



PREVENTION & REHABILITATION – SELF-MANAGEMENT: PATIENT SECTION

How should I squat?☆

Dan John^a, Craig Liebenson, D.C.^{b,*}

^a 1336 Ocean Court, Taylorsville, UT 84123, USA

^b L.A. Sports and Spine, 10474 Santa Monica Blvd., #304, Los Angeles, CA 90025, USA

Received 20 November 2012; accepted 20 November 2012

Introduction

Many people with knee or back conditions say “I can’t squat” or “I was told by my Doctor not to squat”. However, most people with knee or back conditions will benefit more from learning how to squat rather than avoiding squatting.

We all squat many times throughout the day even if we don’t perform them as exercises. For instance, we squat when we get up from a chair, pick something up from the ground, get in and out of our car, etc. If we hinge too much from our knees or our waist (i.e. spine) then we cause repetitive strain to our knee(s) or back. The goal is to learn how to hinge from our hips so as to spare our knee(s) or spine.

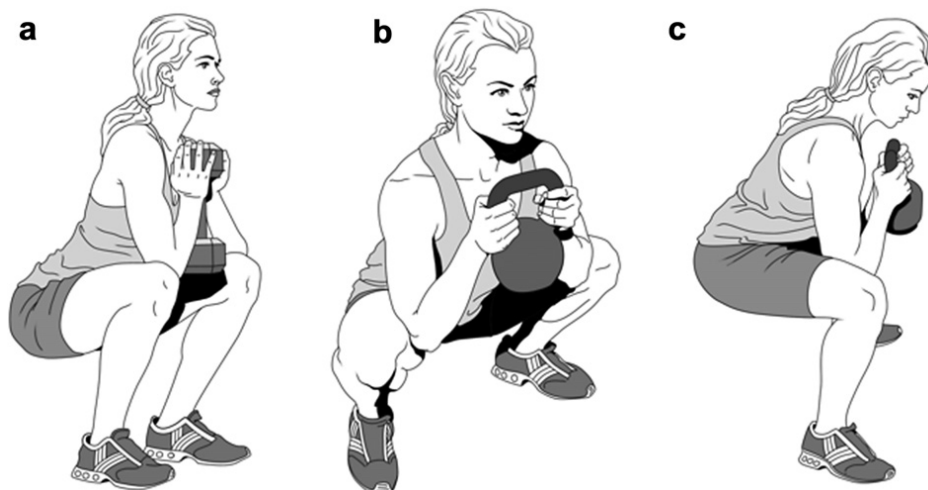


Figure 1 Goblet squat. a) With dumbbell, b) With kettlebell, c) Side view proper spine posture.

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* Corresponding author. Tel.: +1 31047 02909; fax: +1 31047 03286.

E-mail addresses: dj84123@yahoo.com (D. John), craigliebenson@gmail.com (C. Liebenson).

Method

The answer to the question “how should I squat?” is simple – hinge from your hips. This can be taught with a few simple squat variations.

The Goblet squat (see Fig. 1)

- Look at a spot on the ground approximately 6 feet (2 m) in front of you
- Lower the body down until your elbows graze inner thighs
- Feel your weight go back to your heels
- At the bottom of the squat you should feel that you can wiggle your toes (this ensures that you are using your gluteal muscles more than your quadriceps by shifting your weight to your heels)

Note: Keep your lower back slightly arched forward

The Potato-sack squat (see Fig. 2)

- Start with your feet shoulder width apart
- Have your arms hanging straight down
- Squat until your arms graze your inner thighs
- Feel your weight go back to your heels

Note: Keep your lower back slightly arched forward

The Sumo squat (see Fig. 3)

- Start with your feet shoulder width apart and feet slightly turned out
- Grab top of dumbbell
- Keeping your arms hanging straight down, raise and lower the dumbbell
- Your arms should graze inner thighs as you squat
- Feel your weight go towards your heels

Note: Keep your lower back arched forward and avoid bending your elbows or shrugging your shoulders

