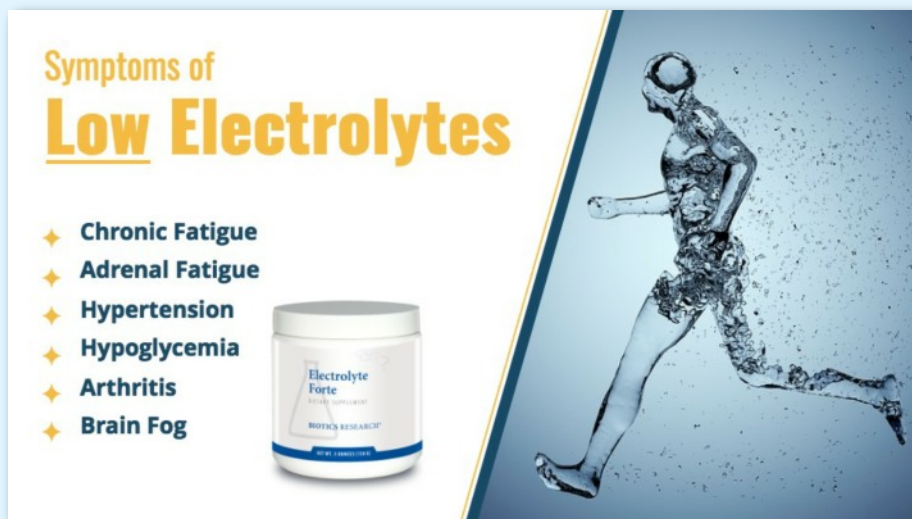


Electrolyte Forte

“Electrolyte Forte is perfect to support electrolytes for patients with chronic health challenges as well as athletes.”

One spring after gardening in early June, I remember feeling faint, like I was getting the flu. Regardless of taking my favorite immune support supplements, I just couldn't shake this feeling of “being off.” After about a week, one of my mentors suggested going to the pharmacy and getting some salt pills. Almost to prove him wrong, I followed his advice, and in a few hours, was dramatically better. I wanted to share that rather mundane story to remind you that when your electrolytes are low, fatigue, muscle weakness, dizziness or lightheadedness, changes in blood pressure (for me it was low) are common. Other symptoms include irritability, anxiety, mood changes, cramping, nausea, diarrhea or constipation, and irregular heartbeat.

My gardening experience, although corny, is typical of many people who unknowingly lose minerals when they sweat. And it doesn't take a lot. Let me remind you that water molecules have an electrical charge, and electrolytes, which have



opposing charges, move water in and out of cells. Electrolytes actually regulate how water moves in and out around the body. So, although someone can be drinking enough water, if they are low in electrolytes, they can be dehydrated. Many people are unknowingly contributing to their low electrolytes by drinking bottled water. Most bottled water companies use reverse osmosis to purify the water, which removes toxins and, of course, key minerals. But drinking water devoid of minerals can create further electrolyte loss. One study claimed 75% of Americans are dehydrated to some extent. And being dehydrated

by just 1.3% impairs performance in tasks that require attention, psychomotor, and immediate memory skills.

In other words, if you are low in electrolytes, the chances are very good you will be dehydrated. Electrolytes play essential roles in energy metabolism, regulate muscle function, promote healthy inflammatory responses, maintain fluid balance, maintain proper blood pH levels, and optimize nerve signaling.

You may remember the book, Your Body's many Cries for Water by Dr. Batmanghelidj. He discussed mechanisms for

dehydration for almost every disease. You can see a link to the right for more information. But as I study the role of electrolytes, I think we could rename his book, your body's many cries for electrolytes and water.

We generally think of supplementing electrolytes with athletes or someone working outdoors in the heat. But electrolyte insufficiency is present with patients with chronic health conditions like fatigue and lethargy, poor complexion, sagging skin, impaired mobility and coordination, poor cognition, hypertension, hypotension, hyperglycemia, hypoglycemia, adrenal fatigue, metabolic syndrome, and arthritis. I never thought about it, but an imbalance of electrolytes can lead to chronic inflammation. For example, low levels of magnesium have been linked to chronic inflammation and a lack of potassium can lead to an increase in pro-inflammatory cytokines.

Most electrolyte formulas are loaded with sodium and sugars, which are contra indicated with hypertension, dysglycemia, and metabolic syndrome. Knowing this, Biotics research created a product named, Electrolyte Forte, that is low in sodium and contains less than 1 gram of carbohydrates. It's perfect to support electrolytes for patients with chronic health challenges as well as athletes. Each single scoop of Electrolyte Forte contains:

150 milligrams of magnesium,
150 milligrams of calcium,
315 milligrams of phosphorus,
320 milligrams of potassium,
350 milligrams of chloride,
160 milligrams of sodium,
90 milligrams of vitamin C,
300 milligrams of taurine,
beetroot and pomegranate juice powders in a watermelon base. And Electrolyte Forte is

sweetened naturally with monk fruit. Multiple scoops could be employed to supplement key minerals for someone sensitive to pills.

Here are a couple of highlights with a few of the ingredients. Magnesium is involved with multiple enzymatic reactions many of which involve energy production. I've read sources that say over 600 enzymatic reactions. Mg-ATP is one that jumps out. If you don't have enough magnesium, you can't stabilize and efficiently move the ATP your body makes. Magnesium helps regulate blood pressure, convert vitamin D to its most active form, and helps regulate the release of hormones and neurotransmitters. Calcium helps regulate the activity of enzymes involved in cortisol secretion. Phosphorus increases the ability to produce ATP. Low serum phosphate levels are associated with reduced insulin sensitivity and higher blood glucose levels following an oral glucose challenge. Taurine restores energy metabolism and muscle performance. It facilitates mitochondrial health, lowers glutamate levels, inhibits microglial activation, acts as an antioxidant, inhibits inflammatory prostaglandins and nitric oxide, reduces brain swelling, protects the blood brain barrier, and increases brain antioxidant enzymes like glutathione. Taurine enhances cellular transport of electrolytes particularly magnesium and potassium. You can see a link to its role in brain health to the right.

As Dr. Batmanghelidj put it, "Water may not fix every problem, but problems 'caused' by dehydration cannot be solved without addressing that 'cause,' no matter what therapy is employed." And without the proper electrolytes, dehydration can still be the underlying cause.

Thanks for watching. I look forward to being with you again next Tuesday.