The margin between victory and defeat is often very small. Diet affects performance, and it is your day-to-day nutrition that supports your training and this will ultimately improve your performance.

There are a number of factors that can affect your nutritional strategy:

- How far do you need to travel for the game?
- How many opportunities are there to drink or take on carbohydrates?
- What will the range of temperatures be?
- Is food readily available after exercise?
- How many games are you playing: is it a one-off game or a tournament format?

Background

Most team sports can be described as moderate-to-long duration exercise. However, they differ from prolonged, continuous moderate-to-high intensity exercise in a number of key ways, and therefore the nutritional challenges vary.

Team sports involve passages of high-intensity work, such as sprinting and jumping, followed by periods of low-intensity activities, such as standing, walking, and jogging. Players’ ability to perform repeated sprints with short duration recovery in between is an important determinant of performance in intermittent team sports.

Breaks in play are also incorporated which provide suitable opportunities for recovery and also for the intake of fluids and carbohydrates.

Finally, team sports also combine a complex combination of physical, skill-based and cognitive activities which can be impaired if proper nutritional strategies are not implemented and maintained.

BEFORE

The goal is to start exercise adequately fuelled and hydrated. Not only will this help you perform on game day, but it will also help you get the most out of your training.

Fueling

Eating before exercise tops up the body's carbohydrate stores (glycogen), especially if exercising in the morning. It also helps to maintain blood sugar levels which can help improve performance.

- The pre-event meal should be eaten 2-4 hours beforehand
- Contain between 100 to 200 grams of carbohydrates (2 g carbohydrate per kg body weight)
- Be low in protein, fibre and fat to minimise the risk of gastro-intestinal discomfort and increase carbohydrate delivery to the muscles.

Use these recommendations to help determine what works for best for you! Hydration Starting exercise dehydrated can contribute to impaired exercise performance. As such, use these guidelines to help you optimise training and competition:
• Slowly drink 5 ml fluid per kg of your body weight 2-4 hours before exercise, for example: 400 ml for an 80 kg athlete.
• Consuming foods or drinks that contain sodium (salt) will also help to stimulate thirst and retain the consumed fluids.
• Monitoring your urine colour and volume is a simple indicator of hydration status – if your urine is dark in colour and low in volume you need to drink more.

Ask yourself these questions in the hours leading up to exercise:

• Am I thirsty?
• Is my urine dark in colour?
• Is my body weight noticeably lower than yesterday?

Answering “yes” to any of these questions may indicate inadequate hydration. However, it is important to take on board your pre-exercise fluid with at least 45 min gap separating intake from exercise (preferably longer). This should allow ample time for you to void any accumulated urine.

Use the handy poster on the next page to ensure that you’re always adequately hydrated before a session:
Are You **Hydrated?**

If your urine is pale like lemonade, that’s a sign of proper hydration.
If it’s dark like apple juice, you need more fluids.

Gatorade contains carbohydrates and electrolytes to hydrate and provide energy to working muscles.

**GATORADE®**
Enjoy one of these menu’s 2 – 4 hours before exercise to make sure you are well fuelled:

**Sample Meals**

**Menu 1:**
- 50g Rolled Oats with 350ml skimmed milk
- 1 Bagel with 30g light cream cheese
- 330ml Orange Juice and 1 medium banana

*Nutritional Information: 680kcal; 145g carbohydrate; 32g protein*

**Menu 2:**
- 1 bagel with 100g sliced turkey breast and mustard
- 330ml Orange Juice and 1 medium banana
- 500ml Gatorade Perform

*Nutritional Information: 737kcal; 134g carbohydrate; 36g protein*

**Menu 3:**
- 100g penne pasta with 1 chicken breast and 100g pasta sauce
- 1 slice of white bread
- 330ml orange juice

*Nutritional Information: 777kcal; 135g carbohydrate; 37g protein*

**GATORADE PRIME**

The science doesn't lie, and research has proved it: preparing before exercise can have a big impact on your performance. Simply put: the better you prepare, the better you'll perform.

