

## **The Process of Strength and Conditioning for Golfers**

**The use of different sporting activities and resistance work to develop a strength and conditioning program specific to golf.**

Many club golfers are now recognising the importance of getting fit for golf. However many club golfers have a limited understanding or are confused in what they should be pursuing in regards to a strength and conditioning program specific to Golf.

In fact from my experience many golfers are unaware of the muscle groups they should be training to enhance golf performance and in fact the great majority are actually using the wrong muscle groups and poor technique within the gym environment. These faults can not only cause injury but can also affect performance and result in destroying good swing bio-mechanics.

This chapter outlines common sporting activities, regimes and exercise protocols that golfers commonly participate in. It should be emphasised that this article is not designed to discourage golfers from keeping fit. On the contrary it is encouraging club golfers to make themselves more aware of the mistakes that can be made when training in the gym and other exercise environments. It will sophisticate and maximise exercise technique that will in turn assist in improving golf technique.

We have included some self-testing drills to give you golf specific exercises along with breathing exercises to reduce tension and anxiety levels when playing golf. Further golf exercises can be found in the following sections:

- [Your Back and Golf](#)
- [Injuries and Golf](#)
- [Stretching and Golf](#)

## **Golf Specific Fitness Exercises**

It is clear to see that after databasing over 4000 golfers and working closely with PGA Professionals specific patterns are common in golf swings. In assessing poor swing patterns in golfers and matching them up against their musculo-skeletal screenings, we have found that specific physiological breakdown can cause technical problems or inhibit technical improvement. From this information we have produced a Functional Testing System which can be used to confirm diagnosis of these patterns.

Breakdowns within these functional tests would confirm that the golfer has physiological breakdowns in their body which can inhibit or restrict the ability to maintain good form when practicing or trying to improve technically.

The functional tests are graded from level 1-6. At each level a four point system is put into place to identify common breakdowns. Obviously, the less points accumulated, the less the breakdowns in that functional position. Examples of the four breakdowns are seen in the paper on the A4 worksheets. If there is a consistent inability to reduce the point system, physiotherapy, massage and myotherapy intervention is recommended to ensure quality of movement and positioning in each test is achieved. This in turn should enable the golfer to achieve and maintain good technical positions by performing the test which then becomes a golf specific exercise. The golfer can then move from a base level to a more difficult level of the same functional test and keep improving once they have good patterns of movement and have good associated physiological form within their diagnostic drills. This will, through their specificity, produce golf specific exercises moving golfers away from generic exercises which have minimal relevance to coaching and the golfer's swing.

Below are links to some great self-testing / golf specific exercises to workout your body for golf:

- Karate Kid
- Rotation
- Crucifix Position
- Lower Trunk
- Angel Wings with Ear to Shoulder
- Lower Trunk with Leg Raises

## 1<sup>st</sup> Protocol: **Warming up and Stretching**

### **Common mistakes:**

- Poor positioning can cause injury eg back
- Bouncing and fast jerky movements can also lead to injury
- Poor stabilising in the trunk region will lead to inefficient stretching of the muscle groups. The inefficiency will lead to the correct muscle groups not being warmed up properly and can result in weakness in these muscle groups inhibiting them from performing good swing bio-mechanics

### **Warming up and stretching:**

Promoting good technique, use the self testing drills because:

1. The drills will improve posture therefore improve posture at address;
2. They will stretch the over tight muscles
3. They will strengthen the correct muscles for golf eg latissimus dorsi, gluteii, transverse abdominus, rotator cuff etc
4. The golfer can measure inflexibility and postural weaknesses using the distance of their hands, neck, shoulders and back from the wall
5. Enables an increased body awareness as the drills require participant to check their legs, trunk and neck position in space

### **Crucifix Position: an example of self-testing**



## **2<sup>nd</sup> Protocol: Abdominal training and trunk stability training**

### **The benefits to the golfer are:**

- Prevent injury e.g. back
- Maintain good posture at address throughout the golf swing
- Makes the golfer more aware of their core stability and centre of gravity
- These factors in turn will reduce compensatory movements in the golf swing

## **3<sup>rd</sup> Protocol: Heavy Weights and Building Beach Muscles**

### **Common Mistakes**

Many club golfers will realise not only from personal experience but also from teaching pupils who have excessive muscle bulk. That excessive muscle hypertrophy can affect swing plane. Heavy resistance exercises can cause this not only resulting in restriction of movement in the golfer's body but also causing imbalances in muscles that have to be balanced for weight transference. It will also affect the "golfer's feel".

