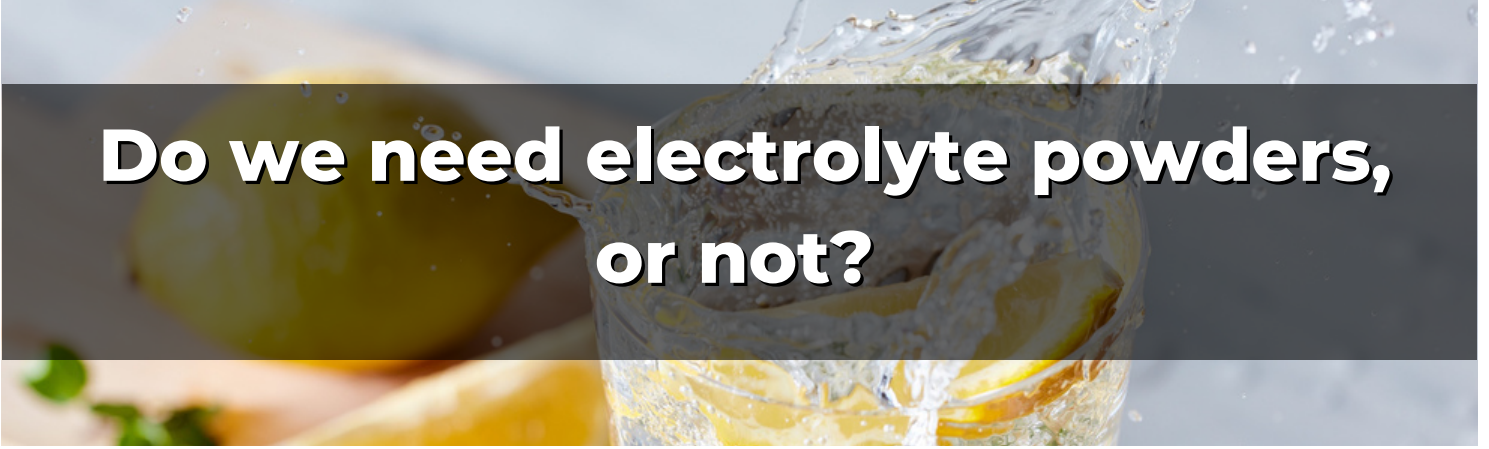




Do we need electrolyte powders, or not?

Water has been hydrating humans for hundreds of thousands of years, but have you heard? It turns out we have been getting our water wrong all this time. A packet of sodium, potassium, and magnesium stirred into the glass is, so we are told, what finally sets it right. The current version of the story goes like this: most people are chronically dehydrated, water by itself passes through you without much benefit, and the electrolytes are what let the body absorb and hold it. For most people going about an ordinary day, it is a fix for a problem they don't even have.

Your body is very good at managing its own water balance. When fluid runs low, your brain triggers thirst and your kidneys concentrate urine to conserve water. When you drink more than you need, your kidneys clear the excess. Your system does not require an electrolyte subscription; it requires that you drink when you are thirsty, which most healthy people already do as a matter of habit and basic instinct.

The familiar eight glasses a day is an arbitrary number that caught on with no solid science behind it. Plenty of water comes from food too, since fruits, vegetables, and soups are mostly water. Coffee and tea count too, even with caffeine (the mild diuretic effect does not cancel out the fluid in the cup). How much someone actually needs varies by body size, activity, climate, and health, which is why a fixed daily target can't fit everyone.

Electrolytes, which are essentially minerals, are, of course, necessary. Sodium, potassium, magnesium, and the rest regulate nerve signaling, muscle contraction, and the movement of fluid across cells. You lose them in sweat, and with heavy, prolonged sweating, you can lose a substantial amount. The question is not whether electrolytes are important; it's whether the average person doing average things loses them faster than a normal diet puts them back. For the most part, no. A typical day of eating provides far more sodium and potassium than a workout removes.

When you take in more than your body needs, your kidneys excrete the surplus to keep your blood in balance. The packet does not super-hydrate you. It tops off stores that were already adequate and sends the rest out in your urine. So essentially, you pay for sodium and potassium your last meal

already supplied, then pay again, in effect, to filter it back out.

The same logic applies to the other minerals on the label. The fuller formulas include magnesium, and sometimes a little calcium and chloride. This is the part some people point to, since they drink the packet for the magnesium rather than the hydration, and magnesium is a mineral that some people do fall short on. But the argument is weak: a hydration packet contains roughly 25 to 60 milligrams of magnesium, against a daily target near 320 for women and 420 for men. A handful of pumpkin seeds or a bowl of black beans gives you more (not to mention a slew of other protective nutrients), and if your magnesium is truly low, healthy food is the answer, not a drink mix that is mostly sodium.

There are real situations that call for electrolyte replacement. Endurance exercise lasting more than an hour or two, especially in heat, can deplete sodium enough to warrant replacing it. The same holds for heavy labor in high temperatures and for illness with vomiting or diarrhea, where fluid and electrolyte losses come fast and large. Athletes, outdoor workers, and anyone sick enough to be losing fluid quickly have a legitimate use for these products. A person sipping an electrolyte drink at a desk does not.

The opposite problem gets less attention and can be more dangerous. Drinking large volumes of plain water faster than your kidneys can clear it dilutes blood sodium, occasionally to a hazardous degree. It is rare, showing up mostly in endurance athletes who overdrink during events. Even so, more water is not automatically better.

If you want a way to check that does not involve a number, your body gives you several clues. Thirst is the first and most reliable for healthy adults. Urine is the second: pale yellow means you are well hydrated, darker means drink more, and consistently clear means you are likely overdoing it. Frequency is informative as well, since urinating several times across the day is a normal sign of adequate intake. The one caveat is age, because thirst dulls over time, so older adults do better drinking at regular intervals rather than waiting to feel it.

Drinking when we are thirsty and eating plenty of high-water-content foods, for most of us, will cover our fluid needs.

Melon, Cucumber, and Tomato Salad with Lime and Pepitas



This salad shows how you can get your water and minerals from a plate rather than a packet. Cucumbers and melons are almost entirely water. Melons and tomatoes are packed with potassium, and pumpkin seeds are one of nature's best sources of magnesium. That pinch of flaky salt provides a bit of sodium.

Ingredients (serves 4 as a side):

- 1 medium ripe melon, cantaloupe or honeydew, cut into bite-size pieces (about 4 cups)
- 1 large English cucumber, halved lengthwise and sliced
- 1 pound ripe tomatoes, heirloom cut in wedges or cherry tomatoes halved
- 1 small shallot, thinly sliced (optional)
- 1 small jalapeño or Fresno chili, thinly sliced (optional)
- A handful of fresh mint leaves, torn
- A handful of fresh basil leaves, torn
- 1/4 cup pumpkin seeds
- 2 tablespoons extra virgin olive oil
- Juice of 1 to 2 limes, plus the zest of 1
- Flaky sea salt
- Freshly ground black pepper

Instructions:

1. Toast the pumpkin seeds in a dry skillet over medium heat until they puff and begin to pop, about 3 to 4 minutes. Set aside to cool.
2. Combine the melon, cucumber, and tomatoes in a wide bowl or on a platter. Add the shallot and chili if you are using them.
3. Whisk the olive oil with the lime juice and zest. Pour it over the fruit and vegetables and toss gently.
4. Tear in the mint and basil, then scatter the pumpkin seeds over the top. Finish with flaky salt and black pepper.
5. Serve cold, soon after dressing, so the produce stays crisp. If it sits, the salt and lime draw water out of the fruit, which is delicious spooned up but less pretty on the plate.