



Fuel your body

for the teenage sports person

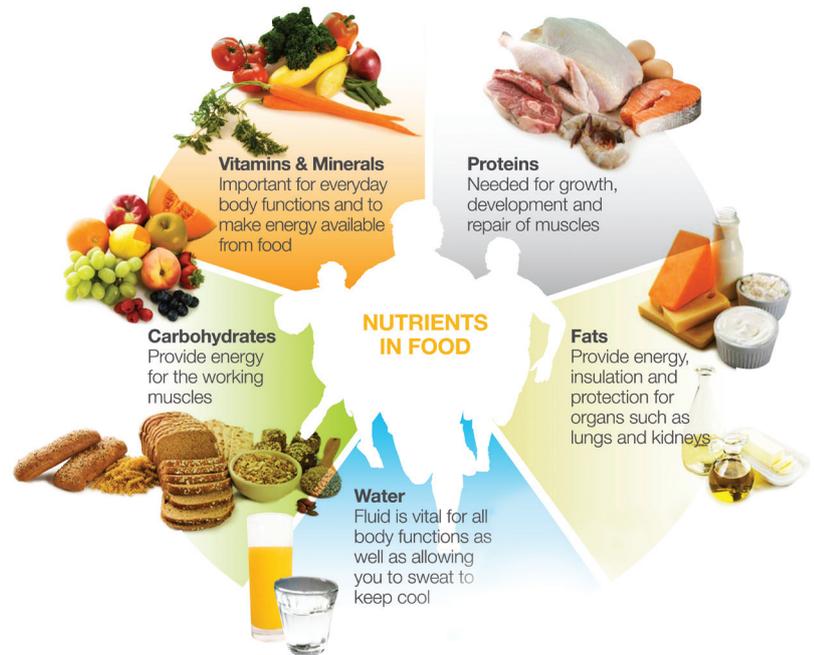


As a sporty teenager, your active lifestyle and growing body means you have special nutritional needs.

Start with the basics of a healthy and varied diet. There are no quick fixes – supplements, in particular, are not recommended for teenagers. This booklet is packed with information about what to eat and drink to perform at your best in sport, stay healthy and feel great.

What improves your performance?

- Eating enough to meet your growth and energy needs
- Drinking enough to replace lost fluids and stay well hydrated
- Individual talent and improving your sporting skills
- Planning your training and recovering properly.



Courtesy of the Irish Rugby Football Union

Top tips

- Water is the best choice of fluid
- Low-fat milk is effective in replacing lost fluids
- Isotonic sports drinks can be good for replacing fluids during and after long intense periods of sport (60 minutes or more) but you should not drink these every day
- Fruit juices, low-fat milk, soups and smoothies are good sources of fluids and provide nutrients too.

What should I drink during exercise and when?

| | What | When |
|------------------------|---|---|
| Before exercise | Water, isotonic sport drink* – aim to drink 200 to 400ml | Approx 30 minutes before exercise |
| During exercise | Water, isotonic sports drink* – aim to drink 150 to 200ml | Every 15 to 20 minutes |
| After exercise | Water, isotonic sports drink*, low-fat milk – aim to drink 400 to 800ml per hour of exercise completed | Soon after and for the next couple of hours as needed |

(*depending on sport, age or advice of a dietitian)

Thinking of using a sports drink?

For more specific advice on using sports drinks consult a sports dietitian or registered sports and exercise nutritionist.

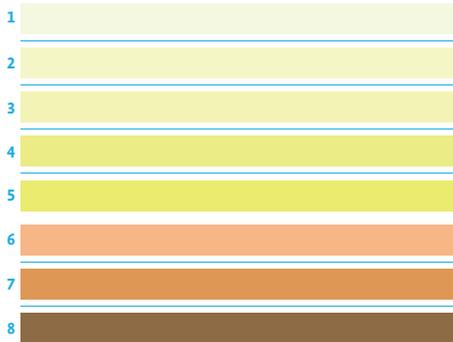
Fast Fact!

Avoid drinking too much tea and coffee. Bring a water bottle to school to keep you hydrated.



Pee Chart

Checking your urine colour is a simple way to see if you are drinking enough fluids – your urine should be a pale yellow colour. If it's darker than number three on the Pee Chart you need to drink more.



Your target is to make sure that your pee is the same colour as numbers 1, 2 and 3. Colours 4 and 5 suggest dehydration and 6, 7 and 8 severe dehydration.

Armstrong LE (2000): Performing in Extreme Environments. Champaign: Human Kinetics.

Save money and make your own isotonic drinks

Recipe 1

- 500 ml fruit juice
- 500 ml water
- 1 g salt (pinch)

Recipe 2

- 200 ml fruit squash or cordial
- 800 ml water
- 1 g salt (pinch)

For the above recipes, use previously boiled and cooled water and mix all of the ingredients together until they have dissolved.

Fast Fact!

Isotonic sports drinks contain added sugar. Limit consumption of these drinks to hard training sessions and competition. Using a straw will help you protect your teeth.



