

Preparation for competition

Most players appreciate the need to rest and eat well during the days prior to an important match, but questions arise regarding how much to eat, what type of food and when is the best time. This includes what to eat during the few hours immediately before competition or intense training.

Carbohydrate is the key energy-providing nutrient that must be optimised during the days leading up to and including the day of competition. Attention should also be given to optimising water and salt levels in the body. However, during the 2-4 days prior to a competition, a player's need for protein and fat, as well as most other nutrients, typically does not increase above the levels that are recommended for normal moderate level training.

Carbo-loading

Players who compete intensely may benefit from 'carbohydrate-loading' for a few days. This loading of muscle glycogen to super-compensated levels can be achieved within 2-3 days by consuming a large amount of carbo-

Example of one day of a carbohydrate loading diet providing 630 g of carbohydrate* (i.e. to provide 9 g/kg carbohydrate for a player weighing 70 kg)

Early morning – 150 g = 2 cups cereal with milk + 250 ml fruit juice + 1 banana + 2 thick slices toast + thick spread of jam

Late morning – 50 g = 500 ml soft drink or 750 ml sports drink

Mid-day – 150 g = 1 large bread roll + 1 medium muffin + fruit smoothie

Snack – 50 g = 200 g flavoured yoghurt + 250 ml fruit juice

Dinner – 200 g = 3 cups cooked pasta + 2 cups fruit salad + 2 scoops ice cream + 500 ml sports drink

Snack – 30 g = 50 g chocolate

(*foods added to balance a meal, such as sauce on the pasta, can meet needs for energy and other nutrients)

hydrate (about 8-10 g per kg of body weight per day; see below) at the same time that training intensity is reduced to no more than easy levels of short duration. It is assumed that a moderate to hard bout of fatiguing exercise is performed in normal training sometime earlier in the week prior to competition.

Carbohydrate in the 6-h period before playing

Players sometimes find a favourite pre-competition meal that not only provides extra energy during the match, but also feels 'right' in terms of curbing hunger, quieting their stomach and being convenient and practical. In low key competition, or for some players who do little running in a game, the pre-match meal need not be predominantly carbohydrate. However, in intense competitions players are generally advised to:

Eat 1-4 g/ kg body weight of carbohydrate during the 6-h period before exercise.

The main 'mistake' players might make is to eat too little carbohydrate (less than 1 g per kg body weight) during the 1-6 h period before exercise and then not take in carbohydrate during exercise. This small carbohydrate meal 'primes' the body to rely more heavily on blood glucose, but it does not provide enough carbohydrate to sustain the player throughout the subsequent exercise.

Fluid intake prior to competition

Players should drink sufficient fluid with meals on the day before competition to ensure they are well-hydrated on the morning of competition. Players should not refrain from drinking water or carbohydrate-containing fluids during the hours leading up to competition.

In hot weather, it is recommended that approximately 500 ml be ingested during the 60-90 minute period before the start of the game. This will allow sufficient time for urination of excess fluid before the game begins. In training or competitions that cause heavy sweating without sufficient opportunity for fluid intake, players often benefit by drinking 300-600 ml of fluid during the 15 minute period immediately before the start of the event.

These volumes should be scaled down for female and youth players with a smaller body size.

Five different examples of foods that each provide 140 g CHO in a pre-competition meal* (2 g/kg for a 70 kg player) are

2.5 cups breakfast cereal + milk + large banana

Large bread roll or 3 thick slices bread + thick spread honey

2 cups boiled rice + 2 slices bread

4 stack pancakes + 0.5 cups syrup

60 g sports bar + 500 ml liquid meal supplement or fruit smoothie

(*note that other foods may be eaten at the meal)

