

Uncorking Gluteal Function through Hip Flexor Stretching

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INTRODUCTION: A sedentary lifestyle contributes to hip flexor tightness. Some evidence suggests that tight hip flexors may contribute to impairments in gluteal function.

PURPOSE: To analyze the effect of a hip flexor stretching program on hip flexor length and gluteus maximus strength, power, and endurance.

METHODS: Twenty-three participants (15 females, 8 males; average age 24.0 ± 2.58 years) totaling 46 limbs were tested. Twelve participants were randomly assigned to the experimental group, while the remaining 11 were placed in the control group. Hip flexor length was measured with the Thomas test using an inclinometer. Gluteal power was measured using a single-leg jump for distance with a tape measure. Gluteal strength was measured with the prone hip extension using a luggage scale. Gluteal endurance was measured with a single-leg bridge using a stopwatch. Participants in the intervention group performed five minutes of a lunge-and-reach stretch on each limb daily for six weeks.

RESULTS: Statistically significant changes were found for the Thomas test and single-leg jump for distance ($p=0.01$ and $p=0.02$, respectively). No significant change was found for gluteal strength or single-leg bridge endurance ($p=0.23$ and $p=0.26$, respectively). All measurements demonstrated high reliability ($ICC=0.92-0.99$).

CONCLUSION: These results suggest that the lunge and reach stretch can be used to improve hip flexor length and gluteal power in a young, healthy population. Clinicians, coaches, and athletes may find these improvements beneficial for rehabilitation or performance.