



## Maximizing Athletic Performance in the Summer Heat

### 🌀 Preparation

#### Be aware of:

- Days with temperatures above 18°C
- Humidity higher than 50%
- Low tail winds (high tail winds are better for cooling)

#### Try to wear:

- Sun block to avoid getting burned
- Light-coloured clothing that is light and porous

#### Keep in mind:

- Exercise intensity is a major contributor to body heat. Body temperature increases as exercise intensity increases – this affects our ability to cool
- Plan your route with tree-lined paths for shade
- Locations to hydrate and sponge

### 🌀 Hydration

#### Before:

- Drink up to 500 ml (2 cups) 2 hours before exercise

#### During:

- Drink up to 250 ml (1 cup) every 15 minutes
- During continuous exercise drink 200 to 400 ml per hour
- The body can only absorb up to 1 L per hour
  - Best drinks: cool water or sport drinks (they absorb rapidly)

#### After:

- Drink to rehydrate as well as replenish (electrolytes), refuel (carbohydrates) and repair (protein)
  - Best drinks: Chocolate milk, Ensure, Boost, soy milk, V8 and sport drinks

### 🌀 Monitoring Dehydration

$$\text{Sweat Rate (litres per hour)} = \frac{(\text{weight before} - \text{weight after})}{\text{length of exercise bout (hours)}}$$

$$\text{Dehydration (\%)} = \frac{(\text{weight before} - \text{weight after})}{\text{weight before}} \times 100$$

- Measure weight (kg) with minimal clothing – remove wet clothing and shoes
- Each pound (1kg = 2.2lbs) lost during exercise represents 500 ml of fluid loss