

Occasion around Training/Competition	Hydration Assessment Technique	Definition	Recommendations
Before	Morning body weight	In a euhydrated individual who is in “energy balance”, morning body weight (after voiding) is stable and not expected to deviate by >1%. Determine “normal” (euhydrated) baseline body weight by taking daily measurements (over a period of ≥3 days).	If morning body weight has dropped by >1% from “normal”, then drink fluid to re-establish baseline body weight.
	Urine specific gravity	Specific gravity is a measure of urine concentration. A urine sample < 1.020 is indicative of euhydration. This technique requires an instrument called a refractometer.	Slowly drink beverages (e.g., ~5–7 mL/kg) at least 4 h before the exercise task. If no urine is produced, or urine is dark or highly concentrated, slowly drink more fluid (e.g., another ~3–5 mL/kg) about 2 h before the event.
	Urine color	Light yellow (like lemonade) is indicative of euhydration. Dark yellow or brown (like apple juice) is indicative of dehydration. Clear urine is indicative of overhydration.	Consuming beverages with sodium (110-270 mg/8 oz) and/or small amounts of salted snacks or sodium-containing foods will help retain the consumed fluids.
During	Change in body mass	Measure pre- and post-workout body weight to determine expected sweat loss during training and games of various intensities, durations, and environmental conditions. Body weight should be taken with minimal dry clothing or nude, if possible.	Avoid significant body weight deficit (i.e., ≥2%). Also, avoid any body weight gain. Drink 16 oz. of fluid for each 1 lb. of sweat lost during the course of a workout. Consuming a beverage with sodium (110-160 mg/8oz) helps replace sweat sodium losses and stimulate thirst.
After	Change in body mass	Compare post-workout body weight to pre-workout body weight. Body weight should be taken with minimal dry clothing or nude, if possible.	Drink ~24 oz. of fluid for each 1 lb. of body weight deficit* Consuming a beverage with sodium (110-270 mg/8oz) and/or small amounts of salted snacks or sodium-containing foods helps replace sweat sodium losses, stimulate thirst, and retain the ingested fluids.

*Rapid and complete rehydration is especially important if participating in a practice session or game within the same day, otherwise normal eating and drinking practices (i.e., water and sodium intake with post-exercise meals and snacks) is usually sufficient to re-establish euhydration.

Definition: Euhydration, “normal” body water content, which is maintained by drinking enough fluid to replace sweat losses, as indicated by maintenance of body weight
Source: Sawka, M.N., L.M. Burke, E.R. Eichner, R.J. Maughan, S.J. Montain, and N.S. Stachenfeld (2007). American College of Sports Medicine position stand. Exercise and fluid replacement. *Med. Sci. Sports Exerc.* 39:377-390.