

Hydration! Going Beyond Water

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This is a common question I get from athletes, “I am drinking plenty of water how can I be dehydrated? As a sports nutritionist and functional medicine practitioner, I spend a lot of time getting athletes to understand that good hydration goes beyond drinking water. While consuming enough water is essential in having good hydration, the body needs certain nutrients on board to create healthy cells and to transport water into the cells. Therefore, drinking the right amount of water is only part of the equation. Consuming essential nutrients that contain minerals, electrolytes and essential fatty acids (especially omega 3’s) all play important roles in cellular health and intracellular water levels. It is important for athletes to understand the positive effects of eating a nutrient dense diet, versus the poor consequences that processed foods have on cellular health and hydration. Being properly hydrated is crucial in maximizing sports performance and directly impacts energy levels, recovery, injury prevention and mental focus.

Minerals and essential fats play important roles cellular health and hydration. The minerals, especially the electrolytes (sodium, chloride, potassium, magnesium, calcium, phosphate, bicarbonate), help to transport water into the cells and assist in many other metabolic processes. Essential fatty acids play a key role in producing healthy cell membranes and over all cellular health. If the cells are not healthy they cannot properly hold or transfer water and nutrients into the cells.

Over the past 50 plus years, Americans have been exposed to the Western diet, also known as the standard American diet (SAD), rich in unhealthy fats (hydrogenated/trans fats), refined sugars, and processed foods. Processed foods are manufactured with artificial ingredients that are high in sodium, trans fats, genetically modified foods (GMO’s) and may contain other chemicals such as: MSG, added nitrates, and dyes. These bad guys have a negative impact on cellular health and hydration. For instance, many commercial lunch meats are high in sodium, MSG, and nitrates that cause electrolyte imbalances, disruption in healthy cell signaling, and digestion issues. Foods containing processed wheat, and GMO’S can cause inflammation, poor gut health and have a negative impact on cellular health. Athletes wanting to maximize hydration and improve sports performance need to avoid processed foods.

The American diet is at an all-time low in consumption of plants, and healthy essential fats. According to recent statistics about three-fourths of American’s are low in vegetables, fruits, and healthy fats. (*What We Eat in America, NHANES, 2007-2010*) This is bad! The plants and the good fats are responsible for creating healthy cells and maintaining healthy intracellular water levels. Plants are not only rich in minerals but also contain vitamins, phytochemicals and antioxidants that play essential roles in maintaining cellular health. Getting athletes to understand the importance of eating these good guys are vital to maximizing one’s hydration potential. The combination of lack of plants, and essential fats in the diet, along with the high amount of processed foods sums up poor consequences for cellular health and hydration levels.

Bottom Line: Consume more plants and essential fats by eating from the rainbow spectrum of plants - fresh organic veggies, fruits, raw nuts, seeds, (walnuts, chia seeds, flaxseeds), oily fish (mackerel, salmon, trout, tuna), other essential fats (coconuts, avocados, dark bottle cold pressed

extra virgin olive oil), incorporate a quality mineral/vitamin, antioxidant supplement, along with a good omega 3 fish oil to your daily diet. Read labels and avoid processed foods. Avoid energy drinks and beverages that contain high amounts of caffeine. High amounts of caffeine are dehydrating. Consume good quality water (spring, alkaline, pure coconut water).

Low intracellular water is by far one of the top problems I see in my sports nutrition practice. Most athletes do not realize the negative impact of even mild dehydration has on the body. It cannot be overstated how important cellular health and hydration plays in sports performance, energy, recovery, preventing injuries, mental focus and overall health. You can be drinking the right amount of water, but if you are consuming processed foods and not eating a nutrient dense diet containing essential minerals and good fats, then you are not maximizing your hydration potential. Your cells end up looking more like raisins than grapes.

