground, begin by flexing at the knee and lowering yourself until the rear near is just shy of the floor, using the rear foot to secure yourself.

Throughout the decent keep your eyes focused on a spot just above eye-level in front of yourself and maintain an upright torso throughout.

Drive yourself back to the upright position by pushing firmly through the base of the foot and pushing the glutes and hips through to create full lockout at the top of the movement.

### MOVEMENT



### MUSCULAR ANATOMY

#### Main Muscles Used

The Split squat relies heavily on the Gluteal muscles and Quadriceps muscles to achieve the squat movement and to a lesser degree the hamstring, low back and upper back muscles to keep the body stable and upright during the movement.

### EQUIPMENT REQUIRED

The split squat can be performed using a variety of kit, most commonly an athlete will hold a dumbbell in each hand – but Kettlebells, Barbells racked across the back or sandbags/power bags held in a hug-grip are not uncommon.

The split squat requires minimal equipment for a maximal effect:

1. Weight for external loading
2. Somewhere to rest the rear foot – a Bench or a single leg squat stand

## Advanced Considerations

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### Coaching – Foot Positioning.

The most difficult part of coaching this lift is the huge variability between limb lengths and how comfortable the foot positioning (both front and rear) is for the person performing the exercise.

Expect a lot of nervous foot placement and removal when first learning this movement, even when unloaded as you get used to the movement and your proprioception improves.

The rear foot elevated split squat can be done using a range of equipment and lends itself well to dumbbells, barbells, sandbags and kettlebells and different loading, such as weights held in the hand, racked across the upper back or even held in a front rack hold or goblet hold or even performed in a weighted vest for extra comfort and to allow free hands to hold onto a stabilizing object whilst learning

The greatest effect these positions have is varied workload on the postural muscles used to maintain the balance, the main focus is always of the gluteal muscles and the quadriceps

### ATHLETIC APPLICATIONS AND USE IN HEALTH TRAINING

Single limb movements have long been accepted as beneficial for athletic pursuits and the rear foot elevated split squat is no exception, however not only is it a wonderful tool for all round muscular development and athleticism, Kimura et al (1) have studied the use of various loading with single limb squats

In athletic clients, it's been observed that this movement serves to increase the load on the Vastus medialis and gluteal muscles and is effective for preventing external knee valgus moment. These findings suggest that this novel isokinetic exercise will be useful for preventing ACL injury and in rehabilitation after ACL reconstruction.(1)

### PROGRAMMING THE SPLIT SQUAT

The split squat is a fantastic accessory movement that compliments squat programming for overall strength as well as athletic training. The nature of this movement being single limb makes it a very good higher volume movement, the supported rear leg makes this, contrary to popular belief a very good movement to learn before the full squat, as the raised limb offers support and stability and many find the range of motion easier to achieve than a full squat.

The weight used and loading will also be less than that of a regular barbell or goblet squat, there is also no impact as you find with lunge movements.

### REFERENCES

1. Kimura, Y., Koyanagi, M., Koyanagi, K., Mukai, K., Naruhiko, N., Sakai, T., Tada, S., Satoda, Y., Inoue, Y. & Inoue, A. (2014) Motion Analysis of a Single-Limb Squat With Isokinetic Resistance. British Journal of Sports Medicine. [Online] 48 (7), 620.1-620. Available from: doi:10.1136/bjsports-2014-093494.162.