

Overcoming Plateaus

By: Louie Simmons

Your squat is going nowhere. No matter what you do it won't increase. What can you do? Well first, let's find the real problem. It can be several things: form, exercise selection, volume, and the development of special strength, i.e., starting, accelerating, eccentric, concentric, reversal, static, and of course absolute.

First, let's talk about form, Box squatting is a must. Use a box that is slightly below parallel. Sit fully on the box, keeping all muscles tight, most importantly the abs and the obliques. By releasing only the hip muscles you are going from a relaxed state to a dynamic phase. This is one of the best methods of developing absolute strength as well as explosive strength. Lowering the bar produces a great amount of kinetic energy, which is stored in the body, resulting in reversal strength.

For box squatting, the form is the same as regular squatting. Before descending, the glutes must be pushed out to the rear. Because you are going to squat to the rear and not down, this sets up the body for a stretch reflex. Next, push the knees out to the sides. This accomplishes two things: It places much of the stress, or work, on the hips, and it will greatly increase your leverage in the bottom of the squat. By pushing the knees out, you are at least attempting to keep the knee joint in line with the hip joint. In theory, if you can stand up with 1000 pounds while your shoulder, hip, knee, and ankle joints are in line, you could squat to parallel with the same weight if the above joints are kept in line. That is why it is so important to super-arch the back, by keeping the chest up, while in the bottom of a squat.

If you correctly push the glutes out first on the descent, then the head will move last. On the ascending phase, the reverse is true. The head must come up first by pushing the head into the traps. It is then natural for the hips and glutes to follow. Also, never push down with the feet when squatting. You must push out to the sides on the eccentric and concentric phases. That's why we recommend Chuck Taylor shoes. The feet can be pushed out to the sides without the feet rolling over. When sitting on the box, it is possible, and desirable, for the shins to be past perpendicular. This places all the work on the vital squat muscles. This is impossible with regular squatting.

Train on a box with 50-60% of your best contest squat. A 500 pound squatter would start at 250 and jump 10 pounds a week for 6 weeks. Now the weight is 300 pounds. On week 7 drop back to 250(50%) and a new wave. This is done for 10 sets of 2 reps for 4 weeks. Then drop to 8 sets. This will keep the bar volume relatively the same. The volume will change dramatically when you start the

wave again, adding 3 or 4 special exercises that have not been used for a period of time.

The combination of changing special exercises and using short rest periods (about 40 seconds between sets) has proven to be most effective for producing growth hormone. The short rest will cause lactic acid to build up.

When you fight through this discomfort, you will produce the most growth hormone. Also, when you use maximal weights in the same exercise for more than 3 weeks, growth hormone production stops! Wusef Omar, a colleague of the renowned Tudor Bompa, with the help of top exercise physiologists, validated this at York University in Toronto.

On the dynamic day, after box squatting, select 2-4 special exercises to improve. Because all the muscles that squat are located in the back of the body, except the abs, select exercises for the spinal erectors, glutes, and hamstrings, such as back raises, reverse hyperextensions and glute extensions, pull-throughs, sled dragging, and calf/ham/glute raises.

The abs are very important for squatting, and we look at ab training very seriously. Because when you squat or deadlift, you are standing up, we do the majority of our ab work standing up. This is done on the lat machine. Face away from the machine, and pull a triceps rope down to the base of your neck. Hold the ends of the rope against your chest. Now bend over by forcing the abs to flex downward into the hips. This is exactly how the abs are designed to work. The obliques are the most important ab muscles. When you flex a weight off the floor or start out of a heavy squat, it is the lower obliques that initiate the entire upward motion.

What I have been discussing is correct exercise selection. I hope you noticed that I have not included leg extensions and leg press. Leg extensions are a waste. It's true that they isolate the quads, but the amount of weight is insignificant. Leg press machines are very dangerous in general. They place a tremendous amount of strain on the lower back. A leg curl machine is designed for bodybuilding. While it does build the hamstrings between the knee and hip, bodybuilders use it because it does not build size at the knee or the glute tie-in. It starts with knee extension and ends with hip extension but in a biomechanically unsound fashion. A glute/ham machine works both the knee and hip extenders simultaneously. As in running and jumping, the quads do very little in squatting. So don't waste too much of your time on quads.

For accommodating resistance, use chains or bands. Weight releasers are useful for building reversal strength.

I have discussed the speed day, Friday for squats. For the development of absolute strength, we have a max effort day, 3 days later. On this day, we never do regular squats.

About 7 weeks out of 10 we do some kind of good mornings for a 3-rep max. We use special bars: Safety Squat bar, Buffalo bar, bent bars, and a special cambered bar that has a 14 inch camber, which takes the upper back out and makes the mid to lower back work over-time. Two out of 10 workouts are some type of squatting on a variety of boxes, from 8 to 17 inches high and with a variety of bars or with the Manta Ray or front squat harness. Do a 1-3 rep max in these special squats. Switch the core exercises every 2 weeks, again to maintain production of growth hormone. One out of 10 workouts should be some kind of pull for a 1-rep max.

After the core lift, use 2-4 special exercises (glute/ham raise, reverse hyper@5356,359 and 6,491,607b2 extensions, pull-throughs). Raise special work for 3 or 4 weeks. This is the correct method to raise volume, with special work, not the classical exercises.

Note: Close to a meet, work on speed and raise special exercises for the abs, low back, hamstrings, glutes, and hips.

This method has produced 22 lifters who have squatted 800 or more, all from a small, private gym. We have had 500 pound squatters progress to 800 in less than 3 years. I'm sure this method will help you too if you think out your training.