

RedCon1 GI Juice: Digestive Enzymes Go Reds Over Greens

written by Mike Roberto | April 10, 2018



Let’s be real. You don’t eat enough fruits and vegetables.

Thankfully, the industry caught onto this a longf time ago! **Redcon1’s GI Juice** recently burst onto the scene promising to heighten your fruit and vegetable game while improving your digestion with a full suite of enzymes designed to turn your body into a metabolic furnace. But does it live up to the promise?

GI Juice is an interesting formulation from the world’s fastest-growing supplement brand, **RedCon1**. But it wasn’t born as a marketing ploy or a needless product launch to keep the brand expanding. Instead, it rose from nothingness for “selfish” reasons:

Eric Hart’s “personal” project

As mentioned in our interview from the 2018 Arnold below, RedCon1’s **Eric Hart** has been stuck with taking a four-course rainbow of digestive supplements for quite some time now, due to not having a gallbladder. So GI Juice came out of his desire to have a one-scoop solution.

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This is superb news. It means that GI Juice is a **product born out of love, not marketing.** And it *shows* in the ingredients list! Turns out when the formulator's health is at stake, they don't pull any punches!

GI Juice – “Greens” Juice... or more Like “Reds”?

Most greens supplements have one thing in common. They taste like absolute shit.

Redcon1 must know this stigma as they went with a **fruit-heavy blend** for the “Greens Blend” included in GI Juice. While this makes GI Juice more of a “fruit-salad with vegetables at the bottom” powder instead of a traditional greens supplement, we aren't even mad. The additional sweetness provided by the fruits make this supplement far more delicious than its competition – and we explain how the benefits are still there, and then some!

Before digging any deeper, let's take a look at the latest coupon-based prices and you can sign up for alerts to get notified when we find a *better* coupon (which, let's be honest, happens frequently with RedCon1!):

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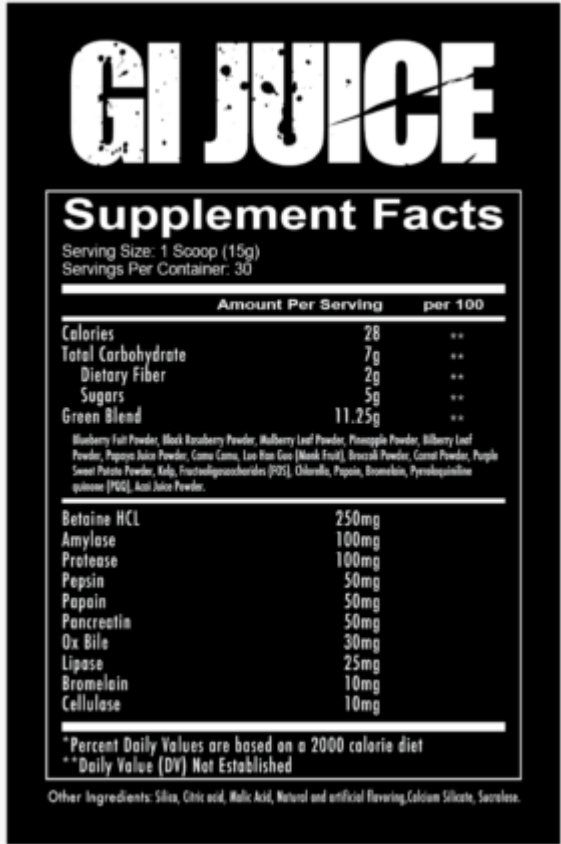
The GI Juice Ingredient Analysis

Don't want to read? Then listen to Mike talk about nearly everything inside of this supplement for 33 fun and fascinating minutes:

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- Greens Blend (11.25g)



GI JUICE

Supplement Facts

Serving Size: 1 Scoop (15g)
Servings Per Container: 30

	Amount Per Serving	per 100
Calories	28	**
Total Carbohydrate	7g	**
Dietary Fiber	2g	**
Sugars	5g	**
Green Blend	11.25g	**

Blueberry Fruit Powder, Black Raspberry Powder, Mulberry Leaf Powder, Pineapple Powder, Bilberry Leaf Powder, Papaya Juice Powder, Cane Cane, Luo Han Goo (Monk Fruit), Brussels Powder, Carrot Powder, Purple Sweet Potato Powder, Kelp, Fructooligosaccharides (FOS), Chlorella, Papain, Bromelain, Pyroglutamine Quinone (PQG), Acai Juice Powder.

