

Drinking fluids is an important part of participating in any sport or recreational activity. Staying well hydrated reduces your risk of sustaining a heat-related injury and can increase physical performance levels.

Children are more susceptible to heat stress; parents must be diligent in maintaining and replacing their child's fluids. Exercise and sweat production increase the body's need for fluid⁶. This can be further affected by environmental conditions, time, and intensity of exercise⁶. During summer in Perth, and on days of high humidity, particular care should be taken to replace fluids. In the northern parts of Western Australia, such as the Kimberley and Pilbara, drinking fluids should be a priority all year round.

Water is the best choice

Cool water is the best choice for children to stay hydrated during sport and physical activity².

For youth participating in prolonged high-intensity activity, such as long-distance running, there are benefits to using sports drinks containing carbohydrate, protein and electrolyte replacements². High-calorie sports drinks, however, are generally unnecessary for most children participating in routine physical activity on the sports field or in the school yard². A high intake of sports drinks can result in an increased risk of weight gain, as well as tooth decay and erosion².

Sports & energy drinks

Energy and caffeine drinks should not be consumed by children before, during and after sporting activities². Athletes should be offered cool water and/or plain milk with healthy and balanced snacks^{2,5}.

Sports and energy drinks contain high levels of sugar and acidity⁵. When regularly consumed, the risk of dental decay and tooth erosion in children is increased⁵.

Staying hydrated

- Drink plenty of fluids before, during and after physical activity
- Don't wait to feel thirsty to replace fluids
- Choose water for fluid replacement
- Sports drinks can be beneficial for extended periods of exercise
- Children are at a greater risk of heat-related injury
- Hot or humid weather conditions will increase your need for fluid replacement
- Cool fluids can be absorbed at a faster rate than warm fluids
- Fluid replacement is important for athletes, coaches, umpires and spectators
- Dehydration increases your risk of heat injury and can lead to poor performance
- Reduce intensity and duration of training and competition during periods of extreme temperatures
- If a child is feeling unwell due to the heat, do not allow them to continue participating

Heat-related injury

Long periods of high-intensity exercise can put the body at risk of heat injury. The risk of heat injury is heightened by hot and humid weather³. Endurance sports such as long-distance running or those with prolonged exposure to the sun, such as cricket, are most associated with heat injury³.

Signs and symptoms of heat injury can include³:

- Fatigue
- Thirst
- Nausea
- Headache
- Dizziness/Light headedness
- Confusion
- Collapse
- Pale, clammy skin or dry skin
- Irritability

There are two main types of heat injury that occur during sport: heat exhaustion and heat stroke.

Heat exhaustion is often characterised by low blood pressure and faint-like collapse after exercise³. A child suffering from heat exhaustion will usually recover quite quickly; however, it can lead to heat stroke if not properly treated³. It is caused when the child becomes dehydrated due to fluid loss⁷.

If a child is suffering from heat stroke, their body can no longer control its temperature³. Heat stroke can cause severe injuries and can be fatal³.

As it is not always obvious whether an athlete is suffering heat exhaustion or heat stroke, it is best to treat both seriously.

Treating heat injury

If a child is suspected of heat injury, remove them from play and administer the following first aid⁴:

1. Lie down in the shade and raise your legs
2. Loosen tight clothing
3. Apply cool or ice packs to the neck, groin and armpits
4. Give cool water to drink if fully conscious
5. If the person does not recover quickly, call for an ambulance



Beat the heat

- To decrease the risk of heat injury, the following precautions can be taken:
- Drink adequate amounts of fluid
- Slowly build up exercise intensity and distance
- Wear appropriate clothing for the weather conditions
- Modify training and competitions in extreme weather
- Refer to the heat policies of your sporting body
- When the UV index is 3 or above Slip on a shirt, Slop on some sunscreen, Slap on hat, Seek shade and Slide on some sunglasses to protect yourself from the sun¹

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