

# Health & Fitness

## Hydration Helps

by Kylie James, CNP, & Joanne Smith, CNP

**I**t's no surprise everyone needs to stay well-hydrated when engaging in physical activities, sports or when working out.

Maintaining proper hydration levels is extremely important not just for maximizing performance and recovery, but for sustaining your health and even safety.

This is particularly important for someone who has a spinal-cord injury/disease (SCI/D) because of difficulties with compromised sweating function and poor temperature regulation.

### DON'T WAIT UNTIL YOU'RE THIRSTY

You can tell if you haven't drank enough if your urine is dark yellow or even orange.

If you feel thirsty, you're already 2% dehydrated and this will have a nega-

tive impact on your physical and mental performance.

### WHAT YOU DRINK COUNTS

Drinking before, during (if possible) and after a game, workout or race is important. However it's not just when you drink, it's also what you drink.

A lot of the sports drinks on the market are filled with sugars, artificial colorings/flavorings and additives, which



West Colvin, of Mesa, Ariz., stays in shape by exercising at the Virginia G. Piper Sports and Fitness Center for Persons with Disabilities in Phoenix.

DEVON O'BRIEN

don't promote health. There's no replacing good, clean water, but if you've been working out you not only need to replace the water you've lost, but also your electrolytes (essential minerals such as sodium and potassium that are depleted from sweating).

Consuming water with electrolytes and glucose is also advantageous for athletes as it avoids depletion of muscle glycogen (the energy, glucose, stored in your muscles providing direct fuel to them).

Drinking water with glucose and electrolytes also helps to maintain mental function, which is critical to performance because mental fatigue leads

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to muscle fatigue even if your muscles have plenty of glycogen.

Here are a pair of easy and great homemade drinks you can make to help get the natural sugars, electrolytes, water and salt:

- 1 liter of water with one cup of orange juice and ½ teaspoon of salt
- 1 liter of water with 1 tablespoon of maple syrup and ½ teaspoon of salt

Coconut water is another delicious and natural source of sugars and electrolytes that your body needs after a hard workout.

**If you're not consuming adequate amounts of fluid multiple problems can occur, including:**

- Blood volume drops causing less nutrients being delivered to the muscles and delayed removal of by-products
- Heat cramps
- Sweat rates drop
- Hyperthermia
- Body temperature rises quickly
- Premature fatigue
- Maximum aerobic performance decreases
- Heat exhaustion or heat stroke
- Gastrointestinal distress
- Mental and physical performance decreases
- Fluid and electrolyte imbalances



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Just be sure to read the ingredient lists as many brands have unnecessary sugars and artificial flavors added to them.

**MAKE A DRINKING PLAN**

To ensure proper hydration levels it may be helpful to maintain a fixed drinking schedule before, during and after exercises or activities.

The best way to do this is to carry the fluid with you so it's readily available. This can be in the form of a water bottle or a CamelBak (convenient bag that you can attach to a wheelchair and has a long plastic straw-like hose that you can just

bring to your mouth to sip your fluids).

As for how much to drink before the game, race or physical activity here's a helpful guideline — drink 0.5 liters 1–1½ hours before game or race and avoid foods and drinks that are natural diuretics such as tea, coffee and sodas.

Keep hydrated and keep healthy!

For more information on nutrition specific to SCI, visit [eatwelllivewellwitsci.com](http://eatwelllivewellwitsci.com).

*Kylie James and Joanne Smith are co-authors of the book Eat Well Live Well with SCI and Other Neurological Conditions.*