Generally speaking golfers should not commence a strength and conditioning program without being screened by a physiotherapist and ensuring that they are able to maintain good posture and muscle balance.



Building up the wrong  
muscles for golf



## 4<sup>th</sup> Protocol: Running and aerobic work

**Many golfers enjoy running and aerobic work the general benefits to the golfer are:**

- Running can be done without any equipment & done anywhere anytime
- It improves exercise tolerance on the golf course and in practice
- Strengthens the lower body.

However, consider:

1. Club golfers tend to move into a typical pattern associated with their golf practice eg stooping posture, feet turned out, pelvis tilting forward see below.
2. As golfers are in prolonged standing postures, running can increase the incidence of spinal, joint stress and fixed postures. Running can also jar the spine. Excessive running can cause tightness in the hamstrings and hip flexors affecting golf bio-mechanics.
3. Excessive running can cause foot problems as golfers tend to have fallen arches (flat feet).

Example of poor running posture



### **Recommendations:**

- Specific stretching range should be implemented.
- Be aware of extra loading in the joints, especially the hips and spine.
- Good supportive shoes are imperative.
- Golfers should run for short distances with break-up stretching sessions
- Run with relaxed shoulders, pelvis tilted upward, feet pointing forwards, good controlled breathing and upright posture at all times. Stand tall at all times

## 5<sup>th</sup> Protocol: Cycling

The same benefits running and aerobics but there is less impact on the joints.

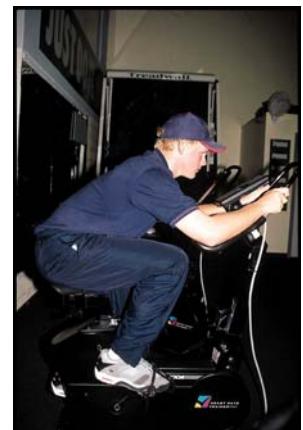
### Considerations:

- Many golfers will increase their pelvic tilt while cycling which can weaken abdominal muscles and excessively tighten their buttock muscles leading to poor posture and swing deviations see poor technique example 5.1
- Leaning over handlebars for long periods can cause stiffness in the upper spine and neck.
- Excessive cycling can tighten the hip flexors and muscles around the shoulder girdle that can affect rotation.
- Inner range exercises on a bicycle will reduce range of movement at the hip and knee joints as result of adaptive muscle shortening.



Correct  
Technique

Poor  
Technique



### Recommendations:

1. Adjust handlebars and seat to your correct height;
  2. Always stretch before and after cycling;
  3. Ensure that you stretch your spine and buttock muscles after cycling;
- Once you advance you can keep your arms to your side so that you are improving your balance, pelvis and trunk control while you are working your legs.

## 6<sup>th</sup> Protocol: **Swimming**

### **Benefits of swimming**

- Increase exercise tolerance on the golf course and during practice
- It is low impact on joints as is not weight bearing
- It encourages good trunk rotation and shoulder girdle stability providing that you have good technique and that you use a variety of different strokes
- Resistance of the water can strengthen specific areas related to golf

### **Considerations:**

1. Front crawl and butterfly strokes can increase Pectoralis major tightness and therefore increase rounding of the shoulders and upper back (kyphosis).
2. Fatigue easily can occur in water, resulting in compensating movements that cause poor muscle coordination.
3. Do not swim immediately prior to golf as the overhead arm movements can affect your pattern of movement before you play



### **Recommendations:**

- Break up swimming lengths with stretches.
- Alternate strokes eg. back stroke and breast stroke.
- Be aware of fatigue and poor technique.

