<u>Hydration Strategies for Optimal Golf Performance</u>

How Much and What a Golfer Should Drink Before, During and After a Round of Golf By: Dr. Ralf Jäger, FISSN, CISSN Date Published: May 2011



Decreasing performance on the back-9 might be a result of dehydration, and regular sips of water might help you to bring your game to the next level. The physical strain of a round of golf will increase your body's own heat production. Your body tries to limit a rise in its core temperature by sweating, but the evaporation of sweat from your skin does not only result in the desired cooling effect, your body loses water and electrolytes. A water loss of as little as 1% of your body mass leads to a reduction of alertness, limits your ability to concentrate and impairs your performance on the course. Dehydration of greater than 3% of body weight increases a golfer's risk of developing heat related illnesses such as heat cramps, heat exhaustion, or heat stroke. Basic signs of dehydration include thirst, irritability and general discomfort, followed by headache, weakness, dizziness, cramps, chills, vomiting, and nausea.

From a nutritional standpoint, there are three primary times when hydration is considered for golf activities; before your round, during your round, and after your round. Each time period has varying objectives. Prior to your round, nutritional goals are to ensure that the golfer is well fuelled and that any nutritional intake will not interfere with the normal physiological responses to the activity. The goal of liquid intake during your round is to provide fluids to offset fluid losses due to sweating, provide fuel for muscles and to prevent the depletion of electrolytes. Finally, the nutritional objectives of post-round hydration are to promote muscle recovery and fluid replenishment.

Before your round

To ensure proper pre-round hydration, aim to drink 16 fl oz (473 mL) with your pre-round meal, either as water, sports drink or juice. Your pre-round meal should be eaten 2 to 3 hours before playing or practicing. Drinking at this point allows sufficient time for excess fluid to be excreted as urine, before going out on to the course. Drink another 8 fl oz (237 mL) 10 to 20 minutes before your round.

During your round

Keep drinking! A routine of sipping water on every tee is a good strategy. Advice on water requirements is difficult due to individual differences, but drinking approximately 6 fl. oz. every 20-30 minutes during a round is a good general guideline. Ideally, you should drink isotonic beverages containing carbohydrates, electrolytes, and fluid in correct proportions designed to enhance fluid and energy replacement. Always drink <u>before</u> you feel thirsty.

A perfect drink that accomplishes these objectives is Max Muscle's ENDUROMAX. ← Pick up a jug of this stuff and watch your game improve. Using EnduroMax will give you enough energy and hydration to finish the back 9 strong without those little lapses of focus and energy that can have a big impact on your score!

(Scott Herkes - Nutrition Coach) http://www.qcmaxmuscle.com/pds/EnduroMax PDS.pdf

If playing in hot weather conditions, you should further increase your fluid intake. An easy and effective way to determine whether you hydrate adequately during play is to simply record your body weight before and after your round and keep track of how much fluid you consumed during play. Every pound lost represents the loss of 16.7 fl oz (500 mL) of liquid that you did not adequately replace during your round.

After your round

Start rehydrating immediately after your round of golf. Post-round hydration should aim to correct any fluid loss accumulated during the practice or event. Golfers should aim to be completely rehydrated within two hours of finishing a round. Look for beverages that contain carbohydrates to replenish energy stores, electrolytes to speed rehydration and protein to promote muscle recovery. When re-hydration must be rapid, the golfer should compensate for obligatory urine losses incurred during the rehydration process and drink about 25-40% more than sweat losses.

What and what not to drink

Water, flavored water and sports drinks that contain 6-8% carbohydrates and electrolytes should be your favorite choice of beverage to stay hydrated on the golf course. The temperature of the fluid influences the amount consumed. While individual differences exist, a cool beverage of 50 to 59°F (10 to 15°C) is recommended.

Avoid beverages which may increase urine output and reduce fluid retention such as caffeinated drinks or alcoholic beverages. In addition, try to avoid carbonated beverages since they may reduce fluid intake due to stomach fullness. Beverages with carbohydrate concentrations greater than 8%, such as fruit juices, carbohydrate gels or sodas, are not recommended during your round as the sole beverage since they compromise the rate of fluid emptying from the stomach.

Hydrated like the pros

Proper hydration before, during and after a round of golf is crucial for the success of any professional golf player. Most Tour players prefer water and electrolyte-carbohydrate enriched sports drinks and make sure to adjust their liquid consumption to the weather conditions on the course.