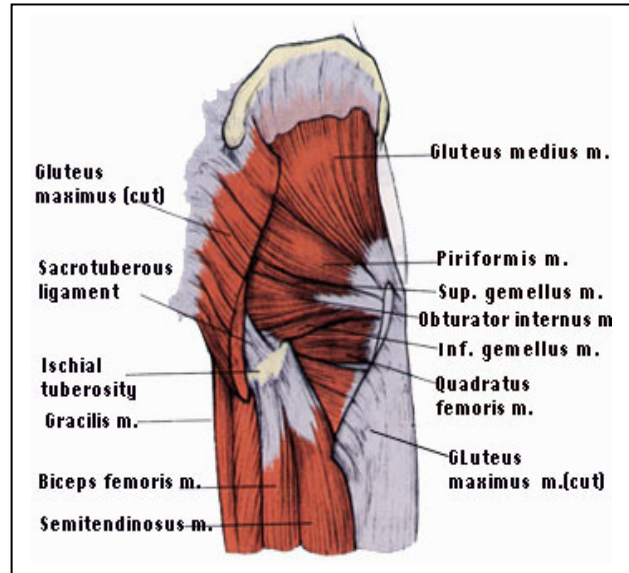


# ***TRAINING THE HIPS & GLUTES FOR SPORTS PERFORMANCE***

**By Chip Sigmon, CSCS\*D**

Derriere, buttocks, buns, or butt, what ever you like to call it, this area of the body is clearly identified by its location. Its official name is the “glutes” or gluteals and in athletic performance strong “hips and glutes” are of the up most importance. However it’s just not strength that must be considered when training the hips and glutes. Flexibility and stability also play an important roll in helping the athlete achieve a high level of performance and these areas are often a neglected part of one’s training program. I’ve trained a lot of athletes that had great hip strength but lacked the flexibility and stability to move on the field or court.



Before we go any further, let’s look first at three main muscles that drives the hip:

1. The gluteus maximus
2. The gluteus medius
3. The gluteus minimus

**The “gluteus maximus”** is the biggest muscle of the buttocks and its main function is to extend the hip. When an athlete is running and the knee is coming up to the chest, this is called knee flexion. However hip extension is just the opposite. Hip extension is when the hip and glutes are driving the force down through the ground and back to propel the athlete forward.

**The “gluteus medius” lies under the gluteus maximus near the hip. Its main function is to hold the pelvis upright when walking and especially when you run. That’s why when you walk, run or even sprint for long periods of time one can become sore in this area. Also the gluteus medius is activated to a greater degree when performing single leg movements in which I’ll talk in greater detail later on in this article.**

**The “gluteus minimus” lies under and assist the glute medius in most movements, especially in rotating the hip joint inward, such as when one brings the knees together.**

**Your hip joint is one of the main reasons one has the glutes at all. You see, this joint is where the thigh bone, or femur, attaches to the pelvis. Something has to move the hip joint and your buttock or the glutes are an important part of this task! I hate to bore you with all this information but it’s important to know how the glutes move the hip joint, especially when dealing with and wanting to improve athletic performance.**

**Everyone knows the importance of squats and squat variations such as front squats to work the hips. There are also power cleans and hang cleans plus Olympic lifts for explosiveness, but these are all bilateral (both legs) movements. On the other hand, anatomical evidence for single leg (unilateral) movements is overwhelming for improving athletic performance. I must point out however that besides single leg movements being great for isolating the hips, it’s also a great way to help prevent knee injuries.**

**So what’s an athlete to do when selecting exercises to promote hip and glute strength, explosiveness, stability and flexibility? A general rule is “choose single leg movements over double leg movements but neglect either”. With the athletes and personal training clients that I train at the OrthoCarolina Sports Performance Facility I’ll for the most part train bilateral leg exercises the first workout of the week then the next workout later on that week will consist of single leg movements.**



Earlier I talked about how important the gluteus medius is when doing single leg movements. This is because the gluteus medius plays a big role in stabilizing the hips and with single leg movements body weight becomes a very important part of the resistance. An athlete learning to control his or her own body weight is precursor to heavy bilateral leg work.

Just some of the single leg exercises that we use at the OrthoCarolina Sports Performance Facility are:

(fig.1) the unsupported single leg squat – when performing this movement be sure to take the hips and glutes back as if you were sitting in a chair and keep the knee in line with the 2<sup>nd</sup> and 3<sup>rd</sup> toe.

(fig.2) the supported rear foot elevated split squat – on this movement make sure to keep the chest and shoulders up, back and over the hips.

(fig.3) the single leg dead lift – when performing this exercise you must try to keep the entire back from the cervical spine to the sacrum as straight as possible.

The previous exercises are all great for strength and stabilization, however earlier I talked also about the importance of flexibility. I know plenty of athletes who can squat over 500 pounds but can't move as they should on the football field or they can't get down when they run a 20 yard shuttle because of tight hips!

I read an article once that said a great exercise for hip flexibility was front squats. That's true but the athlete is only improving the hip and glute flexibility in the sagittal plane. Coaches want athletes that are strong and explosive but also athletes that can move all over the field or court.

(fig.4) shows how we do hip-overs or around the world using a foam-roll that's 35 and a 1/2 inches in height. Athletes can turn sideways at the foam-roll with the ankle going over and back 25 to 50 times or the athlete can face the foam-roll having the hips and leg going forward and back another 25 to 50 times. In doing this movement you're getting a lot of Range of Motion (ROM) plus this movement is not only in the sagittal plane but the frontal and transverse plane as well.

Now on a personal note, I'll reserve this section for the over 45 years and older readers, (yours truly included). Performing double leg (bilateral) back squats can be very stressful on the lower back. I very much agree with well known strength & conditioning coach Mike Boyle that back squats are very beneficial for the short term and when performed by younger athletes. However in the long run can be very harmful.

This is where single leg (unilateral) squatting can be very effective in taking the stress off the lumbar area and putting it directly on the hips and glutes. No more stiff lower backs after a back squat workout for the somewhat older lifters. WOW, sounds great too me, plus the training effect is still there along with activating muscle fiber and getting a more functional workout!

In closing, when trying to do everything you can to improve all elements of athletic performance remember how important the turbo-charger of the hips are, that being the glutes. They must be not only strong and explosive but flexible plus they must be able to stabilize the body know matter what the situation calls for in an athletic event.

#### References:

Mike Boyle: The Case for Single Leg Training

Ron Brown: The Ultimate Glutes



Chip Sigmon is the speed and agility coach at OrthoCarolina Sports Performance. He spent 12 years as the strength and conditioning coach for the NBA Charlotte Hornets and the WNBA Charlotte Sting.