

# Axe & Sledge DEMO DAY: Workout Carbs to Construct Your Body

written by Mike Roberto | April 22, 2021

Seth Feroce's supplement brand, **Axe & Sledge** has been on a monumental tear over the past two years. We often feature their killer stim-free pre workout pump formula, **Hydraulic**, and now we're back with another one of their workout products, the supplemental *carbohydrate* powder in **Demo Day**.



*This article was originally published in April 2019 but was updated in 2021 to include more references and science.*

## Demo Day: Mixed-GI, Fast-Acting Carbs with Hydration Pumps and Glucose Shuttling!

Just as with the rest of Axe & Sledge formulas, Demo Day features an open label, efficacious doses, and patented ingredients. In fact, over *half* of the ingredients here are patented, keeping the high standard that Seth set for his products by using premium ingredients at all times. After all, you can't fuel the hardest workers in the gym with low-quality ingredients and dirty, cheap carbs!

We'll be giving you a breakdown of this rather unique supplement and its well-dosed ingredients, but before we dive in, be sure to sign up for PricePLOW's coupon driven deals so you don't miss out on any discounts, and sign up for Axe & Sledge alerts to stay up to date on the latest and greatest with this awesome brand.

# Axe & Sledge Demo Day – Deals and Price Drop Alerts

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## Axe & Sledge Demo Day Ingredients

- Carb10 (Legume-based starch derived from *Pisum sativum* [peas]) – 15g

	Amount Per Serving	%DV
Calories	90	
Total Carbohydrate	25 g	7%
Sugar	2 g	1%
(Legume-base starch derived from <i>Pisum sativum</i> (peas) (as Carb10™))	15,000 mg	**
Highly Branched Cyclic Dextrin (Cluster Dextrin®)	11,000 mg	**
L-Taurine	2,000 mg	**
Glycerol Powder (standardized to 65% Glycerol)	2,000 mg	**
Isomaltulose (Palatinose™)	2,000 mg	**
Cinnamon Bark ( <i>Cinnamomum verum</i> )	50 mg	**
Alpha Lipoic Acid	50 mg	**

\* Percent Daily Values are based on a 2000 calorie diet.  
\*\* Daily value (DV) not established.

Now this is how you carb up and train! On top of the low-GI, fast-digesting carbs, you get two glucose disposal agents to drive them in, and hyper-hydration water-pump agents!

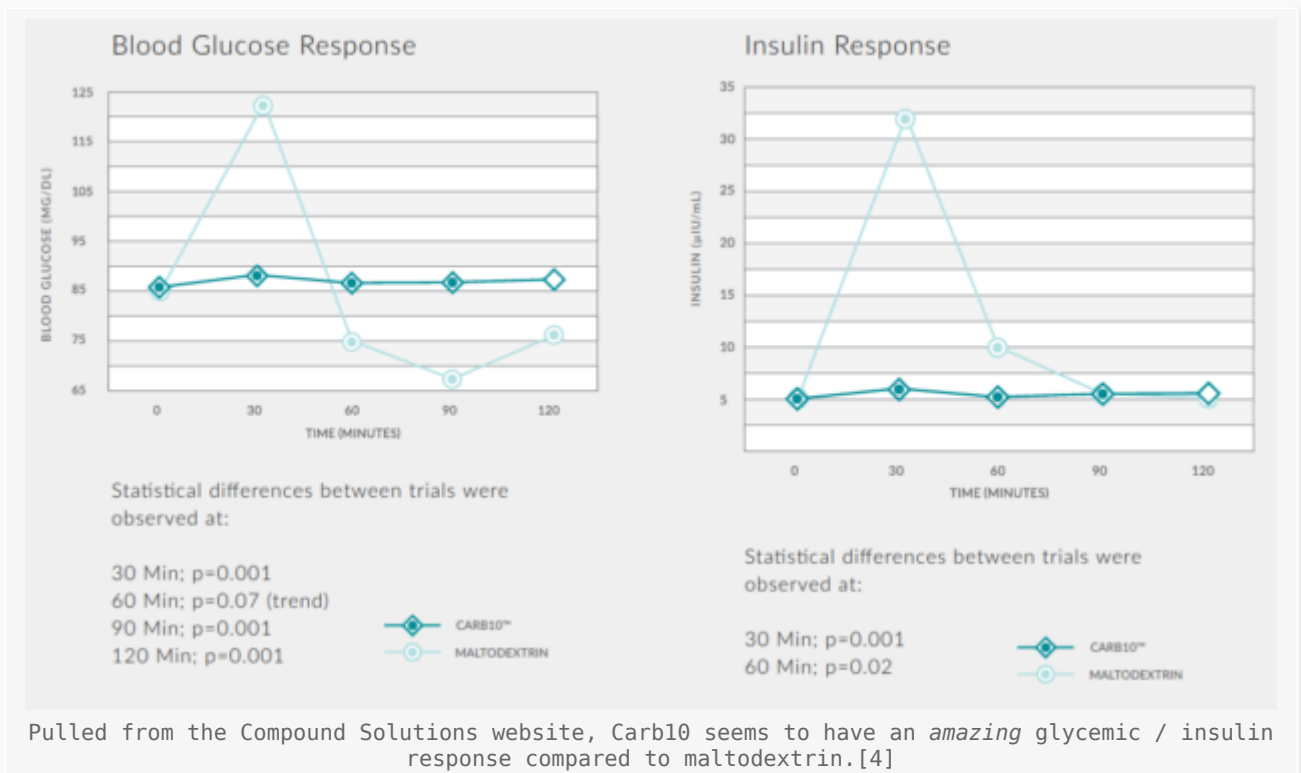
Starting off, we have a big 15g dose of **Carb10**, the new low glycemic index carbohydrate from Compound Solutions that's actually starch derived from *peas*.

