

Squats

The Best Exercise You'll Ever Hate

By Kent Pegg

Ask any athlete or workout warrior which exercise they love the most and, more often than not, they'll tell you squats. Then, ask which exercise they hate the most and they'll tell you squats.

We all have a love-hate relationship with this so-called "king" of all exercises. But, by understanding the mechanics and benefits of the squat, you can increase your attraction to this exercise and enhance its value in your workout routine.

Performed correctly, squats build the body's power muscles of the lower back, hips, buttocks and thighs. Being an exercise with a large range of motion, the squat stretches each area worked and then requires a hard contraction of the muscle spindles to perform the lift.

Along with building the muscles, squats also increase bone density, add tendon and ligament strength, and provide for greater joint stability.

More than any other exercise, the squat maximizes strength development while minimizing joint stress. Other major strength building exercises like the clean and jerk and the snatch place much more stress on the knee joint and the lower back.

Despite their relative safety, as with all compound exercises, form is critical to prevent injury while performing the squat. Consult with a fitness professional if you have any questions before performing squats.

There are three segments to executing the squat: the ready position, the descent, and the ascent.

In the ready position, the bar is placed across the shoulders. The load of the weight is distributed across the mass of the upper back and not on the top of the shoulders.

Keep your head up and your chest out while holding the bar with your hands as close together as possible without placing excessive stress on the front shoulders. Your feet should be wider than shoulder width with your toes slightly turned out (approximately 15 degrees).

With your shoulders back and your back flat, isometrically contract the muscles in your lower back (the spinal erectors) and your upper thighs. You are now ready to begin your descent.

After taking a deep breath, slowly begin to squat downward, pressing your buttocks outward to prevent your knees from coming forward. Avoid any excessive forward body lean as you descend to protect your lower back. Descend until your legs are slightly lower than parallel.

Begin your ascension by using a strong quadriceps extension to initiate a powerful push and accelerate out of the bottom position. At the same time, drive your head back to get a strong contraction of the trapezius and help control the upper body lean.

As you accelerate upward, forcefully thrust your hips under the bar. After approximately one-third of the ascension, begin to slowly expel air through your mouth until you reach the ready position. This expelling of air reduces the increase in blood pressure that heavy exercises can create.

One often overlooked technique which will help you make gains with your squats is to use a strong, eccentric contraction of the hip and quadriceps extensors on the *descent* segment of the exercise. This stresses the extensors and results in storage of kinetic energy in the muscles of the hips and quads. This kinetic energy provides the additional force necessary in the ascension segment to allow you to increase the weight you can lift.

Remember, when doing squats, using a full range of motion will provide far better results than shortening the range of motion. Partial squats should not be considered a substitute for full squats for two reasons.

First, to develop your best knee and hip strength you have to work through as full a range of motion as possible. Second, short squats overdevelop the quads at the expense of hamstring development. The strength imbalance this creates can cause both knee and hamstring injuries.

If you're not including squats in your workout routine, now is the time to start. Begin light and perfect your form. You'll be amazed at the results both in the gym and when applied to your favorite activities.

So get back to basics and learn to love the best exercise you've always hated.

Kent Pegg is a certified personal trainer and the co-owner of the Los Alamos Fitness Center. If you have any questions about the exercises in this article you can call him at 662-5232.