

## Great Glutes

Great golfers have great butts. Strong glutes. Big buns. They might have weedy calves, or may not need a great pair of deltoids, but they will always have a bit of booty. When Sam Snead once told President Eisenhower to “put your ass into the ball Mr President,” he wasn’t just being cheeky. The cannons of a powerful golf swing are the huge gluteal muscles in your backside. The more fully you can load and unload them, the further you’ll hit the ball.

So what’s the functional thinking behind this fact?

As a group the glutes main functional job is to assist in eccentrically decelerating femoral internal rotation, adduction and flexion, and then concentrically accelerating femoral external rotation, abduction and extension. I list the rotation elements first as it is probably in this plane that the gluteal action is most dominant, and most misunderstood. Just take a look at the fibre directions in the gluteal illustration below and you will get a feeling for this “cross-diagonal” rotary action as you can clearly see the muscle wrapping around the hip.



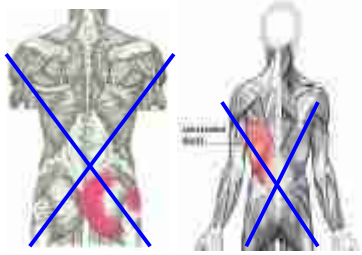
The glutes are **not** just plain old hip extensors, and should not be trained with just sagittal plane hip ext/flex techniques.

The golf swing is a total body kinetic chain reaction....400 muscles and 70 joints working in harmony and not isolation.

Internal rotation is essential at both hips during the top of the backswing. Easily facilitated on the right side by the obvious direct hip movement and counter coil, but much more subtle on the **left** and achieved by subtalar pronation, knee int. rot and valgus drift, and a surprising amount of "relative" adduction at the hip. We are doing this to eccentrically lengthen and load both gluteals ready to concentrically unload them into predominantly transverse (rotary) plane movement as we shift the longitudinal swing axis from right to left during the swing.

The hips are the bodies biggest joints and are dominated by it’s biggest muscle group...the glutes. It has become big news for me as I begin to appreciate the modern "pelvis held" golf swing. The guys are now getting the increased coil, getting the load to unload above, but it works massively on the hips as well to maintain a relative internal rotation relationship.

This is a glutes article, but we can't discuss them without talking about their biggest friends...the lats. The glutes and the lats have an intimate relationship with each other, in fact the right glute and the left lat are functional partners...and vice versa with the left glute and right lat.



It's the now much quoted **X-factor**. They create the paired force couples that drive certain chains of movement mainly centring around their converging forces at the bodies core. The x-factor is not a golf thing...it's an essential factor for normal human movement. Take a look at this:-



In running the glute/lat pairings contribute to creating and controlling the essential counter rotation of the pelvic girdle and the upper girdles via the spine. Counter rotation...all of a sudden running starts to sound like golf.

We need to look at this more as golf physio's and conditioners....we all get a bit too impressed by that powerful right hip/right side. Traditionally we have thought of the right hip as the accelerator and the left hip as the decelerator of the swing...I'm thinking they are really consistently involved in the whole of the swing as in any typical kinetic chain reaction. The glutes also have a primary role to play in the technical "shape-making" of a golf swing. They drive the body coil, they control slide, they limit pelvic instability and tuck-under at impact, and they dictate the spinal pelvic angle...they are busy!

- We need to seek out the transverse (rotary) plane in our hip strength and stability patterns. *Med. ball rotations, cable work, counter rotation positioning etc.*
- We need to take advantage of the frontal plane. *Bump outs, single leg work, pulley and cable patterns, In-line footwork stability patterns etc.*
- We need to integrate the squat patterns in a more functional 3 dimensional manner. *3D squat matrix, unstable surface squats, asymmetrical loaded squat, stability ball etc.*
- We need to integrate all of the above with the lats in functional 3 dimensional patterns. *Woodchops, high-lows, med ball patterns, dumbbell lunge matrix etc.*
- And we need to have a pathway of making sure that the glutes and lats have the **flexibility** needed, can **stabilise** throughout the range, can build upon this with **strength** training and then finally express the previous three with **power** patterns. Only then are we doing the glute justice with a correct pathway for training.

In a nutshell we need to kick a bit more butt, and it's not just about doing squats!

Bob Wood MCSP, SRP

