



Symphony of

One of the essentials if you are to progress in golf is power. as the team at the Institute of Sport explain in the first

Mention the word power to some golfers and you find it conveys negative thoughts. They instantly associate power with a loss of control. At the Institute of Golf, we encourage players to generate as much clubhead speed as possible to create the necessary power.

Look at it this way: if you have a bad swing and swing slow, you have a slow bad swing; if you have a bad swing that is fast, you have a fast bad swing. The point of difference is that the slow bad swing means you finish up in the trees 100 metres away whereas the fast bad swing

will put you into the trees 200 metres down the fairway.

At the institute we design a swing that has three objectives – to generate power, to be consistent and to send the ball to a pre-determined target. We take away the fear of swinging fast and we set out to create a symphony of movement that will allow you to achieve all these objectives. Power is an essential in the golf swing in order to generate clubhead speed.

The key is using your most primary power sources, your posterior chain, ground reaction force and hip rotation.

In order to use the body's muscles in an efficient manner, the body must first achieve an adequate range of motion through the muscles and joints, as well as adequate stability through the body.

Many players believe the bigger the swing, the further the ball will go. Unfortunately, this is not true. With this notion that bigger is better, players often have a preconceived idea that the club needs to be parallel to the ground, back facing the target etc. These positions for many are impossible to achieve and can produce devastating results.



movement

Achieving it is not as alarming as you may believe, instalment of the How To Grow Your Game series

Players must understand that their body will determine the positions of the swing. In this article, we explain and demonstrate ways to unleash your potential.

Unlocking the secret to power and distance

FLEXIBILITY

A good way to start is by becoming more flexible. You can only perform movements that your body will allow you to do.

Therefore, the more flexible you are, the greater range of movement (ROM) you will have through the joints in your body, allowing you to generate greater clubhead speed. For example, greater flexibility through the thoracic spine will allow the body to rotate through a much greater ROM with your backswing, reducing the need for compensatory movements such as lateral slide, loss of spine angle and over-rotation of the hips. At the same time, it is creating energy in the form of stretch through the trunk muscles before the muscles recoil during the downswing

to give you that much-needed power.

There is no quick fix to becoming more flexible. We recommend you see a physiotherapist or physical instructor to obtain your own personalised stretching programme. Yoga classes can also be beneficial.

Refer to www.instituteforgolf.co.nz for examples of stretches that will help you improve your flexibility for golf.

THE-X FACTOR

In the early 1990s, Jim McLean of the #1 Golf School in the United States coined



the term X-Factor. This term defines the difference between the amount of hip (pelvis) turn and shoulder (trunk) turn during the backswing.

Maximising pelvis and trunk differential during the backswing is associated with longer driving distances.

Further research failed to demonstrate a greater X-Factor when comparing tour professionals, senior tour professionals and amateurs and therefore further research went on to discover the X-Factor Stretch.

What has now been established is that increasing X-Factor early in the downswing through rotating the pelvis towards the target before the trunk is known as creating F-Factor Stretch. This is more important for an optimal swing than the difference between trunk and hip rotation at the top of the backswing.

Creating X-Factor and X-Factor Stretch during the backswing involve rapid stretching of the muscles of the pelvis, trunk and upper arm muscles. This is immediately followed by rapid shortening of these same muscle groups, a phenomenon referred to as the stretch-shorten cycle where the muscle undergoes lengthening (eccentric) prior to rapid shortening (concentric). This stretch allows the muscles to produce higher forces and create greater power than if they were not stretched.

More information is available on www.instituteofgolf.co.nz

GROUND FORCE REACTION

When you swing a golf club, the only contact your body has with a stable surface is the ground. Therefore, golfers must learn to utilise the ground to create stability and to help generate power. When we talk about creating pressure through your feet, we term this Ground Reaction Force (GRF). By creating GRF through the correct areas of the feet, a muscle-firing pattern is triggered in sequence up through your body.

If the body sequences this right, then a massive amount of force is able to be summated and transferred throughout the body and eventually to the clubhead. This is the key to effectively utilising the lower body in the golf swing in order to generate power.

A great drill to get you started is to start practising in bare feet. You should be able to swing without slipping and sliding around. For more advanced GRF drills visit www.instituteofgolf.co.nz

CONDITIONING

There is a lot more to golf strengthening than building big muscles by lifting weights in the gym. So often we see clients working on building big chests and shoulders

Golf requires extension fitness... specific exercises to increase your golf flexibility and improve the strength and power of your posterior chain

because they want to hit the ball further; in fact, it will probably end up making you more restricted through your shoulders and back, and you will end up losing distance!

There are four separate chains of muscles in the body. With proper development of the muscles within the posterior chain comes an 'amazing' amount of strength. Key posterior chain muscles in your golf swing include calves, hamstrings, gluts and lower back muscles. However, the majority of exercises in the gym develop the anterior and brachial chains such as quadriceps, pectorals and bicep muscles.

Athletes with strong anterior chains are strong in flexion activities but weak in activities requiring extension. Golf requires extension fitness!

Golf conditioning should involve specific functional exercise programmes designed to increase your golf flexibility and improve the strength and power of your posterior chain. A strong posterior chain will help utilise ground reaction force while powerfully accelerating the lead hip and initiating the recoiling of the trunk muscles in order to transfer all of this acceleration and energy to the clubhead to help you generate greater power and distance in your golf swing. ●

NEXT ISSUE: Achieving consistency