Hydration Revisited

by Jani Sutherland

In 2004 the Food And Nutrition Board of the Institute of Medicine released new Dietary Reference Intakes for water, sodium and other electrolytes. The recommendations are for the average adult, who could be sedentary or just mildly active. For athletes training regularly it may be necessary to modify these guidelines.

The Institute of Medicine recommends that adult males consume 3.7 liters of fluid daily, while female adults should consume 2.7 liters. The Institute of Medicine advises that fluid intake be driven by thirst and by consuming beverages at mealtimes. This recommendation does not benefit athletes who should rely on more than thirst to maintain adequate hydration. Body fluid levels are already low when you feel thirsty.

Sodium recommendation focuses on the prevention of high blood pressure, with sodium intake being limited to 1500 mg daily. Research indicates that reducing sodium intake along with a high potassium intake can help prevent the increase in blood pressure that comes with aging.

As an athlete, hydrating before training and rehydrating after training is a top nutritional priority. Make it a daily habit to carry a water bottle to encourage steady fluid intake. Remember that juices, milk, yogurt and fresh fruit are hydrating. Clear urine during the day is a sign of adequate hydration (urine is more concentrated in the morning so check it during the day).

The Institute of Medicine acknowledges that it’s sodium guidelines cannot be applied to most athletes. Daily sodium loss through urine is about 25 mg daily in a sedentary person but can range from 460-1800 mg in an active person. How much sodium an individual loses is a product of your sweat rate and sodium loss. Sodium can be replaced with a sports drink containing sodium or with the sodium in your daily diet. You do not need to replace all the sodium you lose during training; consume just enough to prevent sodium levels from dropping too low. If you are being treated for hypertension check with your doctor regarding sodium intake.

And don't just take that water bottle to practice!! Keep it full and with you all day long.