Betaine HCl	250mg
Amylase	100mg
Protease	100mg
Pepsin	50mg
Papain	50mg
Pancreatin	50mg
Ox Bile	30mg
Lipase	25mg
Bromelain	10mg
Cellulase	10mg

*Percent Daily Values are based on a 2000 calorie diet
**Daily Value (DV) Not Established

Other Ingredients: Silica, Citric acid, Malic Acid, Natural and artificial Flavoring, Calcium Silicate, Sucralose.

This scoop is twice the size of competing products, and the digestive enzyme blend covers all bases in terms of helping with carbohydrate, fat, protein, and even plant digestion!

Run over to MyFitnessPal. Check your macros and even take a gander at your *micronutrients*. Notice anything off? There's probably at least 2-3 **micros** you could do a better job at hitting. Worse, MyFitnessPal doesn't even *provide* tracking data for important micronutrients and minerals that your body so desperately needs!

RedCon1 claims that GI Juice provides **8 servings of fruits and vegetables** per serving coming from *13* different plants! [1] While 11g worth of product might not seem like enough to cover that many bases, keep in mind that some fruits are composed of up to 87% of water, and most are over 80%. Since the dehydration process to form a powder removes water, it makes a ton of sense for the final product to be very light.

Why is this so important? Depends on your outlook on longevity and vitality

It turns out that people who eat fruits and vegetables live longer and better. A massive meta analysis published a few years back run on data from over 800,000 total participants showed that those who eat more fruits and

vegetables live longer.[2] That success tapped out around 4-5 servings (*total* across both fruits and veggies), and interestingly, *fruits slightly outperformed vegetables* in the data!

So if fruits outperformed vegetables in that study, maybe we should consider a “reds” powder over a “greens” one anyway, and stick to the veggies in our eggs and salads!

The math gets us to *at least* a full serving!



Back to that study, each serving is calculated to weight roughly 75g.[2] Realizing that ~85% of that is *water*... 15% of 75g (the part that's not water) = 11.25g! Meaning we can realistically estimate *at least one serving* of fruits / vegetables (out of the 4-5 that you'd like to get each day) from a scoop of GI Juice – but possibly more depending on how well the proper antioxidants have been extracted out.

Yet even the scientists don't 100% know for sure *what specifically* in fruits and vegetables contributes to longer living, so we're just happy to get a large dose of a full-spectrum powder here.

Long story short? We realistically consider eating a scoop of GI Juice to be 1-2 servings of fruits/vegetables, and if you can get 2-3 more yourself (preferably a couple veggie servings to even things out), you're on your way to living a healthier life.

Digestive enzymes *inside* of the Green Blend:

GI Juice also contains a few extra digestive enzymes and other vitamin-esque ingredients. As some are obscure to those of us in the sports nutrition supplement world, it's worth the time to discuss some benefits attached to the heavy-hitters featured here:

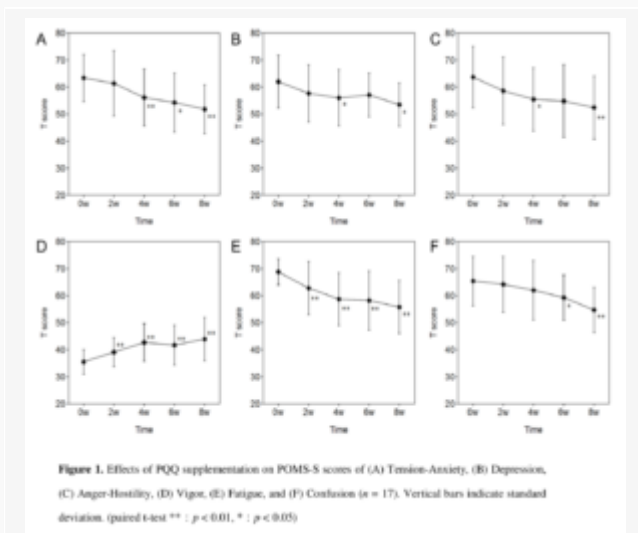
• Fructooligosaccharides (FOS)

Fructooligosaccharides, more easily known as *FOS*, are interesting types of non-digestible carbohydrates that have several interesting benefits:



- *Triglyceride-Reducing* – Rat studies have shown that they can help break down fats, producing shorter chain fatty acids that reduce triglyceride status.[3]
- *Mineral absorption* – FOS seems to help promote absorption of minerals (mainly calcium, magnesium, and phosphorus) from the colon back into the system, and that's theorized to increase bone mass and bone density.[4] This is likely thanks to the short-chain fatty acids produced in the point mentioned above, which can bind to the minerals and help with said absorption.

