

# COMPETING IN THE HEAT



## WHEN COMPETING IN THE HEAT

With baseball being an outdoor sport there is no escaping the environmental conditions. If it is hot and/or humid your nutrition & hydration strategy and your plan to maintain body temperature should be part of your pregame preparation. If you do not have a plan in place you may suffer the associated side effects of heat illness.

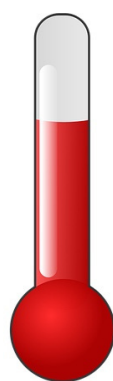
The information provided below offers valuable information on how to maintain performance while remaining healthy in hot & humid conditions.

## WHAT IS HEAT ILLNESS

Heat illness is a range of conditions caused by hot and/or humid temperatures coupled with inadequate nutrition and hydration strategies. This group of illnesses ranges from heat rash, heat cramps, heat exhaustion, and heatstroke. In some, the symptoms can be mild and may require nutrition and cooling intervention while others may require immediate medical attention.



## HEAT & HUMIDITY- THE EFFECTS ON PERFORMANCE



Hot conditions increase core body temperature, which causes decreased muscle endurance, increase heart rate, increase sweat, increase time to fatigue, dehydration, which all lead to poor performance. In hot conditions, our body can typically cool itself through evaporation of sweat from exposed skin surfaces. However, in hot & humid conditions, the body is less able to cool itself due to the humidity in the air which limits evaporation of sweat thus further increasing core temperature.

## COMMON SIGNS & SYMPTOMS OF HEAT ILLNESS

Tolerance to heat will differ from person to person. For this reason, each player must be aware of their reaction to these conditions. Some common signs and symptoms of heat illness include: Headache, weakness, dizziness, fatigue, muscle cramps, GI distress, nausea, vomiting, excessive sweating, confusion, blurred vision, increased heart rate, low blood pressure, seizures, and unconsciousness.



## STOP! PLAN YOUR NUTRITION & HYDRATION STRATEGY

In hot & humid conditions fluid and electrolyte replacement is key in limiting dehydration and its side effects. To limit the effects of heat & humidity consider:

1. Planning your day to ensure you have optimal nutrition & hydration for the day.
2. Additional electrolytes and fluids with your pre-event meal.
3. Additional fuel to accommodate for added energy expenditure (~30-60 g carbs/hr).
4. Having an effective hydration schedule during training or games (~6 ml/kg every 2-3 hours).
5. Choosing fluids you prefer and can tolerate to encourage intake.



## PREVENTION STRATEGIES

There are a number of factors you can do to minimize the effects of heat and humidity on performance. Try to:

1. Acclimatize yourself to the current conditions by training in similar conditions.
2. Prior to game time assess the conditions and make an appropriate plan.
3. Add additional fluids, electrolytes, and carbohydrates to limit symptoms.
4. When possible seek shade to keep yourself cool.
5. Loosen clothing to allow cooling during nonplaying times.

