

# Hydration Game Plan for Safety and Performance



During exercise, your muscles generate heat that must be eliminated. The most effective method for cooling is through evaporation of sweat. However, if the fluid lost through sweating is not replaced, you may become dehydrated. As little as a 1-2 liter fluid loss through sweating will significantly decrease both your mental and physical performance. The goal is to prevent dehydration by adequate fluid intake before, during, and after exercise.

## Drink by Schedule, Not by Thirst

Thirst is not a good indicator of how much fluid you need to drink. Instead, drink until thirst is quenched, and then drink an additional cup of fluid.

| Fluid Replacement Guidelines                          |  |
|---|--|
| Approximately 2 hours <b>BEFORE</b> Physical Activity | Drink at least 2 cups (16 ounces) of fluid.                                  |
| <b>DURING</b> Physical Activity                       | Drink 5-10 ounces every 15 - 20 minutes.                                     |
| <b>AFTER</b> Physical Activity                        | Drink 2 cups (16 ounces) for each pound of body weight lost during activity. |

## Know the Warning Signs of Dehydration

If you experience any of these signs, take a break and drink some fluids. Don't wait until it is too late.

### Signs of Dehydration

- Noticeable thirst
- Headache
- Muscle cramps
- Nausea
- Weakness
- Fatigue
- Decreased performance
- Lightheaded feeling or dizziness
- Difficulty paying attention

## What Should You Drink?

Beverages containing carbohydrate and electrolytes

|   |
|---|
| <b>ELECTROLYTES</b><br><i>At least 70 mg of sodium per 8 oz</i> |
| <b>CARBOHYDRATES</b><br><i>14-17 grams per 8 oz</i>             |
| <b>FLAVOR</b>   |
| <b>FLUID</b>  |
| <b>SPORT DRINK</b>  |

## What Should You Avoid?

**Carbonation** – you may feel full before you have adequately replaced fluid  
**Caffeine** – is a diuretic and may interfere with fluid replacement  
**Alcohol** – is a diuretic and will interfere with fluid replacement, as well as negatively affecting performance

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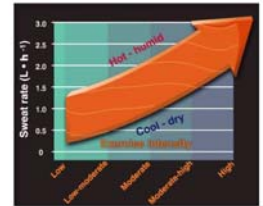


## Know Your Sweat Rate

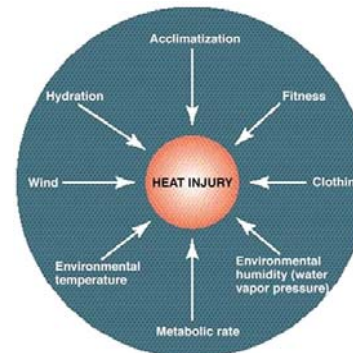
Sweat rate can be as high as 2 – 3 liters/hour in a hot-dry climate

Determine your sweat loss by weighing yourself daily. Your weight should stay constant if you have successfully rehydrated.

**Check your urine as a sign of day-to-day hydration.** If it's clear, or pale like lemonade, that's a sign of good hydration. If it's dark like apple juice, you need more fluids.



## Be Aware of Conditions Causing Heat Injury and Take Necessary Precautions



### QUICK RECOVERY TIP

Drink 16 OZ of fluid FOR EACH POUND of weight lost during physical activity.



## Tips to Beat the Heat

Allow for heat acclimation – cut back on exercise intensity and slowly build back to previous level over 5-7 days in the heat

Carry fluids with you and take advantage of every opportunity to drink

Select lightly flavored, sweetened beverages containing sodium to encourage voluntary drinking

Eat more salty foods or slightly season your food with salt to encourage voluntary drinking and replace salt lost through sweating

Avoid the sun's rays to minimize radiant heat gain – seek out shade and wear a hat when not working

Use sunscreen – SPF 30 minimum

Wear light-colored, lightweight porous clothing made of fibers that wick off sweat

Do not change into a dry shirt at breaks or time-outs. Completely soaked shirts do better cooling the body

Speak up if you feel ill, and get the fluid, rest, and medical attention you need

