



Coach-Athlete Q&A

A look at some coach-replies to common questions by topic.

Q: Hey Sonni,

I've been meaning to ask you what you think about Gatorade Endurance Formula?? I was just thinking about LB and how many problems she's having. Just a thought.

www.gatorade.com/endurance Try that. I just looked it up and it gave the nutrition facts but not the ingredients. Look under products.

H.E.

A: Checked it out.

---**Carb-profile:** 14 GRAMS OF CARBOHYDRATE per serving.....and of that 14 grams of carbohydrate, 14 of those grams are made offered as simple sugars.....ie: **100%** simple sugar.

---**Protein-profile:** 0 grams of protein

---**Electrolyte-profile:** has potassium and sodium.....only trace amounts of magnesium and calcium.....and doesn't even mention manganese.

And under the "% of daily value" column @ right.....it shows that this 14grams of sugar (per 8 ounce serving) are offered @ a dilutional ratio of 5%.....offering 50 calories.

Ask yourself: **"Why just 5%? Why not 10% or 15%? Why wouldn't they pack in MORE carbs per volume of water if they're truly trying to fuel me?"**

Answer:

- 1-Because it would taste like over-sweetened kool-aid.....and they couldn't sell it.
- 2-Because SIMPLE sugars **only** get through the stomach lining @ that 5-6% solution

Again I'll preach, COMPLEX carbs can be absorbed (ie: pass through the stomach) @ a 15-20% solution.

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That's the **Carbohydrate-problem** w/ Gatorade's "Endurance" formula (which, interestingly is no different carb-type-wise, than their regular formula that you buy @ the 7-11.)

The **protein problem** they have is that there is none.....while studies repeatedly show that the body utilizes 7-10% of it's calories in endurance exercise from protein.

But the REAL tricky thing (and read this carefully) is their **electrolyte problem**. Ya see, when you offer a product that can only empty the stomach @ 5-6% solution (or risk *drastically* screwing up stomach osmolality).....this means that it take a



full 8 ounces of water to ingest their 50calories of fuel. This means to get you maximum caloric 'feed' of 250 calories (as much as your kidneys can process).....you'd have to drink 40ounces to do so, right?

{50calories per 8 ounce serving means drinking 5 x 8-ounce servings to get the 250 cal (per hour) you need.}

.....and 5 x 8 ounce servings is 40 ounces per hour.....hour after hour after hour.....to get in the fuel!

Could you do that? Not very probable at all!!

But let's assume that it's a scorching hot day, and you DID pound down 40 ounces per hour.....not you've violated the "20-25ounces per hour" rule that keeps you from diluting blood-electrolyte levels and going hyponutremic. So, in order to get the fuel you need from THEIR simple sugar formula, you have to violate commonly tested electrolyte & hydrations rules.

So why in the world would Gatorade....the most recognized "energy-drink" brand on the planet.....create a product like this?

1---it taste good.....and therefore sell\$.

2---it's cheap to produce.....sucrose is a far cheaper carb than long-chain maltodextrin.

3---because your body can adapt to "nutritional-stress" to a degree for 2-3 hours (because you STORE water, carbs, and electrolytes)...so it'll shift these levels for as long as it can. But when the body's stored levels run out.....it relies on what you feed it more and more and more.

For 99% of the population (their market).....being tasty, cheap, and accessible works great.....because they're exercise is a 1 hour b-ball game, a 5k, a 2 hour bike ride, a few hours of yard work, or a "healthy" (haha) drink w/ their HappyMeal.

But for long-course triathletes, who'll be out there for 4-16 hours.....this stuff is a joke.

Sonni Dyer