The advantage of this carbohydrate source is that it has the dual-sided benefit of being low glycemic while simultaneously *also* being fast absorbing.

Essentially, you can quickly top off your muscles with glycogen, which will yield some performance benefits, but you also don't have to worry about excessively spiking your insulin, which isn't necessary for hypertrophy (muscle building) anyway – we just need *some* insulin action, which is what we get here.

When our insulin levels are too high, fat oxidation turns off,[1,2], and this is a carb that could prevent that. In addition, excessive and chronic insulin (hyperinsulinemia) can lead to several other health issues that we'd like to avoid.[3] Instead, But if you can keep a nice and steady prolonged carb drip, you can both build muscle *and* fuel an ultra-long workout, yet not induce fat storage.

With an osmolality of just 30 mOsm, this product is marketed to help by “providing 82% lower insulin response and 27% lower blood-sugar response”.[4] Compound Solutions uses the images below to demonstrate this:



This is the first of our patented ingredients in this list, and since this is 15g of a carbohydrate, it accounts for about 60 calories in the body. We know you can easily train that (and more) off, though.

- **Cluster Dextrin (Highly-Branched Cyclic Dextrin) – 11g**

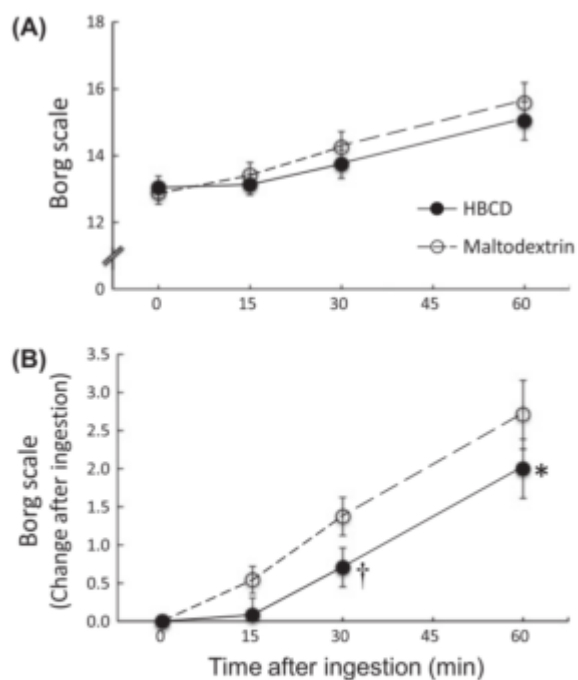


Fig. 1. RPE measured using Borg scale before and after ingesting HBCD and maltodextrin. (A) RPE; and (B) changes in RPE after ingestion.

