

## Glutes and Hip Extension

The Gluteus maximus is strongly activated at short muscle length during full hip extension, abduction, and external rotation. This is due to the muscle's longer internal moment arm in these positions.

It is also more strongly activated when the knee is flexed.

Its action is suppressed when 1) the knee is extended and 2) knee extension coincides with hip extension (e.g., squatting and leg pressing movements). Gluteus maximus activation also increases during hip extension when the abs are braced.

### **BEST "GLUTE" EXERCISES:**

Hip thrust – normal feet position:



Hip thrust - wide stance, toes out position:



Bent-knee kickback & up on machines designed for that purpose or on a Smith Machine:



Glute-Ham machine back extension with the knees stabilized in a flexed position:



Wide stance, toes out, squat, and leg press:



Hip thrust with knees flexed and wide, with feet close (bottom of each foot facing each other):



Reverse hyperextension with the knees flexed:



The top of the ROM of the glute-hamstring raise when the knee flexion occurs:



The bottom of the ROM of any squat or leg press, single or double leg:

