

Sports Nutrition

by Julie Tomlinson

A good starting point for every athlete is ensuring they consume a well-balanced diet as recommended by the governments Food Standards Agency (www.food.gov.uk). You will find advice on their website specifically related to and aimed at adolescents.

Getting nutrition right in a way that can benefit performance isn't that straight forward when it comes to athletes. A combination of the types, quantity and timing of food can all help athletes respond and adapt to training quicker, recover from - and prevent - illness and injury, train longer and harder, build strength and endurance, and recover quicker and more efficiently between training sessions. This will ultimately lead to an enhanced performance.

Firstly, be mindful that a young athlete will need to consume more calories than their less active counterparts. Not only must their nutrition cover the basic demands of everyday living, along with maturation and growth, it must also supply the energy and nutrients demanded by their training. They should encourage themselves to listen to their bodies in determining appetite and energy levels.

Here are some pointers to get you thinking about sports nutrition:

- **In general, eat a low-medium GI diet.** High GI diets cause tiredness and can inhibit energy storage.
- **Ideally eat something every 2-3 hours.** This helps maintain blood sugar levels and maximise glycogen replenishment – fuel for exercise.
- **Eat a meal based mainly on carbohydrates 2-3 hours before exercise.** If timing leaves a period longer than this, then a high carbohydrate (low GI) snack should be consumed an hour before.
- **During exercise lasting longer than 90 minutes and immediately after exercise eat high GI carbohydrates.** During exercise (>90mins) aim to consume 30-60g of carbohydrate per hour. In the pool, this can be provided through a sports drink, whether bought or home-made. To make a home-made one simply mix 500ml of unsweetened fruit juice with 500ml of water. Or, 1 part squash to 4 parts water. Avoid squash that contains artificial sweeteners as they can aggravate the digestive tracts of children. Consumption of water only is sufficient for exercise lasting <90minutes.
- **Eat omega 3.** It has been shown to increase stamina and strength, combat inflammation, along with a host of other benefits linked to general wellbeing. Good sources are 1-2 portions of oily fish per week (salmon, mackerel, sardines, etc..) or alternatively for vegetarians flaxseed oil.
- **Eat lots of fruit and vegetables.** The antioxidants and phytonutrients in them help reduce cell damage caused by free radicals (of which the body produces more of during exercise), help the body recover faster following exercise, and boost the body's immune system. Its worth noting that the immune system can be depressed in those involved in frequent, intense exercise. This can make athletes extra susceptible to colds and viruses, both of which mean time out of training. It's not as simple as ensuring you get enough Vitamin C though. Other vitamin and minerals such as Vitamin A, B6, and B12, plus zinc and iron play vital roles.

As these are found in varying quantities in a whole host of differing fruits and vegetables, the easiest thing to do is ensure you eat a diet rich in both. Simply include some fruit and/or veg at every meal and snack. Please note there is no benefit in taking excessive amounts of vitamins and minerals as this may actually cause harm.

NB. GI refers to the Glycaemic Index of all carbohydrate containing foods. Low GI foods cause a minimal elevation in blood sugar levels, whereas high GI foods cause a sharp spike in blood glucose (sugar), followed by a rapid fall. This leads to low blood glucose levels and a craving for sugary foods. There are many GI books available for around £3-4. This will help you familiarise yourself with what constitutes as low, medium, or high GI foods in your weekly shop.

It's not just your food intake that can influence how well you train or perform. Hydration can also have a huge impact. As a general rule, if you feel thirsty you are already dehydrated. Symptoms of dehydration include confusion, fatigue, headaches, heat exhaustion and nausea. Your training will feel harder and your performance will suffer. Fluid intake should be spread throughout the day. Some of your fluid will come from food sources such as soup, milkshakes, fruit and vegetables.

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