• Pyrroloquinoline Quinone (PQQ)



Interesting: 20mg daily PQQ supplementation provides all kinds of cognitive and mental benefits. We should cover this more often!

Pyrroloquinoline Quinone, or *PQQ*, is a powerful and underrated ingredient. When used properly, it has been shown to decrease pain, reduce fatigue and stress, and it may even improve sleep quality![5]

There isn't a ton of human evidence in vivo, but it seems to have anti-

inflammatory, neuroprotective roles in the system, as it behaves a bit like an antioxidant and a bit like a mitochondria supporting agent.

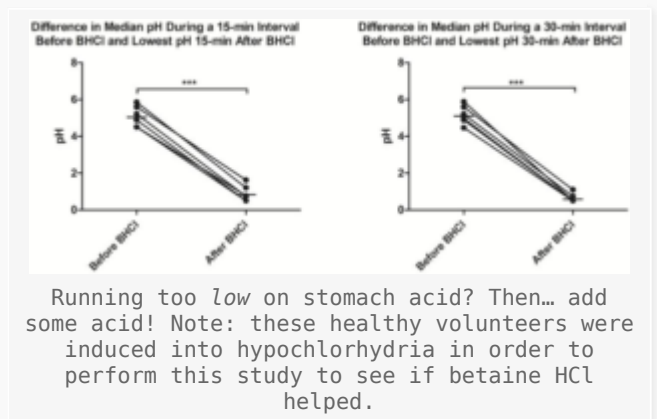
We'd love to see more of this in the industry, and this is the exact kind of ingredient we like added to a greens/reds blend.

Now we get to the rest of the digestive enzymes, provided in an open-formula format:

- **Betaine HCl (250mg)**

Betaine *anhydrous* (also known as *Trimethylglycine* / *TMG*) is a recent darling of the sports supplement side of the industry due to betaine's ergogenic effects.

But that's not this! This is Betaine *Hydrochloride*, shortened to **Betaine HCl!**

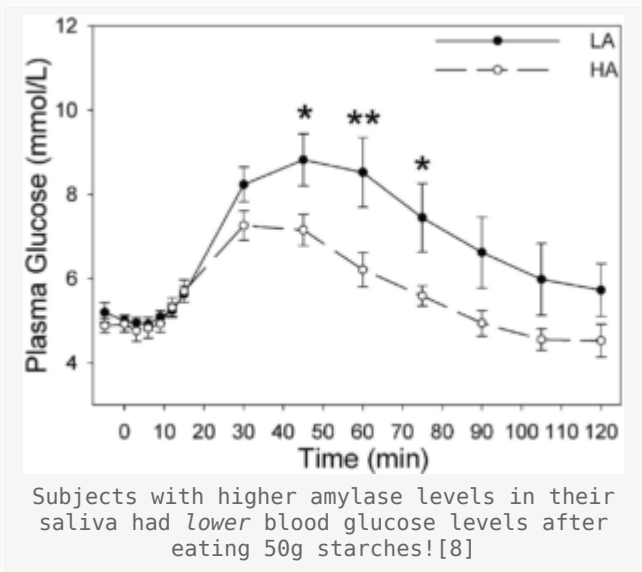


When adding that HCl (hydrochloride salt) to betaine, things change a bit. Betaine HCl is very acidic, and becomes a quality supplement for those who need **“re-acidification” of their guts**, [6] **lowering gastric pH**.

Hydrochloric Acid (HCl) is normally produced in the stomach, and it's what helps with protein digestion. It activates *pepsin*, [7] which helps keep a good balance of gut flora and is included below. So if you're low on this critical acid, you're going to bottleneck a whole ton of these functions, which is why occasional reacidification isn't a bad idea.