Are supplements a quick-fix to better performance or a waste of money?

What are they?

Sports supplements come in many forms; drinks, protein powders and bars, liquid meal replacements, creatine, caffeine, herbal preparations, and more.

Do you need them?

No. They won't make you faster, stronger, or more skilful.

Warning!

Protein powders and protein shakes are not recommended for teenage athletes. It's not true that you need huge amounts of protein to 'bulk up'. You will get plenty of protein by including the foods listed on page 6 in your diet.



Are they safe?

Sports supplements have not been tested on teenagers or children, so there is no evidence to show they are safe for a growing body.

The following supplements **are not recommended** for anyone under 18 years of age:

- Protein powders
- Creatine
- Caffeine tablets
- Individual amino acids
- Bicarbonate buffers
- Herbal preparations
- Fat burners
- And many more.

Sports supplements are not regulated and could contain ingredients that are not listed on the label, so there's a risk some could lead to a positive doping test.

Athletes often use multi-vitamin, iron or calcium supplements. If you include lots of different types of food in your diet, you shouldn't need to do this. If you have any concerns about the adequacy of your diet consult a sports dietitian, doctor or registered sport and exercise nutritionist for a nutritional assessment.

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Carbohydrates (carbs) and fat are the two main fuels for your muscles when exercising. Protein is needed for muscle growth and repair.

Carbs

Include carbs at every meal and most snack times. Your body only stores a small amount of carbohydrate so you need to keep your stores topped up. The more sport you do, particularly high intensity sport, the more carbs you will need to eat. Here are some tips to eat more carbs.

Potatoes, rice and pasta

- Eat larger portions with your main meal – half your plate should be filled with these foods
- Add these to soups and have with stews, curries and tomato-based sauces
- Mix these with beans, peas, sweetcorn and raisins to make tasty salads.

Bread and pizza

Use thicker slices of bread or try a triple-decker sandwich!

- Choose thick-based pizzas instead of thin.

Breakfast and snacks

- Add chopped fresh or dried fruit to breakfast cereals or yoghurts
- Make your own high-carb smoothie with fresh or tinned fruit and yoghurt
- Have breakfast cereal at other times of the day
- Cereal, rice cakes, oatmeal crackers and cheese can help fill gaps between meals.

Don't choose these sugary carbs everyday - max once or twice a week

- Sugar-coated breakfast cereals
- Boiled sweets, jellies
- Fizzy drinks, fruit squash
- Small slice of cake, biscuits, mini muffin
- Jam, honey, marmalade
- Sweet desserts – for example meringues, ice cream, jelly.

Warning!

Most teen athletes won't need sports gels and energy bars. Only use these under the supervision of your dietitian or coach.



Fat

Everyone needs a certain amount of fat each day to stay healthy.

Healthy fats are found in foods such as vegetable oils, oily fish (for example salmon, sardines, mackerel), nuts or avocados. Foods containing less-healthy fats include crisps, pastries and fried foods – limit how much of these you eat.

- Grill, boil, steam, braise, stir-fry or microwave your food
- Trim all visible fat from meat
- Have lean red meat, chicken, turkey and fish in your diet instead of processed meat, for example processed ham, sausages, hotdogs or pepperoni
- Use low-fat monounsaturated or polyunsaturated spreads, for example spreads made from sunflower oil
- Use mayonnaise and high-fat spreads sparingly



- Choose low-fat or vinegar-based dressings, mustard or chutney on sandwiches
- Choose yoghurt or fromage frais instead of cream
- Try frozen yoghurt as dessert alternatives
- Choose low-fat milk and yoghurt and choose cheeses such as 'light' cheddar, edam, gouda, feta, camembert, cottage or low-fat cheese spread
- Have baked, boiled or mashed potatoes instead of chips
- Remember, it's OK to have some treats, just avoid eating these foods too often.

Protein

Your body needs protein for growth, maintenance and tissue repair.

Most people get plenty of protein through a varied and balanced diet.

Excellent protein foods include:

- Lean red meat
- Soya and tofu
- Chicken and turkey
- Nuts
- Fish
- Pulses
- Eggs
- Yoghurt
- Low-fat milk
- Cheese.

If you are vegetarian or vegan make sure your diet includes some good vegetarian or vegan sources of protein from the above list.



Putting it into practice

Kit-bag essentials

- Water
- Other fluids if needed, like:
 - home made isotonic drink
 - low-fat milk.
- Snacks, such as:
 - dried or fresh fruit – bananas, mandarins, apples, raisins, dried apricots
 - breakfast cereal or breakfast bar
 - bread or roll with jam.

Food alert!

For two to three hours before training avoid snacks and meals that are high in fat such as fried foods, chips and crisps. These take longer to digest and you may feel unwell when you exercise.



Before exercise

To ensure your energy levels are at their best when you exercise, eat a meal or snack that is high in carbohydrates two to three hours before you exercise. Leave at least 30 minutes after eating before you exercise.

