

June 08

Food & Your Performance

Good nutrition is essential for performance. The food you eat fuels your body, enabling you to exercise and getting the right balance, can help give you the upper hand. Both athletes and non-athletes need the same nutrients, but they need to consume them in different quantities and proportions.

Carbohydrates are the sugars present in cereal grains, fruits and vegetables and they are the preferred source of fuel for working muscles. Your body must break down carbohydrates in order to turn them into glucose (blood sugar). Inadequate carbohydrate intake will result in tiredness and impaired performance. A sportsperson's diet needs to be carbohydrate rich, accounting for 60-70% of their total calorie intake. Wholegrains, pasta, rice, potatoes and oats are the best choices and will provide powerful fuel for muscles and help with the restocking of muscle fuel after exercise.

The **glycaemic index (GI)** refers to how quickly a carbohydrate food is converted to sugar in the blood after consumption. Low GI carbohydrates like oats, pasta and wholegrains give a slow release of energy and are the best choices at mealtimes. Whereas high GI carbohydrates, like biscuits, jellies, sports drinks, rapidly boost blood sugar levels and are the best choices for immediately after training.

Breakfast really is the most important meal of the day...breakfast is literally breaking the fast. After a night's sleep our body is running on empty and we need to supply the body with fuel. A good high fibre, low GI breakfast is important to supply the body with a steady stream of energy. Unsweetened muesli or porridge is a great nutritious start to the day, coupled with some wholegrain bread and a piece of fruit. Continuing the day by basing your diet around wholegrain carbohydrates will help supply your muscles with the steady stream of energy they need.

Although **vitamins and minerals** do not provide any energy, they are essential in helping the body to breakdown proteins and carbohydrates and help you to perform efficiently and effectively. Eating a varied, balanced diet, including lots of fruit and vegetables, will ensure that you meet your requirements. If you do choose to take vitamin supplements, avoid very high doses.

Fluid is critical for performance and dehydration can lead to tiredness, impaired performance and cramps. Prehydration is just as important as rehydration, so ensure that you drink plenty on the days you are not training too. Sports drinks are generally recommended for a work out of longer than one hour.

- **Fluid guidelines...**before exercise drink plenty of fluids throughout the day and arrive at training well hydrated. Take about 300 mls of an isotonic drink or water about 15-20 minutes before exercise. To avoid dehydration sip 200mls every 15-20 minutes during exercise but if this is not possible drink approx 500 mls at half-time. You may need to drink more if you sweat a lot or it is very hot.

A good **protein** intake is important for any sportsperson and should make up approximately 15-20 % of overall calorie intake. Protein is necessary for growth, maintenance and repair of body tissue. The best sources of protein include lean meat, poultry, fish, pulses, nuts, seeds, eggs and low fat cheese. Always have a protein rich food with at least two or more meals per day.

It can be difficult to juggle training and a work life, so it is important to be organised with your diet. Try to plan your diet and make a shopping list, so that you have something from all of the food groups you need.

- A good supply of high fibre carbohydrates, some unsweetened muesli, porridge, wholegrain bread, pasta, rice and potatoes.
- Fruit and vegetables, both fresh and frozen, so you always have a supply.
- Good low fat sources of protein including fish, poultry, lean meat, tinned fish, beans, nuts and eggs.
- Calcium rich foods including yogurts, low fat cheese, milk or fortified soya milk.
- Nuts, dried fruit, juices, biscuits, oatcakes, seeds and fruit for snacks.