

Give Your Whole Body a Drink

AVINI PLUS HYDRATION

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About 60% of the total weight of our bodies is water. That's right – water; H₂O, aqua, Adam's ale – the stuff of life.

Water is absolutely necessary for life; and even a small loss of water can cause trouble. Research suggests that individuals can become dehydrated if they lose just 2% of their total body weight due to water depletion. This can cause a range of adverse effects and symptoms, including:

- Inability to focus on tasks
- Dry tongue or mouth
- Light-headedness
- Muscle weakness
- Dizzy spells
- Tiredness
- Headaches
- Feelings of lethargy
- Thirst
- Dry skin



While we need to stay hydrated; just drinking water is not enough. If you are tired and thirsty from physical activity, what happens as soon as you drink a big glass of water? Right away, your body produces sweat (as a cooling mechanism) and urine (to offload waste). This does not allow for proper rehydration and leads to a cycle of dehydration over time. Additionally, plain water quenches your thirst quickly, so you stop drinking before you are actually rehydrated.



For proper hydration, there needs to be three things: water, electrolytes and carbohydrates. I'll explain these components one at a time:

WATER

- Obviously water is required to replace that water that is lost through sweat, urine and metabolic processes. There is no hydration without water.

ELECTROLYTES

- Electrolytes provide charged particles within the body that help hold onto the water. These include minerals like: Magnesium, Sodium, Potassium, Calcium and Zinc. All of these are "ions"; meaning that they carry an electric charge. Since these are all positively charged – and same (or 'like') charges repel – the body needs to have more water to allow for these charged particles to separate from each other. The higher the net charges in the body, the more water your body will retain. This has the effect of increasing the total volume in the bloodstream. Additionally, since the bloodstream needs to hold onto that water to

ensure electrolyte separation, the water gets saved instead of wasted through the production of sweat or urine. Lastly, electrolytes supply a 'salty' taste in the mouth that induces thirst. This allows you to keep drinking to further support rehydration.

CARBOHYDRATES

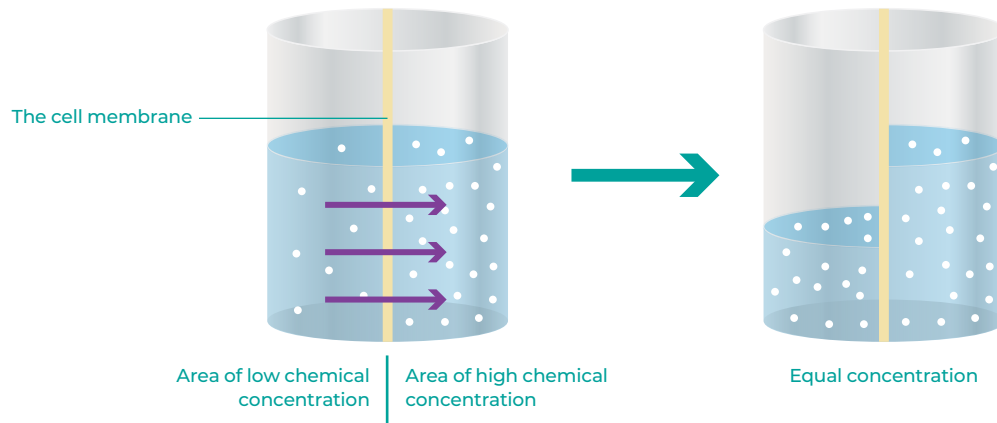
- When we are physically active, we utilize energy stores in our muscles called 'glycogen'. Muscles that require more glycogen are considered to be 'carb-starved', where they require carbohydrates to rebuild glycogen stores after physical exercise. Since carbs are water-attracting (like sponges), this drives water into the muscles where it's needed most.

This is how all sports drinks work. All of them contain water, electrolytes and carbohydrates. Water gets absorbed into the bloodstream; electrolytes keep that water in the body for utilization; and the carbohydrates drive the water into the muscle where they are taken in to replenish lost glycogen.



While this is a universal technology among all sports drinks manufacturers – they miss the boat on one important aspect of proper rehydration: they ignore **osmolality**.

Osmolality is a measure of solid particles in a liquid. Water will always flow from areas of low osmolality to areas of high osmolality.



For the *Avini Plus Hydration* formulation, we utilize specialized long-chain carbohydrates. These supply the carbs necessary for proper hydration, but because of their size, they greatly reduce the osmolality of the solution. The osmolality of the vessels around the stomach is at least 250. For water to be absorbed efficiently from the stomach, the osmolality needs to be less than 250. All other hydration products (including all sports drinks) have an osmolality that are much higher than this. Only Avini Health's *Plus Hydration* has a maximum osmolality of 220. This ensures rapid, systemic hydration every time you drink it.

The best example that I can provide is a simple test: Go outside and do some physical activity. Get sweaty and thirsty – then try an everyday sports drink. You will feel the liquid hit your stomach as it struggles to be absorbed and eventually do its job. Now, do the same thing with the *Plus Hydration*. After you drink Avini's *Plus Hydration*, you will never feel the liquid hitting your stomach. Because of its lower osmolality, the formula is absorbed so quickly that it feels like your body took a drink. It is whole body replenishment.

Now you know - not all hydration products are created equal. Avini's *Plus Hydration* with its low osmolality formula stands above every other rehydration product. Go ahead; give your body a drink.