Note that Betaine HCl capsules out there are dosed almost 3x higher than this, so you shouldn't have to worry about *too* much acid from this, avoiding heartburn. Some people dealing with stomach issues actually have *under-acidic* environments, so this could be worth trying under a doctor's care.

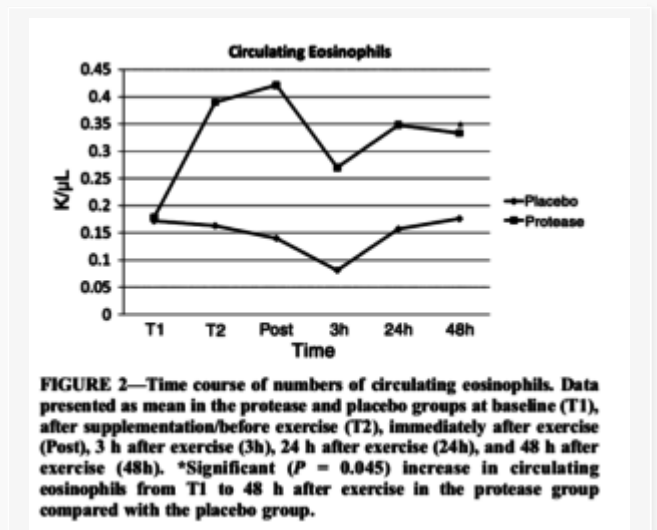
- **Amylase (100mg)**



Amylase is the enzyme found in both saliva and the intestine (made by the pancreas) and is responsible for **breaking up dietary carbohydrates**. Starches get “cleaved” into simple sugars by salivary amylase[8] (this is one of many reasons why chewing well is so important!)

If carbs are generally a consistent problem for you, it’s worth a shot to see if adding amylase to your diet yields any benefits. With that said, the study cited above showed that the amount of amylase in saliva didn’t have as much to do with glucose response as insulin, but the chart still certainly shows a difference! So we’re not expecting carbohydrate-cleaving *miracles* from it, unless perhaps you’re extremely amylase-deficient, but it still has a chance of helping.

- **Protease (100mg)**



Could Protease help with post workout soreness

and recovery? If so, why don't we see it in more post workout supplements?!

Our first of several ingredients designed to *improve protein digestion*.

Proteases are the class of enzymes associated with protein breakdown during the digestive process. They work by performing *proteolysis*, which is protein catabolism done via hydrolysis of the protein's peptide bonds.


Muscle damage attenuation?!

Athletes can get excited over this one – protease supplementation reduces the damaging effects of exercise and increases recovery![9,10] It helps with soft tissue injury resulting from intense exercise, and has been shown to help with muscle healing and helping athletes get back to high-levels of muscle contraction function. Wonder why we don't see it in more post workout supplements!

- **Pepsin (50mg)**

Pepsin is a subclass of protease above, and is the enzyme found in the stomach responsible for converting *polypeptides* into plain ol' *monomers* – it can help you digest your casein protein.[11]

Works with Betaine HCl



The screenshot shows the header of an article from the International Journal of Otolaryngology. The title is 'Reflux Revisited: Advancing the Role of Pepsin' by Karna Dev Bardhan, Vicki Strugala, and Peter W. Dettmar. It includes publication details like the year (2012), volume (2012), and page number (646901). It also lists the PMCID (PMC3216344) and PMID (22242022). There are links for author information, article notes, copyright, and license information, and a disclaimer.

Those interested in the whole reflux problem may be interested in understanding the role of pepsin in low-acid environments per this "Reflux Revisited" paper.[13]

Up above, we mention how the *betaine HCl* ingredient helps with the "re-acidification" of the gut. One of the main issues with too *low* of acid levels is that pepsin is only stable up to a pH of 7.[12] If it's not in an acidic-enough environment, it can actually cause damage due to its instability! So you'll often see pepsin and Betaine HCl come together, as the former oftentimes needs the latter.

On the corollary, if the environment is *too* acidic, pepsin can also contribute to damage there.[12] So there's really a perfect medium of finding the right dosage – if you *don't* experience heartburn, you're on the right track.

- **Papain (50mg)**

Papain, also known as *papaya proteinase I*, is a protease found in *papaya* fruit, and is one of the most interesting ingredients we've covered lately. Its pairing with bromelain, protease, and pepsin here means you should be using proteins very efficiently.



