

PHYSICAL PREPARATION FOR GOLF

Golf is a highly technical, physically demanding sport that involves the recruitment of almost every muscle in the body. Elite male golfers will typically generate over 160 km/h of club head speed in a very brief period of time, repeating full swings up to 40 times per 18 holes. When you consider the time spent practicing, golfers may repeat this movement hundreds if not thousands of times.

The load transmitted through the spine has been calculated at up to 8 x body weight compression force while hitting a 5 iron in both amateurs and professionals, while other forces through the spine are greater in amateurs, usually as a result of inferior swing mechanics. That means that an 80 kg golfer will have to absorb a 640 kg compression force through the spine at two instances during the swing, once in the backswing and just after impact. This force will mostly be absorbed and controlled by the deep core stabilising muscles, the deep abdominals, deep back muscles and deep muscles of the hip.

Another force that needs to be absorbed by the golfer during the swing is the centripetal force that is generated by the club as it rotates around the body during the swing. The weight of the club traveling at speeds of up to 160 km/h will generate a force of up to 90 kg pulling the club away from the body. This force must be controlled by the golfer, mostly by the muscles around the shoulder blades, to prevent the arms being pulled away from the body and the golfer losing his posture.

These are just two examples of the forces that must be absorbed and controlled by the golfer to be able to compete without injury. They highlight the need for physical preparation to prevent injury.

Golfers also need to prepare physically to be able to perform the complex, technically complicated movements that make up the golf swing. Without the adequate flexibility, strength, balance, co-ordination and control it will be difficult, if not impossible, for golfers to swing the club technically correctly, as well as implement necessary technical swing changes that are required to progress. In this way physical development must precede technical development in the course of a golfer's improvement.

This manual will outline all aspects of physical preparation for golfers. It must be remembered that this should in no way replace an individualized assessment and program development.