

Before exercise: What to eat and drink?

It is important that athletes see not only the snack or meal directly before exercise as important but also the days in the week preceding exercise as important as well. The meal eaten before exercise is really only fine tuning the fuel and fluid reserves and ensures that athletes are feeling full and will not become hungry during training or competition. It is important that athletes do not eat too soon before exercise, as digestion will need to occur to make the food available to exercising muscles in a suitable format. That is food is only useful once it has been broken down and absorbed into the system.

The length of time that it takes to break down foods to make them available depends on the type of food eaten and the quantities eaten. Foods that are higher in protein, fat and fibre take a little longer to digest and if you eat a large quantity of food this will also take longer to digest than small amounts. Everyone is different so it is important that each athlete works out a plan of eating and drinking that suits his or her particular needs and type of sport. Most individuals can manage a larger meal 2 hours prior to exercise and then may be able to manage something small or drinks in the hour leading up to exercise.

It is important that the foods eaten directly before exercise should provide you with carbohydrate. If you keep your food choices low in fat and fibre you will reduce the risk of discomfort and it will be digested faster. Carbohydrate foods are absorbed into the system at different rates and therefore they will have different effects on blood glucose levels. Foods that are known to be released slowly and have a more sustained effect on blood glucose are known as low Glycaemic Index (GI) foods. Those that have a rapid effect are high GI foods. It has been suggested that low GI foods will provide a slower release of blood glucose during exercise but research in the area has not been conclusive. Another way of ensuring that carbohydrate levels are maintained is by taking some carbohydrates during exercise. However, some sports may be restricted in that athletes are not able to take in extra carbohydrate during activity therefore it is important that pre event meals have some low GI carbohydrate sources. Athletes do need to practice what they will eat as some of these foods can also be high in fibre, which is one of the things that may slow down digestion, and therefore is a potential source of tummy upset for athletes.

Early risers?

Some sports require that athletes train early in the morning or you may have to do an early morning session prior to going to work or college. Therefore a meal 2-3 hours before training is not really possible. Fluids can be used at this time as an alternative to solids and they will also provide fluid as well as fuel. Milkshakes, sports drinks; fruit salad and cereal bars are useful at this time. Athletes must ensure that they pay careful attention to their post training meal and fluid replacement and the timing of food intake after the early morning training sessions.

2-3 hours before exercise

A pasta or rice based meal or salad with tomato based sauce, meat / chicken / fish and vegetables

Sandwich (bread or rolls with meat / chicken / cheese filling with salad

Baked beans on toast

Baked potato with grated cheese

1-2 hours before exercise

Fruit smoothies

Sports and cereal bars

Fruit

Milk or milk shakes

Breakfast cereal and milk (not high fibre varieties)

Less than 1 hour before exercise

Sports drinks

Sports gels

Dilute squash and water

Jelly sweets or fruit flavour ice-lollies.

Feeling queasy?

A small number of athletes may find that they experience symptoms such as fatigue, sickness and dizziness after consuming foods and drinks rich in carbohydrate immediately before exercise. This reaction is a response to the levels of insulin, which is a hormone. If you are affected you may need to experiment with the timings for pre event meals and maybe allowing longer gaps. You also could consider having a larger quantity of carbohydrate as there are some suggestions that smaller amounts (<50g) are more likely to cause problems with those that are sensitive. By including carbohydrate from low GI sources you can slow down the rate of insulin release.

So by getting the timing right and including the right type of food and fluids you can hopefully improve the outcome of your training sessions and competition events.

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