



### **What are the energy demands of playing Golf?**

The energy demands of a golf game are generally underestimated. Although exercise intensity is relatively low, the long duration of rounds and the amount of distance covered during rounds, results in substantial demands being placed on the body's energy resources.

This low level of activity is interspersed with very brief periods that demand high levels of muscular control. It is vitally important for golfers to guard against low levels of energy and dehydration. Given the time typically spent on the course during a round of golf, fuel sources must be replenished. Lost fluid should also be replaced regularly especially when playing in hot and humid conditions.

Golf is a sport that requires continuous walking. An average round of 18 holes will take most golfers 3-4 hours. In that time you can expect to walk approximately 4-5 miles and burn up a significant amount of energy, especially if you are carrying your own clubs.

### **What happens if energy losses are not replenished?**

Unless energy losses are replenished fully between practice sessions or games then the result will be a gradual and progressive depletion of energy stores. Such reductions in bodily stores will eventually lead to decreases in quality of both play and physical recovery from playing, with an associated decrease in competitive performance.

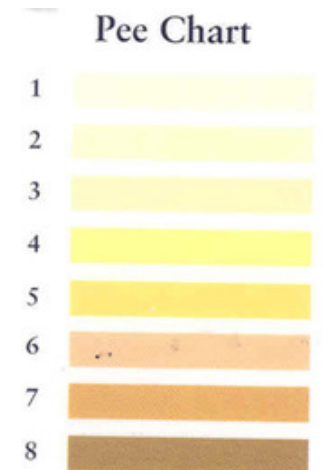
Technical ability, concentration and focus, muscular strength, high levels of muscular control and co-ordination are all vital attributes, which need to be at their best for optimal golf performance. A reduction in any of these abilities as a consequence of fatigue induced by energy depletion will have a negative impact on golfing performance.

## What are the effects of fluid loss?

During exercise the body breaks down fuel to produce energy. The body heats up during this process and sweats. Fluid loss through sweating can lead to dehydration.

Dehydration can result in poor concentration, co-ordination and reaction time. Thirst is often not felt until you are already dehydrated, so do not wait until you are thirsty to take on fluids.

<i>The effect of fluid loss on performance</i>	<i>Body weight Loss of fluid %</i>
Impaired Performance	2%
Capacity for muscular work reduced by 20 – 30%	4%
Heat Exhaustion	5%
Halluncinations	7%
Heat Stroke	10%



Your target is to make sure that your pee is the same colour as numbers 1, 2 or 3. Colours 4 and 5 suggest dehydration and 6, 7 and 8 severe dehydration.

## What are the benefits of fluids?

1. Taking on fluid helps to restock bodily fluid levels preventing dehydration and therefore can help prevent premature fatigue and decrease in sporting performance.
2. Fluid has a potential cooling effect, which helps to decrease levels of heat stress to which the body is subjected during intense activity, especially in warm and humid conditions.
3. Fluid helps to restore blood volume, which in turn results in a better ability to remove heat from the body's core.
4. If salts and electrolytes are included in the fluid mix then losses as a result of sweating can be offset.
5. If some carbohydrate is included then reductions in the bodies critically important carbohydrate stores can be replenished.

### **What are the effects of fuel loss?**

GAA players require high energy levels. It is estimated that a player can burn between 600 and 1000 calories during a match. The high activity levels reduce the body's levels of stored energy (glycogen stores, in the muscles and liver). If stores are reduced significantly then performance will be negatively affected! Not only due to reduced energy supply to the working muscles but also because low levels of circulating carbohydrates in the blood can lead to a drop in players ability to concentrate. Result? A tired mind and body.

### **What are the benefits of fuel?**

1. Taking on fuel replaces the loss of bodily stores of fuel caused by the high energy demands of training and matches.
2. Carbohydrate fuel been scientifically demonstrated to help performance in both long duration endurance activities and in repeated high intensity efforts (for example the multiple sprints involved during football and hurling)
3. If carbohydrate is taken in fluid form the performance debilitating effects of dehydration can be reduced.

### **What will give me the energy I need?**

Lucozade Sport is an isotonic sports drink, designed to improve sporting performance. It delivers a boost of carbohydrate energy to the working muscles and supplies fluid fast. Together these help to maximize sporting performance and endurance.

**FLUID:** Water: to replace what is lost as sweat and help prevent dehydration

**ENERGY:** Carbohydrate: to provide fuel for the working muscles

**SALTS:** Electrolytes: sodium, potassium, calcium: to enhance fluid absorption into the bloodstream and help maintain hydration

### **What does 'isotonic' mean?**

Isotonic drinks are specially formulated to be in balance with your body's own fluid and are therefore effectively absorbed by the body. They are proven to improve endurance capacity.

“ISOTONIC”

ISO – means equal TONIC – refers to tonicity (also called osmolality). Tonicity is a measure of the number of particles (dissolved solids in a solution)

## Lucozade Sport V's Water

<i>Lucozade Sport</i>	<i>Water</i>
Stimulates thirst	Suppresses thirst
Retains more fluid and minerals	Stimulates more urine production
Well-tolerated post-exercise	May cause bloating
Contains energy content sources	No energy
Salt content	No salt
Taste encourages voluntary intake	Bland

'In tests against water, athletes using isotonic Lucozade Sport drinks are proven to improve their sporting performance by 33%'

Nicholas et al (1995), Journal Of Sports Sciences, 13 (4), 283-290.

### When should I take Lucozade Sport?

Lucozade Sport will facilitate fast fluid replacement and deliver carbohydrate energy. For optimum performance Lucozade Sport should be taken

BEFORE, DURING and AFTER sport

#### BEFORE

When hydrating prior to exercise you should slowly drink 5 to 7mls per kg of body weight of Lucozade Sport at least 4 hours before. This will ensure that you top up carbohydrate energy stores and ensure that you start fully hydrated.

#### DURING

The aim of drinking during exercise is to prevent excessive dehydration. A suitable starting point may be 150 to 250 mls every 15-20 minutes during activity. If this is not possible, athletes need to consume larger amounts at half time.

#### AFTER

1.5 litres of fluid needs to be consumed for every 1kg of body weight lost to aid recovery by effectively re-hydrating and replacing depleted energy stores. It can take up to 48 hours to fully replenish glycogen stores, but the first two hours after exercise is the most important to take in some carbohydrate then.

**PREPARE**

**PERFORM**

**RECOVER**

There are more than 50 scientific studies to demonstrate the benefits of Lucozade Sport for Athletes. To find out more log on to [www.lucozadesport.com](http://www.lucozadesport.com)