

11

NUTRITION

CHAPTER



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Nutrition

The value of good nutrition for players is appreciated increasingly by footballers at all levels of the game. The nutritional needs of adolescents are different from those of adults. Due to the rapid growth occurring during adolescence, more calories and protein are required during puberty than at any other time of life with the exception of the first year. Adolescent players need to eat meat, dark green vegetables and/or other iron rich foods to maintain adequate supplies of iron. It is essential that adolescent players eat plenty of a well-balanced diet to avoid succumbing to the frustrations of obesity and potential eating disorders or lethargy. Adolescents are inclined to experiment with fast foods and food fads, which can result in an unbalanced diet.

Every adolescent is different. There is no one set of golden rules for adolescents, however there are some basic facts that adolescents can use to work out what is best for them.

The coach needs to:

- Know how to access good advice about sport-specific nutrition.
- Organise information sessions for parents.
- Ensure that appropriate meals are available during camps/tours.
- Avoid overstating the need for a particular body shape, per cent fat or fad diet to achieve potential.

REQUIREMENTS DURING ADOLESCENCE?

An increased requirement for nutrients during adolescence is necessary to cope with the major growth changes taking place during the adolescent years from about 11 to 18.

Appetite is a good indicator of energy needs, but some adolescents are attracted to fad diets.

- Adolescents express their newly found independence by giving up some of the family food habits and developing their own style.
- Education and information about the best choices of snacks and takeaways are important at this time.
- Remember it is the total diet that counts. Adolescents will eat some of the high-fat snacks and takeaways, but encourage them to balance these foods using the healthy eating pyramid as a guide.
- Emphasise good food as part of a healthy lifestyle.
- Because appetite depends on growth and activity levels, it is natural for it to vary from day to day. Most adolescents need to be flexible in the quantity of foods eaten from day to day.

Coaches must make players aware of the impact that certain types of foods have on a player's preparation for a season or game, so players can tailor their diet accordingly. There are certain basic rules for players to follow before and after a game to improve performance and enable a quick recovery from competition.

The importance of good nutrition and the effect it has on performance in a football game is widely accepted. Players don't always select a well-balanced diet. As a coach, you must encourage your players to eat a variety of foods from the 'eat most' and 'eat moderately' sections of the healthy eating pyramid.



Adolescents should be encouraged to:

- Eat plenty of vegetables, legumes and fruits.
- Eat plenty of cereals (including breads, rice, pasta and noodles), preferably wholegrain.
- Include lean meat, fish, poultry and or alternatives.
- Include milks, yoghurts, cheese and or alternatives.

A WINNING DIET FOR FOOTBALL

Footballers use up far more energy than the average person. This energy can be obtained from carbohydrates, proteins and fats. However, the ideal source of extra energy is carbohydrates. Running low on carbohydrates can cause fatigue. Carbohydrates occur as sugars (simple carbohydrates) or starches (complex carbohydrates). Bread, cereals and grain products (eg oats, wheat, rice, pasta) vegetables and legumes all contain complex carbohydrates, while fruit, honey and cane sugar are simple carbohydrates. A balanced diet contains both simple and complex carbohydrates.

Carbohydrates not used immediately are stored in the liver and muscle as glycogen, which is the form of energy called upon during exercise.

Protein

Although protein provides the body with energy, its most important role for the player is in building, maintaining and repairing muscle and tissue. Protein gives the body structure, shape and definition.

The main foods in this group are:

- Lean beef, lamb, veal, pork.
- Skinless poultry.
- Fish and seafood.
- Eggs.
- Low fat milk, cheese and yoghurt.
- Low fat ice cream.
- Soybeans.

Fats

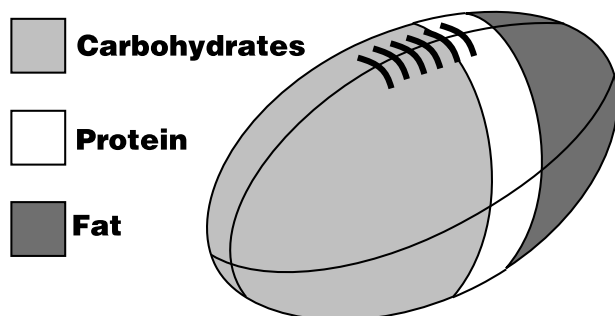
Too much fat increases body weight. Fat takes a lot longer to digest than carbohydrate and should be avoided before training and competition. The main foods in this group are:

- Butter, margarine.
- Mayonnaise, oil.
- Fatty meat and poultry.
- Full cream cheeses.
- Chocolate.
- Fried foods or processed meats should be limited.

The ideal training diet

To achieve maximum energy levels, players need a well-balanced diet, with the right proportions of carbohydrates, protein and fat. It is preferable to eat more complex carbohydrates and less fat and sugar. Ideally, the training diet for players should contain:

- 55-60 per cent of energy from carbohydrates.
- 10-15 per cent from protein.
- About 25-30 per cent from fat.





The pre-game meal

There is no special food which should be eaten pre-game. There are, however, certain guidelines that players should keep in mind.

- The pre-game meal should comprise of complex carbohydrates and fruit.
- It should be eaten at least three hours before the game.
- It is better to eat too little than too much.
- The meal should include plenty of fluids.

High carbohydrate, low fat foods are the best choice for a pre-game meal.

Suggested pre-game foods include:

- Breakfast cereal.
- Low fat milk or yoghurt.
- Bread, toast, crumpets or pancakes with suitable toppings – jam, honey, baked beans, spaghetti.
- Pasta with low fat sauce.
- Fruit – fresh or canned.

After the game

Foods and fluids consumed straight after the game have an important effect on the player's rate of recovery. The best recovery fluids are those containing sports drinks, mineral water, fruit juices and plenty of cold water. Studies show that in the 15 minutes after the game a player has the opportunity to restore lost glycogen at a much faster rate than normal. Carbohydrates are essential. Foods to be consumed by players can include bananas, pineapple, oranges, sandwiches, rolls and low fat yoghurt.

Hydration and fluid replacement

Water makes up about 60 per cent of the total body weight and major reductions in this volume can seriously interrupt normal bodily functions and, therefore, impair performance. Drinking plenty of water in the hours before and after exercise is the best safeguard against dehydration. Players should be encouraged to replace fluids over a period of time and not in one 'drinking bout'. Players can lose as much as four to five litres of water over a two-hour training session or game. The coach should ensure his players maintain an adequate fluid intake before, during and after games and training sessions. Precautions should be taken to reduce the risk of heat injury.

- Arrange training sessions in the cooler parts of the day.
- If the humidity is too high, cancel training.
- Keep a close watch on the heavier and less-fit players.
- During training and games, fluids should be replaced as soon as possible.

Water is the best fluid although some players may benefit from a commercially produced fluid which supplies carbohydrates (sports drinks).

Dehydration can lead to serious problems and parents, coaches and players should be aware of the following:

- Players should drink about 500-750mls 30 minutes before activity.
- During activity, players should consume about 250mls every 15 minutes.
- Following activity, players should continue to drink fluids until they are appropriately hydrated.
- Suitable clothing should be worn.
- Activity during intense heat or severe cold should be avoided.
- Thirst is a poor indicator of fluid loss – players should not wait until they are thirsty!