Squat Option Low Down

Bill Starr: 2006

What to Do in Lieu of Squatting

While I firmly believe that the full squat is the very best exercise for developing the hips and legs, the power base of the body, I'm also aware that many strength athletes cannot do squats. I know it because of the people I've met in gyms over the years and from the many letters I've received from men asking for alternative lower-body exercises.

Those who cannot squat generally fall into two categories: athletes with knee, hip or ankle problems, and those who are unable to fix a bar behind their necks because of an injury or some infirmity such as rheumatoid arthritis. Of course, there are other reasons that people can't do squats as well as a group who choose not to do them. The exercises recommended here will be useful to them as well.

First, I'll deal with athletes who find it impossible, or extremely painful, to position a bar across their shoulders, behind their backs. Squat with dumbbells. Obviously, you can't use nearly as much weight even if you strap on to heavy dumbbells, but if you run the reps up, you can increase your hip and leg strength.

Dumbbells afford many advantages over a barbell. You don't need a rack or spotters, and there's no danger of getting stuck at the bottom. Should you run out of gas, just set them down.

You'll also discover that you can go lower using dumbbells, which works the adductors and hamstrings more thoroughly. And you can do dumbbell squats in limited space with very little in the way of equipment. Squatting with a bar in a high-rise apartment might pose a problem, but doing it with dumbbells doesn't. They're also easy to store and take along on road trips.

Another excellent alternative is lunges done with or without weight. If you haven't been doing anything for your lower body for a while, start with walking lunges, a simple but extremely effective hip and leg exercise. If you doubt that, just check out the amazing lower-body development of female gymnasts, who do countless lunges in their training. While lunges appear tame, they aren't. I've had athletes who were squatting 500 pounds give out after lunging the hallway back and forth, a distance of about 150 feet.

There's a difference between stationary and walking lunges. The walking form requires more balance, and there's a rhythm to performing them correctly. In the walking lunge, you never come to a complete stop, so you must learn to flow from one leg to the other, which requires a bit of practice.

Stand very erect with your feet at shoulder width, toes pointed forward and your hands on your hips. Step straight ahead with either foot. That's a key point. If you step inward or outward, it will adversely affect your balance. Step far enough so that you're lunging into a very deep split. At the bottom-most position your lead knee should be out over your toes and your back leg should be straight and almost touching the floor. That's much more effective than merely bending your trailing leg downward, and I might add, a lot harder.

You'll quickly learn that one leg is more flexible than the other. That's only natural, like being right- or left-handed. Unconsciously, we give priority to one leg. I notice that when I walk up stairs or step up on a curb, I always lead with my right foot. As a result, my right leg is stronger and more flexible. That's exactly why I include some form of lunges in all of my programs. They help bring the weaker leg into proportion with the stronger one.

Once you've stretched out into a deep split, push off with your lead foot and step forward with your other leg into another lunge. That has to be done in a fluid motion, and here's the key to being able to do it: When you rise out of a deep split, extend high on your toes before stepping forward. That makes it easier to flow from one rep to the next than if you did the movement flat-footed.

Another important form point is to maintain an erect torso. If you start leaning forward or to either side, you're not going to get the desired results. When your form breaks down, stop, take a break, and start in again. Lunging short distances with perfect technique is much more productive than going longer using sloppy form.

Once you determine how far you can go and still maintain flawless style, lunge to your goal, pause, then go back. That's one set. How many sets you do depends entirely on your physical condition, but as in every exercise it doesn't matter where you start, only where you end up.

Should you be confined to a rather small space, you don't have to stop at the end of a hallway or room. Just turn quickly and continue the set. One of the nice things about walking lunges is that you can do them almost anywhere—on a lawn, on the beach, in the hallway of a hotel—and I've even lunged around a motel pool. I did, however, do those at night, when the pool area was empty, so the residents wouldn't be alarmed that a nut case was loose.

After you feel comfortable doing walking lunges, try adding resistance. Dumbbells are best, although milk jugs filled with water or sand work well too. Most people find that holding a weight makes the exercise easier to do since it helps with balance. Make sure that you don't allow the weights to swing too much, which will adversely affect the rhythm of the exercise and, therefore, the results. In the event that you can't find a place to do walking lunges, just do lunges in place. They're not quite as productive as the walking variety, but they're still very beneficial.