Note: Values are presented as means  $\pm$  SE \* $p < 0.05$  and † $p < 0.01$  vs. maltodextrin at same time point. HBCD, highly branched cyclic dextrin.

The Borg Scale shows the rate of perceived exertion, meaning Cluster Dextrin makes it feel like you're working less hard than maltodextrin![5]

The leading carb in the industry for *performance* over the past decade has been **Cluster Dextrin**, a trademarked form of *Highly Branched Cyclic Dextrin (HBCD)*. HBCD is rapid-digesting, and also has the benefit of causing little to no gastrointestinal upset. Carb sources like dextrose, maltodextrin, or sucrose have slower gastric emptying rates, which lengthens the time before the carbs can actually get to your *muscles*. Thankfully, HBCD fixes this issue.

In addition, HBCD has a high molecular weight, yet also has very low osmolality. Much more simply, it gets through your digestive system and into the muscles quite quickly.[6] This quick processing allows your intramuscular glycogen stores to be quickly refilled, which has the benefits of increased performance, and a decrease in delayed onset muscle soreness.[5,7]

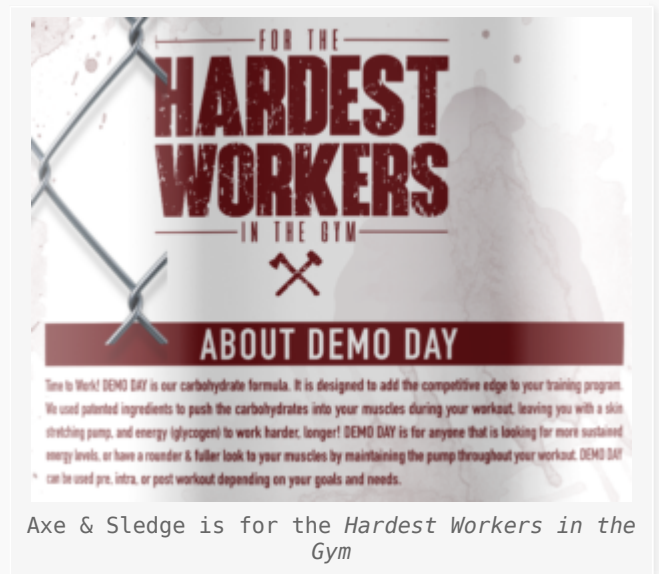
As an additional bit of information, in this image, Compound Solutions uses Cluster Dextrin as a metric to compare against the blood glucose response of maltodextrin in the chart at the bottom-right of the image. Similar to Carb10, we get the slightly-prolonged glucose curve.

Anecdotally, pre, or intra workout carbs give better performance, and nastier pumps, something we know Seth is all about from our Hydraulic review. This gives us 2 patented ingredients already!

- **L-Taurine (2,000mg)**

When Demo Day originally came out, we stated that **taurine** was “a rather unique (and awesome) ingredient in a carb blend”. As it turns out, it’s no longer a unique addition because several brands have copied Axe & Sledge by including it in their intra workout carb supplements!

In addition, far more new research has come out, further supporting the reason why they included it in the first place.



Demo Day has an excellent 2g dose of **taurine**, an organic acid that functions as an *osmolyte*, helping the movement of water between cells. This gives us the benefits of endurance and performance boosts.[8] A recent meta analysis has determined that taurine has much more acute effects from doses as low as a gram,[9] and we have double that here.

Taurine is important for vital functions as well, and is necessary to keep the muscles, brain, and heart healthy, making this a great addition for general health. And if you are staying well hydrated, you will also notice some nice water pumps from its osmotic action as well, especially when paired with another similar ingredient coming up next.

The net effect on muscle is that taurine can reduce delayed-onset muscle soreness (DOMS) and muscle damage caused by heavy training, verified by multiple studies.[10,11]

### **Taurine’s Focus Effect**

### Key Points

A meta-analysis was conducted to evaluate the effects of isolated oral taurine ingestion on endurance performance and to assess the contribution of (1) the dose and (2) the supplementation period to the ergogenic effect.

Human endurance performance can be improved by a 'small' magnitude after orally ingesting a single dose of taurine in varying amounts (1–6 g).

Further research is needed to establish the effects of the oral taurine dose on endurance performance and which populations would benefit most from its supplementation.