It helps digest so many things that it *stacks* with nearly anything! GI Juice is a true “dietary supplement”.

As a supplement, papain is rather “all over the place”, since its additional uses outside of protein digestion range drug-test spoofing to making medicine to teeth whitening, [13,14] amongst many other exotic uses!

Note: Papain is also in the “Greens Blend”, so there’s likely more than just 50mg total in GI Juice.

- **Pancreatin (50mg)**

Pancreatin refers to a *mixture* of enzymes (amylases, proteases, and lipases) produced by the pancreas during the digestion process. The protease specifically found in pancreatin is *trypsin*, which hydrolyzes certain proteins like the other proteases.

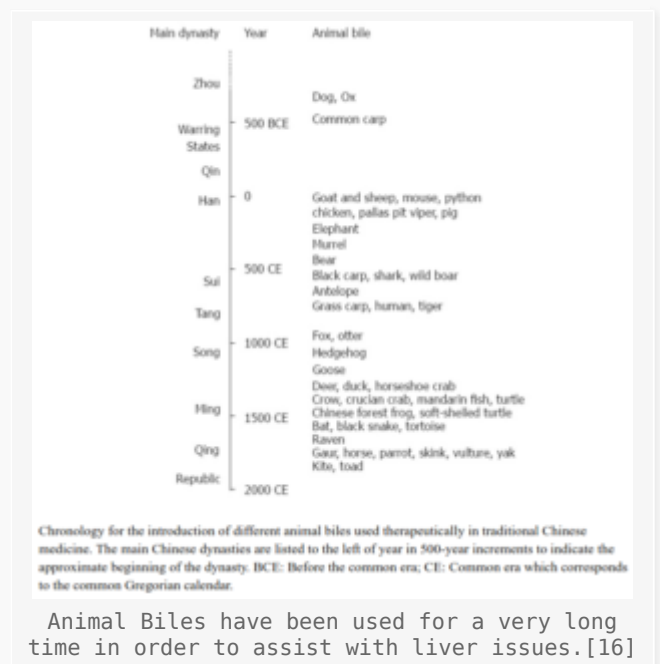
Pancreatin is typically supplemented by those that may have had their pancreas removed or damaged. This is to treat general malabsorption issues caused by the lack of full pancreatic function.

Given the fact that the prescription variation of pancreatic enzymes is on the World Health Organization’s List of Essential Medicines, its inclusion in a digestive health blend is no surprise. [15]

• Ox Bile (30mg)

Yes, actual bile from an actual ox. **Ox bile** is a wild card here – why include it in a fruit and greens supplement? Well let's go back to the origin story. Eric Hart of RedCon1, the man responsible for this unique supplement, *doesn't have a gallbladder!* And the gallbladder is what stores bile (which is produced by the liver), which helps digest fats. It also produces some of its own bile, which is slightly different.

This means that Eric (and similar people with improperly functioning livers or gallbladders) need a bit more help keeping the bile levels on the ready. Reason being, bile is used to emulsify the fats in the digestive tract so that they can be easily absorbed.



Since removal of the gallbladder leads to some issues with indigestion, those without the organ like to supplement with ox bile to help them better process dietary fats.[16]

So if you don't do well on fats, this could be of help. If you have impaired liver function or no gallbladder, see a doctor first, of course!

Why from an ox??

This all makes sense, but why bile from *oxen*??

It turns out that there have been ancient uses of *several* different kinds of animal-based biles, but ox bile was always plentiful in supply and easy to compound into pills.

However, there's been success in traditional medicine with all kinds of animal

biles, such as pythons, mice, goats, sheep, dogs, pigs, elephants, sharks, wild boars, and more.[16]

Oxen are simply big animals that produce plenty of quality bile that are less likely to kill you than, say, bears (which also have incredible bile). So here we are!

- **Lipase (25mg)**

Lipases are like proteases and amylases but breakdown dietary **fats**. It does this by hydrolyzing them into smaller chains, which are then easier to absorb into the system. For instance, triglycerides get broken down into their component fatty acids and glycerol molecules, allowing the fatty acids to then go and perform their roles.

Got that reverse osmosis setup yet?