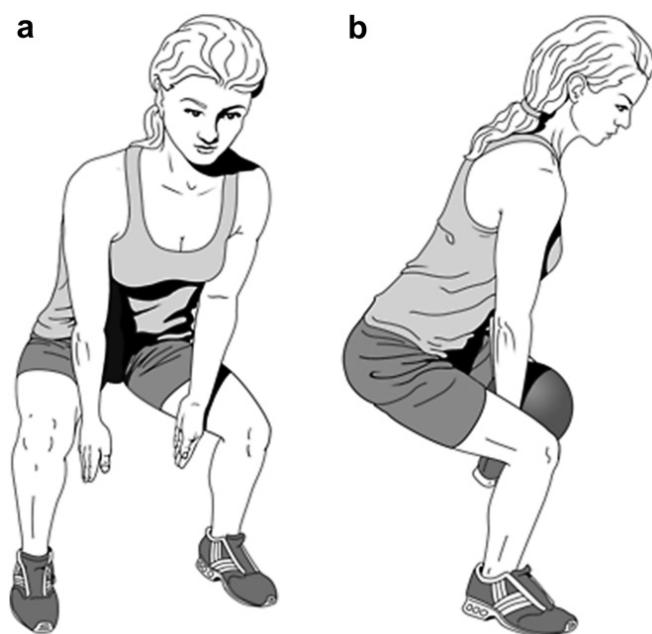


Figure 2 Potato sack squat. a) Without weight, b) With medicine ball showing proper spine posture.

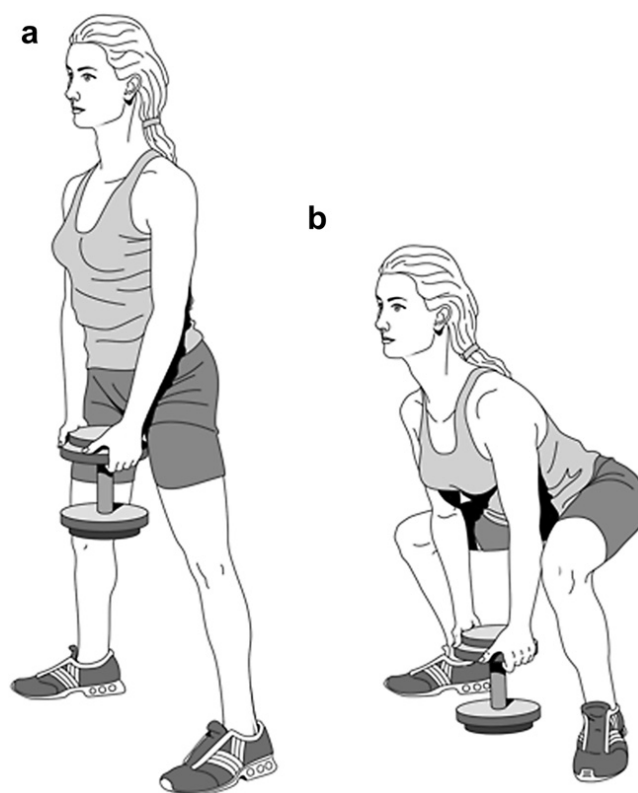


Figure 3 Sumo squat. a) Start position, b) Final position.

The Sumo heart beat (see Fig. 4)

- Grasp the kettlebell by the horns
- Squat down until your hips are below your knees
- Your elbows should be between your thighs
- Quickly pulse the kettlebell forward until your arms are straight in front of you

Note: Keep your lower back arched forward

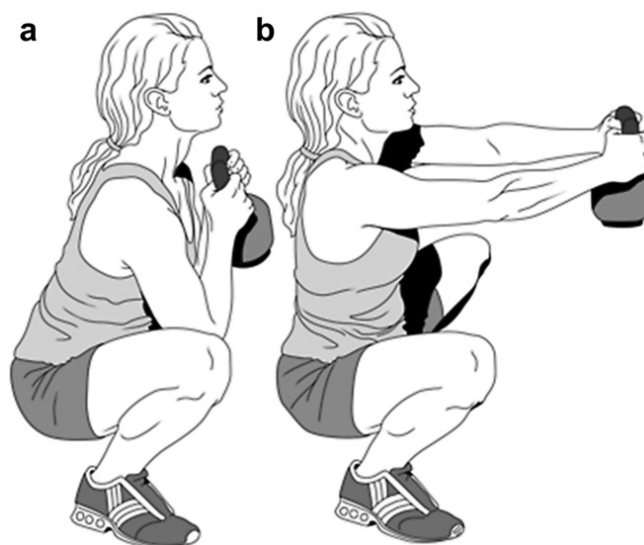


Figure 4 Sumo heart beat squat. a) Start position, b) Final position.

Sets and repetitions

At first only perform one set of 6 repetitions of the Goblet and Potato-sack squats. Progress to a Russian Reverse Pyramid (Liebenson, 2006) of:

- Set One – 12 repetitions
- Set Two – 8 repetitions
- Set Three – 4 repetitions

- When this can be performed add the Sumo squat with 4 repetitions only.
- When this can be performed add the Sumo heart beats for 4 repetitions only.

Reference

Liebenson, C., 2006. Functional fitness training – part 2. *Journal of Bodywork and Movement Therapies* 10, 208–210.