Another useful hip and leg exercise that used to be a part of every bodybuilder's and strength athlete's routine but is now rarely done is the hack lift. It's also referred to as the straddle lift, since you are, in fact, straddling the barbell.

This excellent exercise was named for George Hackenschmidt, a professional strongman of the early 20th century. Born in Estonia, he was known as the "Russian Lion." He invented and popularized the hack lift and claimed that this single exercise was responsible for his powerful lower body and massive leg development. In 1902 he reportedly did 50 reps with 110 pounds, which may not sound like much—until you try matching it.

You can use the hack lift as a substitute for squats or lunges or to add some variety to your lower-body routine on occasion. Since it's different from any other hip and leg exercises, it will hit some new muscles, and that's always a good thing in strength training. The hack lift is a simple movement, yet you'll still need to practice it for a time before you get the feel of it.

Straddle a bar, facing one of the plates. Your feet will be at shoulder width or a bit closer. Most people use the same foot placement as they do when they squat. One hand will grip the bar in front of your body and the other behind. You can use straps on these if you want. As with a deadlift, you start this lift from the bottom position. You'll have to do some experimenting with your grip to find the place where the bar is in balance before you begin. For most trainees a grip that is a hand length from the smooth part in the center of an Olympic bar works well.

You must keep your back extremely tight and your torso upright throughout the execution of this lift. Leaning forward diminishes the benefits. After you are sure you have the correct grip, lower your hips as far as you can and push your feet down into the floor while keeping the rest of your body tight. The bar will come up between your legs and touch your crotch. Pause, make sure your back is flat, and lower the bar in a controlled manner. Stop at the bottom and make certain your body mechanics are right before doing the next rep. Don't get in the habit of rebounding the plates off the floor, because the deep-bottom position is the most valuable in building hip and leg strength.

Knowing that, once athletes learn the technique, I have them do hack lifts using 25-pound plates. That forces them to go even lower, which is a good thing. The deep position makes the adductors and leg biceps work much harder. Also, if you start with your left hand in front, switch and do the next set with your right hand in the lead position.

Try to keep most of your weight on your heels. That will help you stay more upright. While you're learning the form, do eight to 12 reps. Then you can lower them to fives if you like. Three sets of the higher reps are enough in the beginning, and five to six sets will suffice with the fives.

The greatest advantage of the deadift is that you can work the hip and leg muscles and handle a lot of weight, which is what it takes to activate those large muscles. If you're doing deadlifts as a replacement exercise for full squats, you'll want to set your hips really low. Again, I have athletes use 25-pound plates to force their hips and legs to squeeze the bar off the floor. As in the hack lift, keep your torso upright and your back rigidly tight. The bar has to stay close to your body from start to finish. As I also mentioned regarding the hack lift, you want to lower the bar in a slow rather than a fast fashion and avoid rebounding the plates off the floor.

If you're doing deadlifts as a hip-and-leg exercise and aren't planning on entering a contest, go ahead and use straps. Each time you deadlift, change the set-and-rep formula. The rotation of rep schemes I use is: five sets of eight, five sets of five, then three sets of five followed by three sets of three. The eights and fives increase the workload, while the threes hit the attachments more. Each workout is different, which helps you get geared up for each deadlift session.

Machines can help in building a stronger lower body, although they may not be available. Plus, some are poorly designed and do little to improve strength. For those who cannot rack a bar on their shoulders, the hack squat machine can be useful. The machines don't really duplicate the hack lift, but they go by that name in most gyms anyway. I like the ones that glide up and down smoothly at a 45 degree angle and the ones that allow you lie horizontally without gripping anything with your hands. You can place your hands on your thighs, avoiding any strain to your shoulders.

Leg presses are useful, but only if you achieve a full range of motion. Your knees must go lower than your hips in order for your adductors and hamstrings to be fully activated. For most people that means using a moderate amount of weight. When the leg press machine is loaded with massive poundages, you're forced to short-stroke, and the partial movement only works the quads and abductors.

