

Module 10 Lesson 7

Transcript

Today we're talking about the fabulous, the wonderful, the powerful, electrolytes. This is a word that I'll bet all of your clients have heard of, but might not know exactly what that means. They probably know they lose them during exercise, or maybe they know that, and need to replenish them after. But maybe it's a bit of a gray area for them and maybe for you too. Today I want to clear any uncertainties about electrolytes up so you can feel prepared to explain their importance to your clients. In this lesson, we'll go over what electrolytes are and their function in the body. The most common electrolytes of importance in exercise. Signs and symptoms of electrolyte imbalance. And recommendations you can make to your clients who exercise.

Let's start with a little client story. One of the cleanest eating clients I've ever had was a bodybuilder. I'm not going to lie, she was excruciatingly challenging to work with actually. Her name was Maya and she was obsessively intense about her food. When she came to me, she was super low energy and felt her training could just be better. She had weird muscle twitches and episodes of muscle weakness. She also worried that her heart would feel racy at times. She told me that she'd sweat often and heavily even wearing special clothes to promote sweating to show off her definition for her swimsuit competitions. Maya would basically induce electrolyte imbalance. This is a pretty obvious example of electrolyte imbalance and while most people aren't as extreme as Maya, electrolyte loss and unbalance is common in many athletes and you may also see it in people taking certain medications like chemotherapy for example.

Electrolytes are elements and compounds that are found in the blood and body. They're responsible for your physiology and we see chronic disorder most often in people with conditions like alcoholism, cirrhosis, heart failure, kidney disease, eating disorders, thyroid disorders, and sometimes in people with trauma burns or adrenal gland disorders. We're going to see more temporary electrolyte imbalance in people who are temporarily dehydrated such as athletes. The most common electrolytes in importance of exercise are sodium, potassium, calcium and magnesium. They all work together to maintain fluid balance and heart, nerve and muscle functioning, so they're super important.

Electrolytes, travel in fluids in the body and the reason electrolytes gets so much attention during exercise is because of the special needs and losses from sweating. When you lose too much sodium from sweating, you may get a cramp, but by then it's often too late. We don't really have an indicator to go by to tell us to replenish as we move through our workout. You may get some signs of an electrolyte issue as you're exercising, but the symptoms are things like dizziness, fatigue,

muscle twitches or weakness. And they're so generalized, it's hard to pinpoint that the problem was magnesium for example.

The recommendations are once again individualized. It's super easy to get the electrolytes you need in a snack through, let's say a piece of fruit. Bananas have sodium, chloride, potassium, magnesium and calcium and are really popular. And there's nothing wrong with say a potato or coconut water with sodium, potassium and chloride as maybe a less mainstream choice. Ask your clients if they sweat and how much they sweat. You may want to ask if they are ever coated in a thin layer of salt during or after their workouts. Their needs are based on how much they sweat, their size, their genetics, the temperature where they train. The temperature outside, how hydrated they are as they start their exercise. All of those things are important to know. Recommend a little electrolyte replacement in the form of fruit, a sports drink or gels or chews during the exercise training if their workout is longer than 90 minutes or if they're heavy sweaters.

Post-workout, I generally recommend water and a salty snack. But a healthy natural sports drink can also be fine, so there you have it. The 411 on electrolytes. Before we wrap things up today, let's review the takeaways. Electrolytes are elements and compounds in the blood and body responsible for physiology. The most common electrolytes of importance in exercise are sodium, potassium, calcium, and magnesium. They maintain fluid, balance and heart, nerve and muscle functioning. Signs of an electrolyte issue include dizziness, fatigue, muscle twitches or weakness to prevent electrolyte imbalance, recommend fruit sports drinks or gels or chews when workouts are longer than 90 minutes or for clients who are heavy sweaters. Okay, that's the need to know on electrolytes, I will see you in the next lesson.