

First Endurance is a system that is made up of highly researched formulas with a goal of making the best endurance supplements.

A few common misconceptions about carbohydrates (sugar)

All carbohydrates are high glycemic

False – it depends on the sugar. Many are, like glucose which is the highest glycemic sugar. Then there is sucrose which is a simple sugar and one of the lowest glycemic sugars

Sugar is bad for my health

False – high glycemic sugar at rest may be bad for my health but saying sugar is bad for my health is like saying fruit is bad for my health

The body operates completely different during exercise and immediately afterward. During exercise and directly afterward our bodies benefit from sugar

I'm doing a long race, so I need a slow burning fuel

False – If you consume something slow to absorb it will be stuck in your stomach. Since your body can't use the slow burning fuel that you consumed it will use the glycogen in your muscles for energy until that fuel is absorbed.

This is the worst thing you can do because you only have about 2 hours of stored glycogen after you use it you will bonk and be in a world of hurt. Once depleted it takes 22 hours – 4 days before it is fully restored.

When you consume carbohydrates, your body breaks them down and stores them as glycogen. Glycogen is stored in your liver and in your muscles. Your liver converts glycogen into glucose to maintain your blood sugar and your muscles convert glycogen to glucose, so you can exercise. This is a fact and it happens to everyone.

The goal with endurance is to hold on to glycogen as long as possible.

The best way to do that is to start fueling with fast fuels every 15 minutes and keep doing it as long as possible. A fast fuel is something that will absorb fast “high glycemic”

EFS – electrolyte fueling system

- 3 different carbohydrate sources
- Fast absorbing
- Over 1,000mg of all 5 electrolytes

- 2,000 mg of free form amino acids
- Malic acid

Electrolyte Profile 1,160 mg

- Sodium 300mg
- Potassium 160mg
- Chloride 450mg
- Magnesium 150mg
- Calcium 100mg

You need hydration and a balance of all 5 electrolytes to allow your muscles to forcefully and predictably contract. Hydration alone will simply dilute your electrolyte levels.

Compared to other electrolyte formulas EFS has the highest electrolyte profile and does not require additional supplementation.

Free Form Amino Acids 2,000 mg - the equivalent in BCAA and glutamine profile to 9g of Whey Protein.

There is excellent research on the benefits of using protein during exercise. The challenge with protein is they are typically slow to absorb and we know that is a problem.

First Endurance use free form amino acids which is the equivalent to 9 grams on whey. The key different is free form amino acids are absorbed within 5 minutes rather than hours giving you better performance.

Mix of Carbohydrate Sources

- Glucose
- Sucrose
- Maltodextrin

Research has shown that our bodies can absorb different carbohydrates concurrently meaning you are using different parts of your digestive system at the same time and absorb at a higher rate. This is **called Multiple Channels of Absorption** and has been shown to improve performance. If you focus on one sugar at a time it can only go through one part of your digestive system.

Malic Acid – allows the body to make ATP (the body's energy source) efficiently under low oxygen and hypoxic conditions. Easy on the digestive system

EFS Liquid Shots

- Mimics the powder
- Same electrolytes
- Same carbohydrate blend

A fast fuel that is absorbed very fast delivering immediate energy.

The calcium and magnesium are malate's (derived from malic acid) making it easier on your stomach.

The packaging is environmentally aware and is customizable.

It comes in a reusable container that you fill with the 32oz jug. This gives you the ability to fill it according to your needs. If you want a 100 cal bottle you fill it a quarter and add water.

A key differentiator is First Endurance does not use gelling agents

To thicken gels many brands use "gums" such as xanthan gum or arbic gum. These gums slow down gastric emptying and can leading to gastric distress

EFS Powder is your primary choice up to 200 cal /hour above that you could add liquid shots (or go to EFS PRO).

The electrolytes profile is higher in the power

Ultragen

Why should you use a recovery drink?

- Adrenal fatigue – you want to modulate the damaging effects of cortisol brought on by intense training
- Glycogen replacement
- Repair muscle damage

Ultragen provides you with all the nutrients you need to recover

The reason it works so well is because it is extremely fast absorbing.

Every single ingredient was designed to get absorbed in the 30-minute glycogen window

For approximately 30 minutes post exercise your body absorb more nutrients than at any other time.

If you fuel during the 30-minute window you significantly improve your ability to recover

That said, if you fuel with nutrients that are slow to absorb you will lose some or all of the recovery opportunity.

Ultragen contains:

60 grams of glucose also known as dextrose. Although this may sound like a lot, post exercise it is exactly what the body needs to recover. Immediately after exercising you want a very fast sugar like glucose and it is critical to the success of the recovery.

Glucose is also a powerful shuttle for other nutrients bringing them very quickly into the bloodstream.

20 grams of Why protein isolate and hydrolyzed whey protein. These were selected because they are smaller protein molecules and get absorbed much faster than other whey molecules like concentrate. The glucose and protein ratio is 3:1 which is considered optimal.

There are also key vitamins and minerals that are essential for recovery.

6 grams of glutamine

4.5 grams BCAA's

All 5 electrolytes

Ultragen was designed to absorb quickly we strongly recommend to don't mix it with anything but water. Adding anything other than water will slow down the absorption. You can eat 10 minutes after you take it.

Drink it immediately after exercise with water. It dissolves very quickly and doesn't clump. If a drink clumps in water, it isn't going to absorb very quickly in your stomach.

When should you take a recovery drink

- Anytime you deplete your glycogen
- Remember the harder and faster you go the faster you deplete your glycogen
- Critical for consecutive workouts
- Every time you deplete your glycogen your cortisol goes up, you burn your muscle and store fat, so it is very important to hang on to your glycogen and replenish it

You will feel Ultragen work immediately