



Hydration or dehydration can have a significant impact on athletic performance, whether it is competition or practice. The primary way the human body dissipates heat is through evaporation. Evaporation of sweat assist the body in regulating core temperature. If the body cannot adequately evaporate sweat, core temperature rises rapidly. There are many things that effect the rate at which an athlete sweats, and therefore loses fluid during activity. But studies have shown a loss of 1% to 2% body weight begins to negatively affect performance. A loss of 3% can lead to more significant heat related illnesses. It has long been thought of using thirst as a guide to fluid intake, this may work for the averageperson, but for athletes, once you are thirsty, dehydration has already started to set in.



CONSEQUENCESOF DEHYDRATION

- Performance declines with 1-2% decrease in body weight from sweat
- Increased temperature and heart rate
- Decrease in blood pressure
- General feeling of fatigue
- Headaches and Muscle cramps

GOALS

OF PERFORMANCE HYDRATION

- Begin workouts in a hydrated state
- Maintain hydration throughout activity
- Maximize performance
- Improve ability to recover quickly
- Minimize injury and cramping

EXAMPLE ATHLETE **HYDRATION PLAN**

6:30 AM: **8**oz

8:30 AM: **4**oz 10:30 AM: **4**oz

12 PM: **8**oz

1:30 PM: **4**oz

2:30 PM: **8-16**oz

3 PM: **8**oz

during activty: **4-8**oz every 15 min

after activty: 16-20oz

7:30 PM: **8**oz

9:30 PM: **8**oz

TOTAL: 100oz

TIPS

- Monitor urine color. Clear to pale yellow is ideal.
- Most fruits and vegetables are made of mostly water making them a great way to add fluids. Plus, they are full of vitamins and minerals.
- If you are a "salty sweater" eat salty foods before an activity and replace losses with water foods that contain salt, such as broth-based soup or vegetable juice.
- Be wary of fluids that contain high amounts of sugar, they add extra calories.
- Drink water throughout the day.
- The goal during exercise is to maintain or to limit hydration loss.

ACTIVITY-BASED HYDRATION TIMING

Before activity:

- 2-3 hours before: 16-20 ounces (1 water bottle)
- 20 mins before: 7-10 ounces (1/2 water bottle)

During activity:

• 4-8 ounces every 20-30 minutes (1/4-1/2 water bottle)

After activity:

- 16-20 ounces of fluid for every pound lost during activity
- * ideal is to complete within 2 hours of activity, plus protein and carbohydrate intake