Gatorade PRIME is designed to provide a convenient and easily digestible source of carbohydrate energy shortly before exercise.

*Nutritional Information: 118ml; 24g carbohydrate; 106mg sodium*
DURING

There is plenty of scientific research explaining what you should eat and drink during exercise. However, every athlete is different and what works for one may not work for another. Therefore, your game-day nutrition should be based on the following recommendations and tailored to what works for you. Remember - breaks in play are an ideal opportunity to implement both fuelling and hydration strategies.

Hydration

When we exercise heat is produced, and the main mechanism by which the body loses this heat is by evaporation of sweat on the body’s surface. If we do not replace the fluid that is lost as sweat you become dehydrated.

Therefore, the goal of drinking during exercise is to prevent excessive dehydration (2-3% body weight loss) and changes in electrolyte balance as a consequence of sweating1, without drinking so much that you actually gain weight. Here is a guide to estimate your sweat rate:

1. Weigh yourself before training
2. Weigh yourself after training, and subtract the weight of any drinks you consumed
3. 1 kg of weight loss equals 1 litre of fluid loss. This should give you an idea of your sweat rate and, therefore, your required drinking rate during exercise to maintain your body weight within 2-3% of your starting weight
4. Do it several times to see how your body reacts at varying intensities and in different weather conditions.

Following these recommendations should ensure that you drink enough fluids to prevent dehydration without over-drinking as this could put you at risk of a rare but serious condition called hyponatremia (low blood sodium concentrations)4

Are You a Salty Sweater?

Some athletes lose more sodium in their sweat than others. These athletes may need to supplement their sodium intake during exercise:

- Do they get a salty taste of sweat in their mouth when they train and race?
- Do they get eye irritation from salt getting in their eyes?
- Are salt stains visible on clothing worn during training or races?

GATORADE PERFORM

As an athlete, you need to maintain your performance during exercise.

Gatorade PERFORM has been scientifically proven to help athletes replace fluids, refuel working muscles and replenish electrolytes during activity.

Nutritional Information: 500ml: 30g carbohydrate; 250mg sodium
Fuel Requirements

The energy needed for high-intensity efforts is provided predominately from the carbohydrate that is already stored within your body and the carbohydrate that you take on board during exercise.

However, our bodies cannot store large quantities of carbohydrate, and these stores become depleted. It is therefore important to take on board carbohydrate, in the form of a sports drink, gel or bar (this is down to individual preference and tolerance).

POST TRAINING/EVENT

Foods and Fluids

The nutritional challenges after exercise include the need to rehydrate, replenish carbohydrate stores, restore electrolyte imbalances and to rebuild and repair muscle tissue with protein.

After exercise it is recommended to drink 1.5 L of fluid for each kg of body weight lost. So if you lose 2 kg of body weight then you should drink 3 litres of fluid to ensure rehydration. Consuming foods and drinks containing sodium will stimulate thirst and promote fluid retention allowing for a speedier return to fluid balance.

Ingesting protein after exercise provides the amino acids needed to promote training adaptations. Approximately 15-20 g protein is sufficient to stimulate muscle repair and promote muscle building after exercise.

As carbohydrate stores are depleted during prolonged endurance exercise it is recommended to consume 1 - 1.5 g per kg body mass of carbohydrate over several hours. For a 70 kg athlete that is 70-105 g carbohydrate.

Recovery food and fluid examples:

Immediately after exercise:

Food or drink containing protein, carbohydrate, fluid and electrolytes to start the recovery process.
GATORADE RECOVER

Nutrition is a vital part of your recovery process.

Gatorade RECOVER is a protein, carbohydrate and electrolyte drink that provides hydration and muscle-recovery benefit after a challenging workout. RECOVER has the consistency and great taste you’d expect from Gatorade to help you to prepare for the next challenge.

Nutritional Information: 500ml; 14g carbohydrate; 16g protein; 250mg sodium