Taurine's Benefits (endurance-wise) can be seen after a *single* use![9]

The benefits of taurine don't just stop at the muscles, either! The same mechanisms can lead to improved focus. In 2019, a systematic review determined that the ingredient gives a cognitive performance boost by decreasing neuroinflammation and oxidative stress while stimulating the synaptic function.[12] Since it's involved in neurotransmission, taurine *deficiency* can disaffect memory and learning.[13]

There are even eye health improvements![14]

Long story short, taurine is underrated, and Axe & Sledge was one of the first to put a *serious* dose in their intra workout carb supplement. You can read more about the taurine meta analysis in our article titled *TAURINE: The Underrated Endurance Supplement (New Meta-Analysis!)*.

- **HydroMax Glycerol Powder (standardized to 65% Glycerol) – 2g**

A perfect pair for taurine is **glycerol**, a sugar alcohol that acts as a "sponge" within your muscles, drawing water up into the muscle fibers. This results in a *hyper-hydrated* state for us,[15] since it helps increase osmotic pressure and the body can hold additional water.[12] Just as with taurine, this will greatly enhance our "water-driven pumps".



Double up on your pumps. Deadlifts & Gummy Bears is here to stay!

The research behind glycerol (also known as *glycerine*) is often based on far higher doses, but when it's heavily used, there are several interesting endurance-related benefits similar to those of taurine.

For example, in 2012, researchers tested glycerol against placebo on 40 volunteers (half of which were college soccer players), looking at aerobic and anaerobic capacity. They found that those who took the ingredient had *significantly boosted aerobic performance* compared to when the study started.[15] The glycerol users also had *significantly better times in a time-trialed race* when compared to the placebo group, and the same went for a boost in anaerobic power.[15] This was all simply attributed to *better hydration*, which other researchers have concurred with.[13,15]

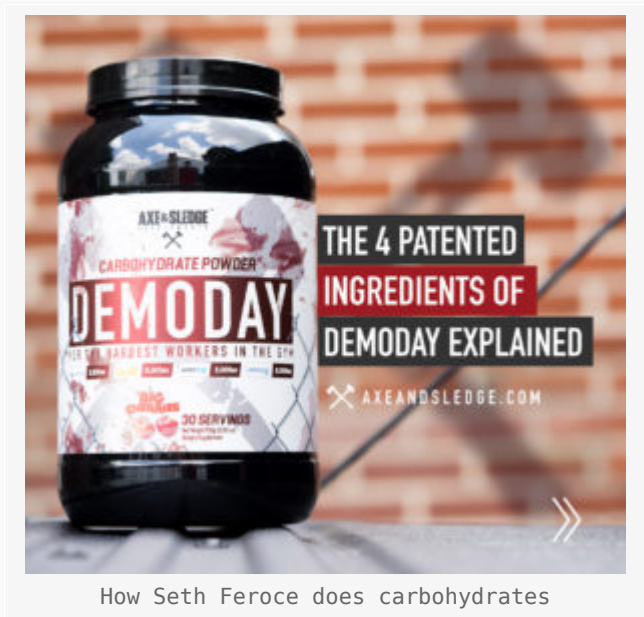
It doesn't hurt that the average Axe & Sledge athlete will likely get a better *pump* from this taurine + glycerol combination either! Stack it with Hydraulic and you're off to the races.

While we're at it, it's worth citing some of the other interesting glycerol research studies. We've repeatedly seen better endurance,[14,16,17] less urination[18] (because who wants to keep hitting the bathroom when you're training?!), and significantly better performance in heat,[19] where athletes could sustain themselves better in temperatures over 90 degrees Fahrenheit.[19]

It's again important to note that the studies used higher doses, and in order to reap all of the benefits from the taurine + glycerol combo, you have to be sure to be intaking plenty of fluids both pre and during your workout. You can always learn more in our article titled *Glycerol: The Ultimate Guide for Hydration, Heat Protection, and Pumps*.



- **Palatinose (2,000mg)**



Our last carb source, and our last patented ingredient, in this blend is **Palatinose**, which is yet another low glycemic index carb form, which comes from beet sucrose, and is about 50% as sweet as straight, regular sucrose.[20] Using carb sources like this prevents hypoglycemia, which is a condition of low blood sugar stores, which commonly happens after intense training.[21]

Palatinose also creates lower plasma insulin amounts than inferior carb sources, leading to more fat oxidation and less glycogen usage.[22]

Every time we see Carb10 combined with HBCD and/or Palatinose (in this case we have both), we love it. All angles safely hit, and insulin won't be so elevated that you'll never return to burning fat.

