

**Spine Range of Motion and Control:** Optimal spinal mobility at all levels is critical since limitations at one area will increase compressional forces on another. This is particularly important during the end ranges of the swing when control of thoracic extension and rotation need to be maximal. The pelvis should also stay relatively neutral throughout the swing to allow the body to rotate around a neutral spine axis. Note that the pelvis stays neutral despite changes in hip position and its directional orientation throughout the swing.

The Pilates Arc™ is a wonderful tool for golfers, since they can stretch the spine and work on core control in a variety of spinal orientations. Mat exercises such as the mermaid and saw are helpful for encouraging spinal rotation and pelvic control, whereas the swan and swimming are helpful in working with spine control in extension.

**Hip Range of Motion and Control:** Good hip range of motion, particularly hip internal rotation and hip extension, is very important. A tight iliotibial band combined with weak hip abductors can be a culprit for many swing faults. What is often overlooked is the importance of also working on hip and lower extremity control in weight bearing positions.

Functional Footprints® are a favorite tool with golfers. They allow one to work on hip control with the golfer in a weight bearing position and in varying degrees of hip rotation, whether they're used on their own or in combination with other apparatus. The reformer is the obvious place to work on hip flexibility, whether performing the supine legs in straps series or the standing lunge/hip flexor stretch. Performing hip work on the reformer with the client standing in their golf address position is helpful for training muscular control with the hips in flexion and spine in neutral.

