NUTRITION FOR TRAINING IN THE HEAT

1. CARBOHYDRATES REQUIREMENTS
Carbohydrate requirements for exercise are increased in the heat due to a shift in substrate utilization towards carbohydrate oxidation.

2. GLYCOGEN RESTORATION
Daily food patterns should focus on replacing glycogen stores after exercise.

3. COMPETITION STRATEGIES
Competition strategies should include activities to enhance carbohydrate availability, such as building up glycogen stores in preparation for endurance events, pre-event carbohydrate intake, and intake of glucose/electrolytes in events lasting > 60 min.

4. GELS & SPORTS DRINKS
This can be done using water and the carbohydrate gel preparations or using sports drinks.

5. CARBOHYDRATES INTAKE
Intake of carbohydrates prior to and during prolonged exercise in the heat provide benefits to exercise performance.

6. HYDRATION STRATEGIES
Athletes should consume 5-6 ml of water per kg of body mass every 2-3 h prior to training or competing in the heat, having tested this strategy prior to racing in a major competition to establish volume needs.

7. BODY MASS LOSSES
During exercise, it is advisable to minimize body mass losses induced via sweating, whilst using caution to avoid over drinking.

8. SODIUM SUPPLEMENTATION
Those that sweat profusely may require supplementing their fluids with additional sodium (e.g. 3.0 g of salt added to 0.5 L of a carbohydrate-electrolyte solution).

9. DRINKING TO THIRST
Drinking to thirst may be sufficient to offset fluid losses during low intensity exercise of shorter duration (<90 min) in cool climates.

10. PLANNED HYDRATION STRATEGY
High intensity exercise in which sweat rate is elevated, along with activities lasting >90 min in the heat should be accompanied with a planned hydration strategy.

11. SPORTS DRINKS OR PLAIN WATER?
Sports drinks allow more complete hydration than drinking plain water or soft drinks because they have optimal sugar concentrations to maximise the uptake of water by the body.

12. SOLID FOODS
Consuming a combination of fluids and solid foods is also advisable for re-hydration and electrolyte replacement.