

ABOUT SOCCER

Soccer (also known as football) is a team-based sport played in two 45-minute halves with a 15 minute break between halves. A team involves 10 players on the field plus a goal keeper.

Soccer is played all year round with the number of weekly matches varying between competitions. In Australia, the main competitive season (A-League) is played between October and March and involves a one match per week match usually on weekends.

A match of soccer is characterised by intermittent in bursts of high intensity activity. During an elite level match, players can cover ~10-11km (including ~1km sprinting), accelerate 40-60 times, and change direction every five seconds, making use of both aerobic and anaerobic energy systems.

These patterns can partially deplete the players' leg-muscle fuel stores (glycogen) which can lead to fatigue and dramatically reduce running speeds over a match.

Soccer players must be skilled, agile and fast on their feet. Although soccer players come in various shapes and sizes, low body fat levels can be beneficial for speed and agility.

TRAINING DIFT

Training can be physically demanding depending on the level of the athlete and frequency and duration of training sessions. This means that some athletes can have high energy, carbohydrate and fluid requirements. A diet rich in carbohydrate foods is important to provide adequate energy to maintain a high standard of play and also promote recovery.

At the elite level, soccer is a professional sport, but many club and young players have work or study commitments to manage around training and match schedules. This creates a very busy lifestyle, and good nutrition habits can take a back seat, especially if the athlete lacks the skills to shop and cook. Takeaways can be a trap, but learning how to choose better takeaways, reading food labels and learning how to cook and prepare ahead can make a difference both on and off the field by aiding recovery and reduce fatigue.

Carbohydrate needs differ between individuals however, on average, soccer players who are training several times a week will require ~5-8 grams carbohydrate per kilogram of body weight per day to fuel training sessions and prepare for matches. Nutritious carbohydrate foods such as wholegrain bread, cereal, fruit, pasta, rice, vegetables, yoghurt and flavoured low-fat milk should be included in meals and

snacks over the day. Players with inadequate carbohydrate intake may experience progressive fatigue during the later stages of a week and over the season.

Players should also ensure good recovery nutrition practices after each training session. See recovery section below for more details.

It is not uncommon for body fat levels to creep up over the off-season period when training loads are low. This can be managed reducing the amount of food eaten or by increasing exercise over this period e.g. cross training or playing another sport.

FLUID NEEDS

Fluid needs during matches can be high due to the high intensity nature of a match (which can be further if playing in hot weather). Dehydration can negatively affect endurance, speed, skill execution and decision making ability and therefore significantly impact soccer performance.

Opportunities to drink during matches are mainly limited to the half time break but informal breaks in play (e.g. injury time) can also be useful. During training, players should make use of any breaks given by coaches to grab a drink. Drinks containing carbohydrate (e.g. sports drinks) can assist with replacing energy stores and minimise fatigue.

A player can assess how much fluid they have lost by weighing themselves before and after the training session or game. See Fluid in Sport factsheet for more details.

EATING BEFORE A GAME

The main pre-game meal should be eaten 2-4 hours prior to the start of a match. It should carbohydrate based and to avoid stomach discomfort, foods low in fibre and fat may be preferred. Options may include pasta with tomato based sauce, sandwich with light fillings, rice based dish. A light, carbohydrate snack (e.g. fruit, yoghurt, cereal bar, toast with spread) in the 1-2 hours leading up to a match can help provide a final "top up" of fuel stores.

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EATING & DRINKING DURING A GAME

Although the half-time break is brief, it is the only opportunity for nutrition during play. Players with a high workload (e.g. midfielders) will benefit most from consuming a carbohydrate snack during the break as they tend to have greatest requirements for carbohydrate and fluid during a game. Chopped fruit or muesli bars can be quick, easy to eat options. Players should also sip on water at half time to help prevent dehydration. Sports drink may also be useful as it provides both fluid and carbohydrate.

RECOVERY

Recovery is particularly important if there is more than one training session in a day or matches are less than 1-2 days apart. It is important to replenish fuel stores with carbohydrate-rich foods after training and games as well as include lean protein to help muscle tissue repair and growth.

Aiming to consume a recovery meal or snack that contains carbohydrates, protein and a source of fluid within ~60 minutes of finishing a training session or match is a good idea. For more details see the Recovery factsheet.

OTHER NUTRITION TIPS

- Supplements are generally not necessary. A balanced healthy diet will usually meet all of the nutritional requirements for soccer
- Be well prepared don't rely on food being available or suitable at the venue you are playing at
- Alcohol can be part of the culture of many team sports.
 Ideally, an athlete should rehydrate and refuel before having an alcoholic beverage, if at all.

January 2014 © This is a sports nutrition publication of Sports Dietitians Australia.

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