

Running & GI Discomfort: Causes & Cures

All of the research supports the fact that taking in fuel sources with Glycogen and even a small portion of protein at certain points in endurance events will improve performance and recovery. The issue for many runners out there is that these substances can also cause mild to severe gastrointestinal (GI) discomfort.

If you are a runner who has suffered from severe stomach cramping and even worse what comes next (especially when no restrooms are within miles) this can be a real problem and may have kept you from taking advantage of the true benefits proper fueling has to offer. In this article I present to you research findings documented by Dr. Kris Osterberg, M.S. R.D. who is the Senior Scientist at the Gatorade Sports Science Institute. What follows is science based evidence and advice on how to get your GI under control when fueling on the run.

- 1) **The Gastric emptying rate or speed at which any food or fluid leaves the stomach is dependent upon two primary factors: energy (food or fluid) content and volume.** With this in mind you may be surprised to learn that it is better to chug than to sip. When you eat or drink a large amount the stomach must stretch to accommodate the volume. The stomach contents exert pressure which helps increase the rate at which the contents will empty from your stomach. Faster is actually better! Slow emptying causes the food or fluid to slosh around in your stomach causing cramping, side stitches, or the sensation of being bloated.
- 2) **Calculate your sweat rate during a run and drink enough to match it.** This is important to avoid dehydration which will actually slow gastric emptying. To determine your fluid needs, weigh yourself before and after exercise. If you are more than two pounds lighter following your run increase your fluid intake during your next run. If you weigh more, cut back.
- 3) **Avoid unfamiliar foods the day before a big race or long run.** Things like fiber, dairy and protein can cause a lot of problems for a runner whose GI is not used to that volume during activity.
- 4) **Train with the products you plan to use during the race.** Check out the website of the race for which you are training and find out what will be served on course. Unless you are planning on being self-supported during the race, train with what is going to be served at the aid stations so your GI system can adapt to it.
- 5) **Make sure the product you are consuming during a run has a carbohydrate concentration of 6% or less.** Sports drinks should have 14 grams or less per 8 oz. and gels or bars should be consumed in small portions and always chased with a gulp of water.

- 6) **Investigate the TYPE(S) of carbohydrates that are in your sports drink or gel.** Your intestinal absorption or OSMOLALITY of your blood is affected by both the amount and the type of carbohydrate ingested. It has been proven that when glucose and fructose are present together, the absorption rate is improved thus causing less or no gastric distress AND improving fluid absorption overall.

- 7) **Train your stomach to accept foods/fluids while running.** Your stomach needs to be trained in the same way your heart, lungs, and muscles need to be trained. At first, drinking or eating may be difficult. Start slowly and you'll see that in time, your stomach becomes more cooperative.

There is no doubt that proper fueling, especially during events lasting 90:00 or more is essential to performance and recover. Following the guidelines in this article should help you incorporate glycogen and protein sources into your racing strategy without worrying about mad dashes to the porta potties or bushes!

Run Well!
-Coach Sonja