Now, for trainees who cannot squat because of problems, new or old, in their knees, hips or ankles due to injuries, arthritis or other ailments: My advice may seem foolish, but I've seen some very positive things happen when it's followed. Experiment. If squats hurt, try lunges, hack lifts, deadlifts or the leg press and hack machine. Try squatting with dumbbells. You may be surprised. Many are. I trained with an older man in a facility that had minimal equipment, and for a long time all he worked was his back and upper body because he couldn't squat without experiencing severe pain in his knees.

One day he asked me if there was something he could do for his lower body. I suggested that he try squatting with light dumbbells and that he should go extremely low. He was quite doubtful yet gave it a try. I told him, "If it hurts, you can always stop." To his surprise, dumbbell squats didn't hurt his knees. There was some stress during the first few reps due to the fact that he hadn't placed them in that position for a long time, but not the sharp pain he experienced when he squatted with a bar. The reason the dumbbell squats didn't aggravate his arthritic knees was because when he went extra low, the pressure was taken off the knee joints and transferred to the hips, leg biceps and adductors. Plus the weight was light and wasn't being pushed down on his knees.

The man also found that he could deadlift, again using light weights. Over the following two months he slowly added to his workload on those lifts and found that he was once again able to take long hikes, something he hadn't been able to do for a long time. He told me that the higher reps seemed to alleviate the knee pain he used to have when he did simple everyday functions, such as climbing stairs. I told him the higher reps flushed blood to his knees and fed the attachments and all-important cartilage without stressing them.

I've know a few people who couldn't squat with a bar or dumbbells but were able to lunge. I'm not sure why, but it doesn't matter. A friend of mine found that when he did wide-stance deadlifts, he didn't feel any pain in his hips. With conventional deadlifts, he did. Yet another was sure he would never find a lower-body exercise he could do until he stumbled across hack lifts. That one exercise was all he needed to rebuild his lower-body strength.

My message is: Just because you're unable to do a certain exercise for your lower body—or any bodypart for that matter—don't assume that you can't find some other exercise to do. Try lunges, squatting with dumbbells and all the others I mentioned, and if they don't work, try something else—like isometrics or isotonic-isometrics. It may seem impossible that a person who cannot squat could do isometrics or isotonic-isometrics in more than one squat position, but it isn't. I've seen it happen. The pain in the knees comes when the joint is in motion. When it's locked in an isometric hold, it's okay. Granted, not everyone with bad knees, hips or ankles can benefit from using isometrics, but you might be one who can.

Finally, I want to address those who are at the extreme end of the spectrum and positively cannot perform any of the exercises that I've recommended, even with light weights. If there is a fitness facility in your area that has a wide selection of machines for the lower body, it would be worthwhile for you to join. Be sure to check it out to make certain that they have what you need. This isn't difficult. You need a

leg extension machine for your quads; a leg curl for your leg biceps, or hamstrings; specific machines for abductors and adductors, and something for your lower back, either a hyperextension or reverse hyper.

Leg extensions and leg curl machines are standard at every gym, but there may not be any apparatuses for working your adductors and abductors. The club may, however, have some sort of cable setup, either attached to a wall or as part of a Universal-type machine. Secure the cables to your ankles and work your adductors and abductors while seated or standing. These are very effective movements. Remember, adductors pull your legs inward; abductors move them outward.

If there isn't a hyper or reverse hyper machine, you can always do good mornings or almost straight-legged deadlifts with a light bar or broomstick.

Ankle weights are useful, although I'm not sure they're still on the market. In the event there isn't a gym in your area, or you just don't care to join one, you can still work the various muscles that make up your lower body without using any resistance. Do the same movements as if you were in the various machines. Obviously, you'll have to do a high number of reps, such as in the 200 range, but it's time well spent.

And while you may not be able to boast of a big squat or deadlift, you will be able to enjoy a more active lifestyle if you keep your lower body strong. As the saying goes, Where there's a will, there's a way. If you really want to improve hip and leg strength, you'll figure out how to do it.