If you're unfortunate enough to be drinking IQ-lowering fluoridated water, note that fluoride has been shown to decrease activity of both lipases and proteases, which can lead to several digestive issues.[17]

A quality reverse osmosis filter is pricey but can solve this problem, but in the meantime, additional supplementation may help as well.

- **Bromelain (10mg)**

Bromelain is a proteolytic enzyme most found in pineapple. It is another *protease*, and as proteolytic enzymes assist in protein digestion, supplementation will help your body better use the vast amounts of dietary proteins gym rats consume on a day-to-day basis.

However, bromelain's benefits extend beyond protein digestion: it improves joint health to some extent, reduces delayed muscle onset soreness (as discussed in the protease section), and can even help clear the sinuses.[18,19]

Bromelain allows larger molecules to pass through the intestines more easily,[20] which is good for proteins and antioxidants like glutathione.[21]

Note: Bromelain is also in the "Greens Blend", so there's likely more than just 10mg total in GI Juice.

- **Cellulase (10mg)**



Cellulose is the structural molecule in plant cell walls. Cellulase breaks it down.

Last but not least, **cellulase** is a category of enzymes that break down the *cellulose* molecule into simple sugars known as *monosaccharides*. This helps with plant digestion, since plants are the critically important structural component of green plant cell walls!

Clearly a good ingredient to include with a greens and reds powder like GI Juice!

With that list, you now have assistance in breaking down carbs, fats, proteins, and plant matter.

We love the fruit blend here, and love the fact that you're getting at least a full serving of plant matter in only five net carbohydrates (see the macros lower down).

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The other stuff: sucralose *is* included

**The Meal Replacement Market:
What "Brand X" Thinks:**

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This is how most brands saw the meal replacement market before RedCon1. Those who want "real food" and "dairy-free" don't want fake sweeteners, right?! WRONG. Read more in our RedCon1 MRE Lite analysis.

As we've mentioned in the dairy-free *MRE*, *MRE Lite*, and *MRE Bars*, RedCon1 isn't afraid to use the sucralose. They've found a great niche here where their customers are cool with the great taste that artificial sweeteners provide, yet still want the other healthy ingredients. For many, this is a "best of both worlds" situation!

Betaine HCl and Pepsin are the driving force

Serious talk here – the critical area is going to be the mixture of betaine HCl and pepsin. If you're running too *low* acidity, these two ingredients may combine to really help. But if you're already acidic, you probably *don't* need additional acid, this may not be for you.

The quick way to tell is to see if you get heartburn from this. But truth be told, if you have a *serious* problem, you need to go see a gastroenterologist and get tests taken. It's too difficult to properly guess or self-diagnose what's wrong with your acid levels or gut flora.

Our GI Juice Review: Tastes better than greens!

It goes without saying, we like this formula for those who need it, and it sure tastes better than any greens formula out there!

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GI Juice Macros

Yes, those fruits and greens *do* provide some calories – but far fewer than a serving of fruit, so this could be a good thing for dieters!

- **Calories:** 28
- **Carbohydrate:** 7g
 - **Dietary Fiber:** 2g
 - **Sugar:** 5g

Greens powders are often lower in calories... but those greens powders are also never dosed *this* high at 15g per serving!

GI Juice Goes Reds Over Greens



It ain't green, that's for sure! Mike mixes up some GI Juice in PricePlow's GI Juice Review on YouTube.

GI Juice is great for filling in a serving or two of fruits/vegetables in your diet, but it's really more of a digestive support supplement than anything else. The enzymes are definitely the focal point here, and they're pretty full spectrum for covering your carb, fat, protein, and plant bases.

One could complain that there's not enough "greens" here, but honestly, there's literally hundreds of other greens products. Did we really need another one? Plus, given the research and how some people (such as seasonal eaters or low-carbers) may want to avoid too much fruit at times, we are absolutely happy with RedCon1 taking a right turn for the reds here.

It's worth noting that the Green Blend is one of the few proprietary blends you'll see out of RedCon1, and that's okay for the general fruits, but it'd be cool to know how much bonus papain, bromelain, and PQQ that blend is providing.

All in all, we stand by our review when we say this is a *secondary* supplement, but anyone interested in a number of digestive issues should look at this supplement, research the constituents and their research, and consider giving this a go if something seems 'off' but not critically wrong with the digestive system.

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