# Hydration Guidelines for the Physically Active

Drew Hacker | Ambulatory Supervisor Licensed Athletic Trainer | Children's Wisconsin





## Disclosures

• I have no relevant financial relationships/interest to disclose



# Learning Objectives

- Common hydration definitions
- Hydration guidelines before and during activity
- Recovery hydration guidelines and best practice
- Dehydration vs. ??



## Common Definitions & Terms

- Euhydration normal state of body water content; absence of absolute or relative hydration or dehydration
- Hyperhydration drinking too much water
- Hyponatremia low blood sodium concentration
- Dehydration loss of body water through sweating, vomiting, urinating and diarrhea
- Hypohydration a dangerous loss of body fluid caused by illness, sweating, or inadequate intake (3% body loss)



# **Am I Hydrated**

- "Urine Color Chart"
- Not just athletes all "physically active"pec
- Know general hydration levels for WT
- 100 lbs
  - 50 oz at baseline
  - 2% BW (2 lbs 32oz).
- 200 lbs
  - 100 oz (2% | 4 lbs | 64 oz)

### AM I HYDRATED?

Urine Color Chart

1	If your urine matches these colors you are drinking enough fluids
2	Drink more water to get the ideal color in Shade 1 and 2.
3	Dehydrated
4	You may suffer from cramps and heat-related problems
5	Health risk! Drink more water.
6	Health risk! Drink more water.
7	Health risk! Drink more water.
8	Health risk! Drink more water.



# **BEFORE PHYSICAL ACTIVITY**





# Before Physical Activity

- Intentionally pre-hydrate
- Urinate every 2-4 hours
- 1 to 2 hours before, 4-8 ounces of water (~1 cup)
- 10 to 15 minutes before another 4-8 ounces of water (~1 cup).



# DURING PHYSICAL ACTIVITY





# During Physical Activity

- Opinions vary but in general but
  - ... for every 15 minutes of exercise, drink ½ to 1 cup or more (4-10oz) of fluid
  - ~6-8 gulps of water per break
- However, if you are a very heavy sweater, you may need A LOT more than that!
- Goal is to prevent <2% body weight reduction during exercise.



# AFTER PHYSICAL ACTIVITY





# After Physical Activity

- Ideally, check your body weight BEFORE and AFTER exercise (Weight Chart) or on an app
- For every pound lost, consume a minimum of 150% (3 cups 24oz of fluid **(16 oz out, 24 oz in)**
- After prolonged, rigorous, exercise greater than one hour:
  - Sports drinks > water mixed with electrolyte tablets, chocolate milk, and juice
- Can eat fruit and salty foods like soup and pretzels post.



# After Physical Activity

#### Headache

Nausea

Dizziness

Fatigue

**Balance Issues** 

Mental Fogginess

Difficulty Concentrating

### Dehydration



Concussion



## THANK YOU

# Resources

- 1. "WIAA Heat Information." Www.Wiaawi.Org, www.wiaawi.org/Health/Heat-Information#4247548-fluid-replacement-and-dehydration. Accessed 20 May 2021.
- 2. McDermott, Brendon P., et al. "National Athletic Trainers' Association Position Statement: Fluid Replacement for the Physically Active." Journal of Athletic Training, vol. 52, no. 9, 2017, pp. 877–95. Crossref, doi:10.4085/1062-6050-52.9.02.
- Casa, Douglas J., et al. "National Athletic Trainers' Association Position Statement: Exertional Heat Illnesses." Journal of Athletic Training, vol. 50, no. 9, 2015, pp. 986– 1000.