Snacks and small meals

- Breakfast cereal* with low-fat milk and fruit
- Toast* with low-fat spread and mashed banana
- Yoghurt drink and a scone with low-fat spread
- Pasta with tomato-based sauce
- Baked potato with tinned spaghetti or ratatouille
- Vegetable soup and a bread roll
- Sandwich with lean meat and salad
- Pitta bread filled with chopped banana and honey
- Low-fat creamed rice with dried fruit
- Low-fat yoghurt and fruit
- Smoothie made with low-fat milk, yoghurt and banana, mango or berries.

*High-fibre cereals and bread are best for you.

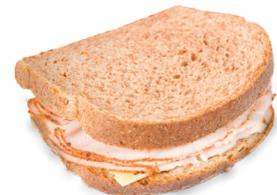
Post exercise

The best way to restore your energy levels is to eat a snack that is high in carbohydrates, and contains a small amount of protein. Here are some examples:

- Ham, tuna or turkey sandwich with an isotonic sports drink or water
- Low-fat milk with a banana
- Yoghurt drink
- Bagel and cream cheese, crumpet or pancake with jam
- Pot of low-fat yoghurt and a banana
- Fruit and low-fat milk.

Food alert!

To restore energy levels on training days, have a nutritious bedtime snack.



Meal Plans

These sample meals will give you some ideas. Older teens like John who often take part in high-energy sports will need larger portion sizes and more carbohydrates throughout the day. Younger teens like Claire who play sport less often and take part in less energetic sports will not need to eat or drink as much everyday.

Sample Meal Plan 1

Claire is 14 years old and plays several sports including basketball and tennis. She is a member of the school basketball team which trains for one hour one day a week, after school. The team plays one to two competition matches monthly. She is also a member of the local tennis club and plays sports there during the weekend. This is an example of what Claire needs to eat and drink each day, based on her weight and activity.



Breakfast (7.30–8.30am)

- Breakfast cereal with low-fat milk
- Glass of fruit juice or piece of fruit
- One to two slices bread toasted with low-fat spread and jam

Mid morning snack (11am)

- Yoghurt or a piece of fruit
- Water to drink

Lunch (12.30–1.30pm)

- Pitta pocket filled with tuna & sweetcorn, or ham, chicken, cheese or egg salad
- Yoghurt
- Water to drink

After school snack (3.45pm–4.45pm)

- Slice of toast with mashed banana
- Glass of low-fat milk

Dinner (6.30–7pm)

- Meat, fish or vegetarian choice with potatoes, pasta, rice and vegetables
- Fresh fruit with yoghurt
- Water to drink

Supper (9–10pm)

- Bowl of cereal with low-fat milk or slice of toast with melted low-fat cheese or beans
- Water to drink

Meal Plans

Sample Meal Plan 2

John is 16 years old. He plays several sports and cycles two miles to and from school each day. He trains two evenings a week after school and on Saturdays, and also plays a match most Sundays. Each training session lasts about one hour and match days include 20 minutes warm up and 30 minutes per half (60 minutes match). He is also a member of the school volleyball team which trains for one hour one day a week, after school. The team plays one to two competition matches monthly. This is an example of what John needs to eat and drink each day, based on his weight and activity.



Breakfast (7.30–8.30am)

- Large bowl of breakfast cereal with low-fat milk
- Piece of fruit
- Two to three slices bread toasted with low-fat spread and jam

Mid morning snack (11am)

- Fruit scone or two to three scotch pancakes
- Water to drink

Lunch (12.30–1.30pm)

- Sandwiches made with four slices bread
- Ideas for fillings: tuna & sweetcorn, ham, chicken, cheese or egg salad
- Yoghurt or mini cheese portion
- Water to drink

Pre –training snack (3pm)

- Fruit (bananas are good for energy)
- Low-fat milk

Tog out/pre-hydrate (3.30–3.45pm)

- Water to drink

Training session (3.45pm–4.45pm)

- Replace sweat lost during training using isotonic fluids or water: 150 to 200ml of fluids every 20 minutes

Recovery/re-hydrate post training (5–5.30pm)

- Glass of low-fat milk with banana
- Sandwich with fruit
- Drink 500ml to one litre of water or isotonic sports drink or as required (more ideas on page 3)

Dinner (6.30–7pm)

- Meat, fish, vegetarian choice with large portion of potatoes, pasta or rice and lots of vegetables
- Fresh fruit with yoghurt or custard
- Water to drink

Supper (9–10pm)

- Bowl of cereal with low-fat milk or bread toasted with melted low-fat cheese
- Water to drink

This booklet provides general advice for 13 to 17 year-olds who are involved in sport.
For more specific advice, contact a sports dietitian or registered sport and exercise nutritionist.

safefood

safefood is the all-island agency responsible for promoting food hygiene, food safety and healthy eating.

For more information search

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NI 0800 085 1683

Irish Nutrition and Dietetic Institute (INDI) INDI is the professional organisation for registered dietitians in Ireland. The Sports Nutrition Interest Group is a group of dietitians within INDI. For more information, please visit www.indi.ie