

FACT SHEET

FOOD FOR YOUR SPORT - AFL

ABOUT AFL

Australian Rules Football (AFL) is a professional sport played extensively throughout Australia and to a lesser degree overseas. The game is played predominantly by men, but there is an increasing level of interest and participation by women. AFL is played from primary school upwards at a variety of levels both amateur & professional.

A match consists of four 20-minute quarters with "time on" being added for any time the ball is out of play. This usually extends each quarter to around 25 – 30 minutes. Each team consists of 18 players on the ground with 3 interchange players. Players rotate on and off the bench so playing time varies for each individual player.

The "off-season" consists of about 6-10 weeks where players do little or no formal training. The length & timing of the off-season depends on whether a team has participated in the finals and the discretion of the coaching staff.

Pre-season is an intense 3-4 months of training prior to the competition season. During this time, players will work on specific match play and body composition goals for the season. For example, a player may need to increase lean muscle mass therefore will be doing a weights program and following a suitable eating plan to support muscle growth.

The AFL competition season runs from March to September. Players train anywhere from 2 (at the amateur level) to 10 sessions (at the elite level) each week and do a variety of different training modalities including weights, skills, swimming, running, recovery and flexibility, in addition to games.

The physiological demand on AFL players is immense. A player's ideal body composition depends on the requirements of their position on the field. For example, mid-field players need to have good endurance as they run very long distances each match (often between 12-20km). Defenders need to be strong and powerful with their position generally requiring shorter bursts of sprinting and anaerobic activities. All players are required to be very fit, strong, agile and lean.

At the elite level, body composition depends on the position played with ruck players typically being over 200cm in height and weighing 100kg in comparison to "on-ballers" who are typically smaller (average 180cm) and lighter (80kg). It is important to realise that different playing positions and body types may perform well at varying body fat levels and individual goals should be set for each player.

TRAINING DIET

The training diet for an AFL footballer should follow a varied diet that provides, sufficient carbohydrate (CHO) to balance daily fuel needs, adequate protein to meet daily needs and assist muscular repair following exercise and a variety of fruits and vegetables to promote intake of vitamins and minerals. The diet will also need to meet the athlete's body composition goals e.g. increase lean muscle mass, reduce fat mass etc. The training diet typically includes a high carbohydrate intake (included at each meal & snack) as well as incorporating protein sources at each meal. Athletes may also have busy schedules outside of training (e.g. work, school, university, social lives, family commitments, etc) so meals and snacks may need to be eaten "on the run". This requires a good planning to avoid rather than relying on takeaway options.

FLUID NEEDS

Fluid requirements vary for each player depending on factors such as their sweat rate, sweat composition and ability to tolerate a fluid intake during sport. A simple & effective way to estimate fluid requirements in training or game setting is to weigh the player before and after the game. The amount of weight lost is assumed to be fluid and therefore providing the player with feedback as to effectiveness of their hydration during training or the game. Fluid loss can vary significantly between players. Sweat testing can assist to investigate sweat composition to maximise your hydration goals.

It is often very hot during the pre-season and therefore players are more likely to be aware of hydration issues. However, the competition season is conducted during the winter therefore the stimulus of a hot climate is not taken into account. This means that players must be more aware of drinking enough fluid during training and games to meet their fluid requirements.

Dehydration leads to lethargy, loss of concentration and difficulty with decision making. All these skills are essential during a game of AFL and therefore fluid is a vital component of a player's nutritional intake.

Sports drinks can be useful during training and matches. Studies have indicated that the additional qualities of electrolytes (sodium & potassium) allow the body to maintain a more effective level of hydration as well as providing a source of carbohydrate compared to water.



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EATING BEFORE COMPETITION

At the elite level, AFL games are played either in the afternoon or evening. Players will generally eat a meal 3-4 hours before a match then a smaller “top-up” snack to fuel carbohydrate stores about 1-2 hours before a match. Some players do not like to have too much food in their stomach prior to a match, especially nervous athletes, who can feel nauseous before a match. Players may have their “favourite” foods which they have before every match.

Typical food choices for a pre-game meal or snack are cereals, sandwiches, pasta, toast, fruit & liquid meal supplements (e.g. Sustagen Sport™). These foods provide both carbohydrate and protein as energy sources for the game. High fat foods should be avoided as fat slows down the rate of digestion and therefore the stomach may not empty sufficiently prior to the game.

EATING AND DRINKING DURING COMPETITION

Ideally AFL players should top up their energy levels by consuming carbohydrate throughout the match. Half time provides a great opportunity to re-fuel, however, many players do not feel physically comfortable eating anything solid during the game due to the intense nature of the sport. Some players choose to have a snack or sports drink at half time to top up energy levels. This depends on individual needs and preferences of the players.

During a match, each club has trainers who run out onto the ground during play to offer fluid to then players. This is a very important role and means that those players who are on the ground most of the match are given an opportunity to take extra fluids. Players will also have the opportunity to consume fluids during formal breaks in play (e.g. half time). Sports drinks can provide an extra source of carbohydrate as a source of fuel as glycogen levels run low during the course of a game. The pleasant taste of sports drink also encourages a higher fluid intake. Water is also a suitable source of fluid and is offered to all players by trainers who run onto the ground during match play.

RECOVERY

Players often don't feel like eating very much due to the strenuous nature of the game but providing light carbohydrate and protein containing snacks after a match is an important strategy to promote recovery. Fluids can be a great option at this early stage post-competition. Suggestions for suitable recovery snacks are:

- Sandwich/roll with low fat cheese/ham/lean meats/jam/honey/banana
- Cereal/muesli bars
- Low fat flavoured milk drinks
- Fresh fruit
- Low fat fruit muffins
- Sustagen Sport™ or liquid meal supplement

OTHER NUTRITIONAL TIPS

- Alcohol has been closely linked to the sport of AFL. At the elite level the players are strongly discouraged from drinking alcohol at all, especially when recovery nutrition, hydration and rest are more important priorities.
- Supplements need to be used in conjunction with advice from experts such as the Fitness Staff or Sports Dietitian. Some have been shown to be effective to enhance performance e.g. sports drinks and sports gels, whereas others may be used by players due to perceived benefit (they feel better) as opposed to proven benefit.

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