

Hydration Report:



Why not just drink plain water?

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What's in your water bottle? Often, I'll have a client who prefers to drink plain water over sports drinks or low-sugar electrolyte drinks – even during long, intense trainings or competitions. And, while he may be able to “get by” on just water, he's not doing his body any favors nor allowing himself to push as much as he would with better fuel. Here's why I recommend fluid beyond water when training or competing for more than 60 minutes with moderate or high intensity:

- ✓ When you're training or competing for >60 minutes, and especially in hot or humid weather, you lose more than just fluid in your sweat. Your body depends on the electrolytes you lose for many functions, and it's crucial to replenish them if you want to perform at an optimal level.
- ✓ Sports drinks that contain a 5-8% carbohydrate solution leave your stomach quickest, and are therefore digested and absorbed faster than water.
- ✓ Sodium actually increases the absorption rate of fluids in your large intestine, so you hydrate better when the fluid contains sodium. Of note, this is a good reason to use a fluid in which the sodium is dissolved into it rather than popping electrolyte pills or sodium tablets once in awhile.
- ✓ When you replenish only fluid, but you've lost fluid and electrolytes, your body must work hard to reestablish the correct ratio of electrolytes to fluid in its plasma. In order to do so, you may continue to excrete fluid in order to not cause a diluted plasma ratio of electrolytes to fluid. End result: More dehydration.
- ✓ Your brain operates on glucose. Your muscles, once they've used up their short supply of glycogen, need a quick source of glucose for optimal performance. When you give your body fluid, lytes, and carbs, you give it the nutrients it needs to work harder for a longer amount of time. In this way, plain water without another steady source of carbohydrates falls short.

In fact, I think training with the proper fluids is every bit as important as competing with them. When training, you must be able to push yourself if you want to get better, right? So why not give yourself every advantage? Money for sports drinks can certainly add up, especially when used 3-4 times per week. So, I came up with a “Homebrew” recipe that is inexpensive and utilizes more natural and healthy ingredients than the average neon yellow commercial one.

While I would never claim that my homebrew is better than or as researched as some of the good products you can find commercially, I find it does the job for a tiny fraction of the cost and without the chemical junk. For many athletes, it affords them the opportunity to training every day with adequate, consistent fuel. You'll find my Homebrew recipe on the next page, as a free bonus for downloading this article. Give it a try and see what you think. It's designed to meet physiological nutrition needs per hour of intense training and provides adequate nutrients with just 20-22 ounces per hour (160 calories, 40 gm carbs, 497 mg sodium, 117 mg potassium). Physiological needs are generally thought to be -40-60 grams carbs, 400-700 mg sodium, 100-130 mg potassium, 16-32 ounces fluid *per hour of intense training*.

Make every training count. If you want to get better, you must train better. Practice doesn't make perfect, perfect practice makes perfect. Don't waste opportunities. Give your body the fuel it needs every time you demand a lot of it.

Fuel Your Adventure. Nourish Your Body.

Want to fine-tune your hydration, training, supplement, and daily eating plan? [Apex Nutrition, LLC](#) will help you optimize all of them! With affordable Nutrition packets, meal plans, and expert coaching by Kelli Jennings, RD, sports nutritionist, and avid endurance athlete, you'll meet your goals for performance, weight, and health!

Kelli's Homebrew Sports Drink*

**FREE
BONUS!**

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Mix:

48 ounces water

16 ounce 100% juice (any flavor)

1/4 cup table sugar

1/4 tsp Morton's lite salt (290 mg sodium and 350 mg potassium)

1/2 tsp table salt (1200 mg sodium)

-1-2 calcium/magnesium chewable tablet or liquid, crushed to equal ~400 mg calcium/200 mg magnesium)

Totals:

64 ounces fluid (will last 3 hours at 20-22 ounces per hour)

480 calories

120 grams carbohydrates (from glucose & fructose)

1490 mg sodium

350 mg potassium

400 mg calcium

200 mg magnesium

Per hour:

-160 calories

-21 ounces fluid

40 grams carbohydrates

-500 mg sodium

-117 mg potassium

133 mg calcium

67 mg magnesium

*This drink is designed to deliver hydration, electrolytes, and carbohydrates to the cells during exercise. It is also designed to be very cost effective with regular kitchen ingredients from natural sources. It does use both fructose and glucose as sources of carbohydrates. If you are sensitive to fructose, or find it causes stomach issues during exercise, discontinue use.