Now it's time to keep those carbs under control, and add a dash of flavor to boot:

- **Cinnamon Bark (50mg)**

**Cinnamon Bark** makes a great addition to a carb product, and is something we generally see in wellness supplements or even glucose disposal agents. This is because cinnamon has some great effects when it comes to blood sugar levels. It has been shown to reduce blood glucose levels, enhance lean body mass, and even help burn body fat.[23] It especially plays well with our carbs and the next, similar ingredient we have here.

What's interesting here is that the cinnamon can be *tasted* in Demo Day. Unless you absolutely loathe the ingredient, it's actually one of the most interesting and unique spins on a carb supplement we've seen. If you stack it



with any tropical fruit flavored EAA (such as The Grind), you'll have a *fantastic* flavor profile inside! Don't sleep on this cinnamon.

- **Alpha Lipoic Acid (50mg)**

Our last ingredient is **Alpha Lipoic Acid**, which is a fatty acid naturally made by the body and stored in the mitochondria. It acts as a powerful antioxidant, and is also involved in energy production as well. Alpha Lipoic Acid has research showing it increases energy expenditure,[24] as well as working to reduce appetite and fasting blood sugar.[25,26]

Anecdotally, when using ALA, we've noticed a lower "baseline" blood sugar level. It doesn't seem to acutely drop levels, it just seems to keep them slightly lower throughout the day and upon waking up. Which means we have more room to slam more carbs and not go too high (all subjective statements).

## Flavors available



Below is an up-to-date list of the Demo Day flavors available.

### Sweetener added to flavored versions

Important to note is that the flavored versions *do* have some extra sucralose added, but if you don't want that, then just stick with the Naked version, which doesn't.

## Final Thoughts: More than just a carb powder



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**Demo Day** is bringing in some serious firepower with three high-quality, low-glycemic carb sources, but this product is more than a one trick pony. With added ingredients for some water pumps, as well as some glucose regulators, it seems Demo Day came into the market with some great innovation that we're happy to see. Who else but Seth himself to add pump ingredients to his carb supplement.

This is an intra workout carbohydrate supplement that adds hydration – we're clearly big fans of the blend *and* the glycerol / taurine combination added in – and it's one that other brands have cloned as well.

This is literally *exactly* how we would design a carbohydrate supplement if tasked to do it ourselves. Looks like we don't need to at this point, because Seth has the carb game handled.

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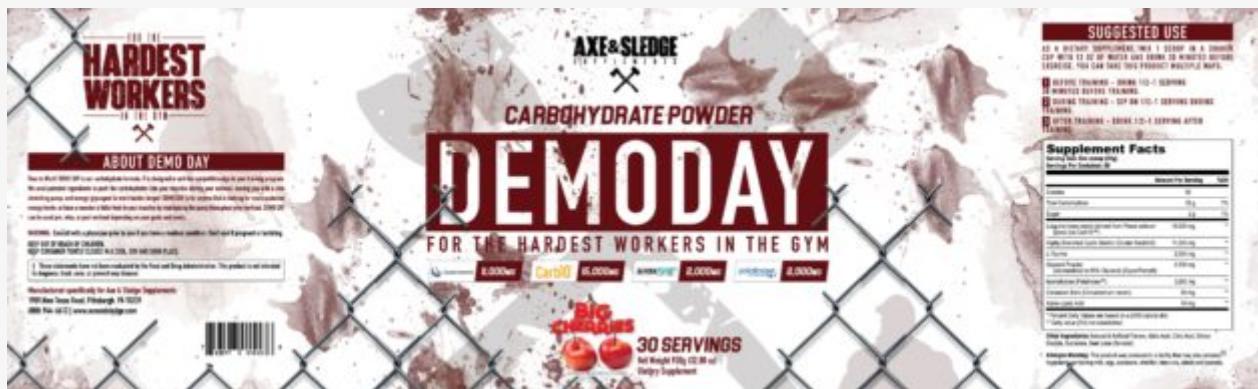
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The complete Demo Day label

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