The hip adduction and abduction exercises are simple but effective movements which can help any weight program. Used in the standing or seated position one brings a straight leg toward the midline of the body against resistance (hip adduction). A straight leg moved away from the midline of the body against resistance brings about hip abduction.

Many times these exercises are not a part of a weight program due to lack of equipment innovation and space. They should be, because these exercises are very specific to some sports (i.e. breast stroke in swimming, soccer style kicking) and provide a knee stability conditioning base for most other activities.

When the hip adduction exercise is done in the seated position the muscles most involved are the adductor brevis, adductor longus, adductor magnus and gracilis. The gluteus maximus assists in the adduction movement when resistance is used.

In the standing position adduction against resistance with the weight positioned unilaterally from the wall can be accomplished entirely by gravity as tension in the muscles surrounding the hip joint is released.

The exercise is perhaps best performed in the seated position because the movements of other body parts are minimized. Better muscle isolation is thus achieved. This movement can provide needed strength and stability. The groin also may benefit and chance for injury is reduced as adduction/abduction exercises are incorporated into the strength program.

When performing diagonal adduction at the hip joint against resistance, the muscles most involved are the iliopsoas, rectus femoris, pectineus, adductor brevis, adductor longus, and adductor magnus. This motion can be of help in the training of soccer-style kickers in football and, obviously, soccer players. In terms of potential internal force, diagonal adduction is a more powerful motion than hip flexion. Diagonal adduction utilizes both the hip flexor and adductor muscles. This helps explain the great distances achieved by soccer-style kickers in football.

Abduction occurs when the lower limb of the leg is moved away from the body. In sporting activities one does not usually see a lot of force exerted in this motion. The muscle most involved in abduction against resistance is small when compared to many other muscles, but the leverage advantage of the gluteus medius provides it with considerable potential internal force development. The remaining gluteal muscles work with the gluteus medius in abstraction.

The top fibers of the gluteus maximus and the posterior fibers of the gluteus minimus contribute some contractile force for motion. The tensor fasciae latae is also involved to some extent in abduction.

In both exercises guiding muscles are needed to eliminate any medial or lateral rotation. This is primarily the case in abduction. The anterior guiding muscles are the iliopsoas, sartorius, rectus femoris, tensor fasciae latae, and gluteus minimus. Posteriorly, the guiding force is provided by the gluteus maximus, long head of the biceps femoris, semitendinosus, semimembranosus and the six small lateral rotators of the hip.

Diagonal abduction involves gluteus medius, gluteus maximus, semitendinosus, semimembranosus, long head of the biceps and the six lateral rotators. Again, soccer-style kicking uses this motion. In addition to strength development, it is important to work on improving the flexibility or range of motion of these movements in order to increase limb velocity.

Improved hip flexibility is also important in increasing running speed. These exercises may be solid additions to any strength training program designed to improve speed. Remember to use proper static flexibility stretches before dynamic resistance work is started on these movements.5