



GVXC Nutrition Notes

Good Hydration: Important for your Running and for your School Work

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Staying hydrated is the constant task of the endurance athlete. A human's body is composed of approximately 60% water. If you lose more fluids (through sweating, going to the bathroom and breathing) than you take in (through drinking and eating watery foods), you will become dehydrated. Dehydration severity is measured by weight loss as a percentage of your normal body weight.

If you become mildly dehydrated, you may experience the following symptoms:

- Thirst
- Fatigue and weakness
- Increased body temperature
- Muscle cramping
- Headaches
- Darker-colored urine
- Dry skin, mouth, nose, eyes
- Impaired ability to concentrate or think

None of these symptoms are helpful when trying to train, race, do homework or perform well in school and sports! Severe dehydration can easily become a life-threatening condition, especially in extremely hot conditions.

Why is hydration so important? Water allows the body to transfer nutrients from the blood to the cells and then return the by-products back to the blood. Many metabolic processes depend on water.

During the day and night, you lose water through breathing, skin, going to the bathroom and sweating. Water loss varies with humidity, environmental temperature and respiratory rate. Obviously, when you run or train, you lose much more body water (and electrolytes) through sweat and increased respiration. When you do, it can have significant effects. Dehydration of as little as 1% body weight (1.5 pounds in a 150-pound person), is enough to begin to impair your running as well as your cognitive performance.



Aim to maintain your hydration by planning out your water intake throughout the day. Start your morning with a big glass of water when you wake up. Drink water with every meal. Carry a water bottle throughout the school day and sip it as you become thirsty. Drink another 16 ounces of water an hour before running and top that off with another 8-

16 ounces of water 20 minutes before exercise. After you finish your run, start the re-hydrating process by drinking once again. Finish your day with another big glass of water after dinner. On hot days or during long runs, plan your run to go by some water fountains and/or carry some small bottles of water on a waist hydration pack. Remember that you can also take in a lot of water by eating watery foods like fruits, vegetables, soups, smoothies, oatmeal, etc.

Don't forget about electrolytes. Your body's water contains several electrolytes, including sodium, chloride, potassium, magnesium and calcium. Electrolyte balance is crucial. On days when you sweat a lot from hard runs and/or hot conditions, add some salty foods to your diet and sprinkle salt on your foods. Consider adding an electrolyte tablet or powder to your water bottle.



Finally, you may have heard that it is possible to over-hydrate. This can result in a serious, sometimes fatal condition called hyponatremia. This condition is extremely rare in high school track or cross-country athletes – but more common in those who run marathons or participate in ultra-endurance races. Hyponatremia can be prevented by adding in electrolytes when you find yourself drinking quite a bit more than normal.

Stay hydrated. You will feel stronger in your races and training sessions. You will feel healthier all-day long. And you will be able to think more effectively to get that homework done so that you can sleep (another great topic for athletes!).

References:

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Recipe of the Month

Homemade electrolyte drink (adapted from Epicurious.com)

Ingredients

- 1 (4") piece ginger, peeled
- 1/4 cup fresh lemon juice
- 2 tablespoons fresh lime juice
- 2 teaspoons agave nectar or maple syrup
- 1/8 teaspoon fine sea salt
- 2 3/4 cups mineral or coconut water

Preparation

Finely grate ginger and, using a flexible spatula, press solids into a fine-mesh sieve set over a small bowl; discard pulp. You should have about 1 tsp. ginger juice.

Combine ginger juice, lemon juice, lime juice, agave, and salt in a large measuring cup or bowl. Stir in mineral water (or coconut water). Pour over 2 glasses filled with ice.