

## Does my child need to consume a sports drink?

There are many factors that will impact on the decision to use a sports drink including the sport and your child's goals. The main parts of a sports drink are water, carbohydrate, and sodium. It is important to consider how the type and amount of these nutrients can impact performance.

### Carbohydrate

**Type:** Carbohydrate in a sports drink is typically glucose or maltodextrin (a glucose polymer). But recent advances in our understanding of how specific types of carbohydrate influence performance has led to the development of sports drinks with specific blends of carbohydrate. In some situations, this combination of multiple-transportable carbohydrates, typically glucose and fructose, enables more of the consumed carbohydrate to be absorbed compared to glucose alone. Information on the blend of carbohydrates can be gained from the ingredients list or the manufacturer website.

**Amount:** The amount of carbohydrate required for a performance benefit can vary greatly. For example, simply mouth rinsing with fluid containing carbohydrates (e.g., not actually consuming carbohydrates) through to consuming up to 90g per hour of carbohydrates have all been shown to impact on performance. The normal sports drink will typically contain approximately 6g of carbohydrate per 100ml, or 30g in a typical 500ml bottle.

The influence of carbohydrate is dependent on the sport and the athlete. Recent guidelines try to integrate the type and amount of carbohydrate, along with various exercise protocols.

The following recommendations have been suggested:

#### Brief exercise (<45min)

- Carbohydrate is not needed

#### Sustained high intensity exercise (45-75min)

- Small amounts may be beneficial, including mouth rinsing

#### Team/endurance sport (1-2.5h)

- Moderate amounts may be beneficial (30-60g/h)

#### During ultra-endurance exercise (>2.5h)

- Up to 90g/h providing that the product contains multiple transportable carbohydrates.

### Sodium

Sodium is lost in sweat, but the amount that is lost can vary greatly between individuals. This is because the concentration of sodium in sweat, as well as the amount an individual sweats, varies substantially.

Current recommendations during exercise suggest that sodium should be ingested during exercise if:

1. An athlete has a high sweat rate (>1.2L/hr)
2. An athlete has salty sweat
3. Exercise duration exceeds 2 hours

These recommendations are based on reducing the risk to health rather than any direct performance benefit.