**Additional exercises are needed...**

## **Breathing Exercises to Reduce Tension**

### **Introduction**

**These exercises are designed to reduce anxiety and tension prior to competition.**

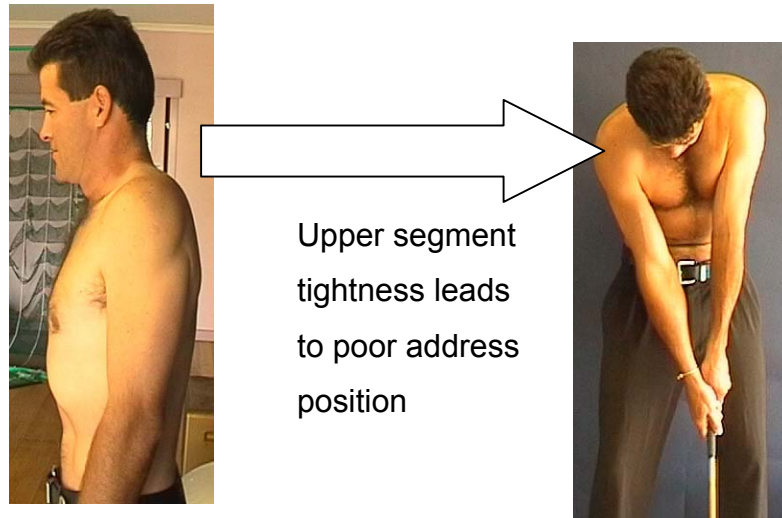
An everyday example for the professional or trainee

Tight neck muscles causing increased tension in arms and hands. This will affect flexibility, rotation and reduce your ability to swing smoothly and efficiently



## The profile of a tense golfer.

This position will also reduce lung capacity, which will lead to decreased aerobic function on the golf course.



## Shoulder “Rolling” Exercise to Reduce Upper Neck Tension in Golfers

To reduce neck tension, place a club in your hands and lift your shoulders breathing in at the same time, then let your shoulders drop and relax completely, slowly breathing out at the same time.

## Relaxation and Breathing Techniques on the Golf Course.

Proper breathing techniques prior to competition.

1. Place back of hands on the sides of your rib cage. Take a deep breath inwards ensuring your rib cage pushes upward and outwards against your hands and ensure that your stomach expands outwards.



Side View

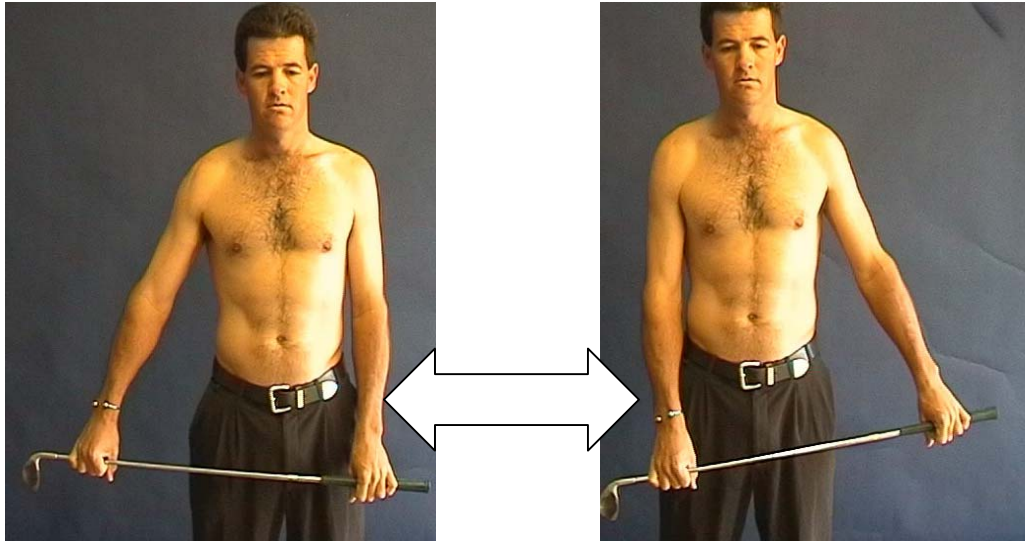
With hands in the same position breath out. Ensure that your rib cage moves downwards and inwards and your stomach also moves inwards.



Front View

## Breathing control techniques when swinging a club

2. To encourage a relaxed swing, hold a club in front of you allowing your arms to drop forwards. Swinging backwards, take a deep breath ensuring you are following good breathing techniques.



Slowly breathing out, swing the club forwards and into the follow-through position.

**NB.** These exercises are useful when you are in a tense situation on the golf course e.g. on a tough approach shot to the green or competing in a match play situation.