

# Tips for Practicing in the Heat

## Heat Illness/Injury Facts to Consider

- Adolescents take longer to acclimatize to the heat than adults.
- Dehydration can affect an athlete's performance in less than an hour of exercise—sooner if the athlete begins the session dehydrated.
- Dehydration of just 1%-2% of body weight (only 1.5-3 lbs. for a 150 lb. athlete) can negatively influence performance.
- Weight Loss of water greater than 3% of body weight significantly increases the risk of heat related illness.
- Unrelated illnesses causing vomiting and/or diarrhea will increase risk of heat related illnesses. These individuals should receive close monitoring of during practice sessions and competition.
- Athletes taking certain medications including diuretics, antihistamines, beta blockers, and anti-cholinergic are at a higher risk for heat illnesses.
- Athletes who are overweight, poorly conditioned, recovering from illness, lacking in sleep, or taking medications are at added risk for heat illnesses and should be monitored closely and/or have their participation level modified.

## Encourage Athletes to Begin Conditioning Before Official Practice Begins

- This allows athletes' bodies to cool more efficiently by increasing sweat production sooner than when they are not acclimated to the heat.

## Make Fluids Part of the Playbook

- Before, during, and after competition, be sure to consume adequate amounts of fluid. Athletes can make sure they are properly hydrated by checking their urine color: lighter urine color indicates athletes are better hydrated. The longer the workout session, the more frequently fluids need to be replaced. Research shows that a sports drink containing a 6% carbohydrate solution, like Gatorade, can be absorbed as rapidly as water. But unlike water, a sports drink can provide energy, delay fatigue, and improve performance.

## Use the Shade

- Before practice, warm up in the shade and be sure to rest in the shade during breaks. Even during rest, exposure to heat can raise the body temperature, increase fluid loss and decrease the blood available to the muscles during workouts.

## Recommend Wearing Loose Fitting Clothing

- Cotton blend, loose fitting, light colored clothing can help promote heat loss. The rule: the less clothing, the better.

## Know Signs and Symptoms of Dehydration

- Dehydration can seriously compromise athletic performance and increase the risk of exertion heat injury. That's why it's important to recognize the warning signs. If an athlete is suffering one or more of the following, the athlete should be referred to the appropriate health care or medical professional.
- Thirst
- Irritability
- Headache
- Dizziness
- Muscle Spasms/Cramps
- Decreased Performance
- Heavy or Profuse Sweating
- Skin is flushed or cool and pale
- Rapid pulse, nausea, weakness
- Disoriented, confused
- Elevated body core temperature
- Cessation of sweating
- Red, dry skin
- Shallow breathing and rapid pulse
- Loss of consciousness

## Follow Fluid Guidelines—Before Practice

- Athletes should begin every athletic activity well hydrated.
- 2-3 hours before exercise drink 17-20 oz of water or a sports drink.
- 10-20 minutes before exercise drink another 7-10 oz of water or a sports drink.

## Follow Fluid Guidelines—During Practice

- Drink Early—Even minimal dehydration compromises performance.
- In general, every 10-20 minutes drink at least 7-10 oz of water or a sports drink. To maintain hydration, remember to drink beyond your thirst. Optimally, drink fluids based on amount of sweat and urine loss.
- Athletes benefit in many situations from drinking a sports drink containing carbohydrate.
- If exercise lasts more than 45-50 minutes or is intense, a sports drink should be provided during the session if available.
- The carbohydrate concentration in the ideal fluid replacement solution should be in the range of 6% to 8% (14 to 18 g/8 oz).
- During events when a high rate of fluid intake is necessary to sustain hydration, sports drinks with less than 7% carbohydrate should be used to optimize fluid delivery.
- Fluids with salt (sodium Chloride) are beneficial to increasing thirst and voluntary fluid intake as well as offsetting the amount lost in sweat.

- Cool beverages at temperatures of 50° to 59° F are recommended.

#### Know What NOT to Drink During Exercise

- Fruit juices, carbohydrate gels, sodas and those sports drinks that have carbohydrate levels greater than 8% are not recommended during exercise as the sole beverage.
- 8% CHO is a warning sign. Replacing fluids with a beverage that has less than 8% carbohydrate would be optimal to assure the fastest rate of fluid absorption.
- Beverages containing caffeine, alcohol, and carbonation are discouraged during activity because they can dehydrate the body by stimulating excess urine production, or decrease voluntary fluid intake.

#### Follow Fluid Guidelines—After Exercise

- Immediately after training or competition is the key time to replace fluids.
- Drink approximately 20-24 oz of a sports drink (if available) per pound of weight loss.
- 1.5 times the amount of water lost must be consumed to replace lost weight.

**\*\*HYDRATION IS A 24 HOUR A DAY PROCESS!!\*\***