

Alpha Prime Supps Top Burn: Elevate Your Energy, Focus, and Thermogenesis

written by Mike Roberto | June 22, 2022

*Looking for a “next level” fat burner that brings a powerhouse of energy? Then it’s time to look at **Alpha Prime Supps Top Burn**, which has **ephedra** inside. In this article, we explain how it’s all still possible.*



300 milligrams of caffeine in a *single* capsule, and legal ephedra? That’s what you’re getting with Alpha Prime Supps’s Top Burn!

Alpha Prime knows that summertime is limited, but there’s still a *bit* more time to get that final bit of shredding in. They’ve got a *highly* thermogenic, *highly* energetic fat burner for those of you who’ve tried other supplements and are looking for something a bit *more*. It’s name is **Top Burn**, and with 300 milligrams of caffeine in *one* capsule, it’s no joke.

Alpha Prime Supps’s Top Burn: How you formulate an “ECA Stack” without the ‘E’ or ‘A’

In this article, we cover this ultra intense “ECA Stack” replacement, which uses a legal *ephedra* extract as part of its formula alongside *white willow* and *synephrine* to make it happen. It’s heated up by PricePLOW favorite, CaloriBurn grains of paradise extract, but has even more heat in store than just that – including thyroid support and a serious amount of *rauwolfia*.

First, check prices and availability on PricePLOW, and then get ready to learn how Alpha Prime’s bringing the legendary stack back:

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Top Burn Ingredients

In a single, *one-capsule* serving of Top Burn Thermal from Alpha Prime, you get the following:

- **Caffeine Anhydrous – 300 mg**



Get ready to fire it up here!

Kicking things off with **caffeine** is always a good move for a fat burner. That's because, put simply, caffeine is one of the best studied supplement ingredients, with mountains of research showing that it can safely increase athletic performance and your body's rate of fat burning.

The way it works is that it sends an influx of fatty acids into your cells, ultimately making more energy available to those cells for useful work. It means you'll be able to push yourself harder in the gym and burn more calories while, at the same time, reducing appetite.[1,2]

However, even in the absence of a workout, caffeine can still rev up calorie burn by increasing your *basal metabolic rate*. Caffeine does this mostly by promoting *thermogenesis*, a process whereby cells convert *energy* (in the form

of carbohydrates and fatty acids) into *heat*. [1,2]

So how does caffeine increase your body's energy throughput? By inhibiting an enzyme called *phosphodiesterase*, [1,2] which is responsible for breaking down *cyclic adenosine monophosphate* (cAMP). [1,2] This matters because cAMP is what regulates your body's conversion of *energy substrates* like fat, protein, and carbohydrates into *adenosine triphosphate* (ATP), your body's fundamental unit of cellular energy. Higher cAMP levels basically mean a faster metabolism. [3]

Most of us, though, have been using caffeine long before we ever heard about its fat-burning properties. That's because caffeine is popular the world over for *fighting fatigue* by inhibiting the action of *adenosine*, a nucleotide that builds up in the brain during the waking state, and then *decreases* neural activity in order to make us tired and ready for sleep. [1,2]

The dose used in Alpha Prime's Top Burn is **300 milligrams**, which is pretty standard for athletic and fat-burning supplements, but significantly higher than what non-supplemental caffeine users (i.e., tea and coffee drinkers) are accustomed to consuming in one sitting.

If you aren't sure how you'll react to a caffeine dose of this size, work your way up to it before trying Top Burn.

- **Ephedra viridis (Leaf) Powder – 75 mg**

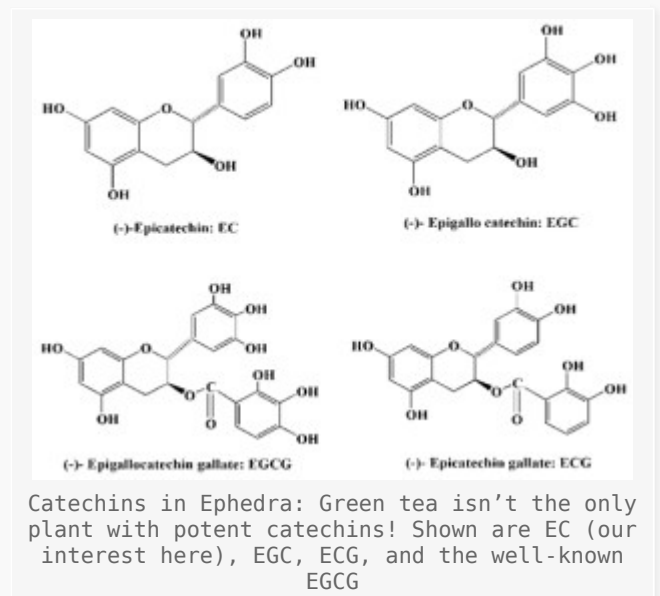


Savvy supplement consumers might be surprised to see **ephedra** making an appearance in the year 2022. After all, in 2004 the Food and Drug Administration decided to protect you from yourself when they banned certain alkaloids that occur naturally in the *Ephedra* plant – chief among them being

ephedrine. Much of their reasoning is covered in our article detailing *ephedra's history* – the issue back then was that the supplement industry was far less mature at the time, and suppliers were providing some *wildly* variable extracts, many with too many alkaloids.[4-6] In response, the FDA moved to ban those alkaloids completely.

Ephedra *without* banned alkaloids are still legal – and still have bioactive constituents!

Anyway, while *ephedrine* might be banned, *ephedra* extracts are *not*, so long as they don't contain the offending alkaloids Ephedra is in a category that also includes *ephedrine*, *pseudoephedrine*, *norephedrine*, and *methylephedrine*.



That's what we have here: an FDA-compliant *ephedra* extract, devoid of the banned alkaloids.

Fortunately for us, there are *still* plenty of other bioactive constituents in *ephedra* that can aid weight loss, including *flavonoid glycosides*, *epicatechin*, *glycans*, and *proanthocyanidins*. There are also some volatile oils like *L-alpha-Terpineol*, *limonene*, and *linalool*.

The presence of these compounds means that even a neutered *ephedra* extract is a powerfully effective *fat burning* ingredient.[7-10]

- **Synephrine HCl – 50 mg**

But now it's time to attempt to *replace* those lipolytic alkaloids that were lost when *ephedrine* was pulled from *ephedra* extracts!



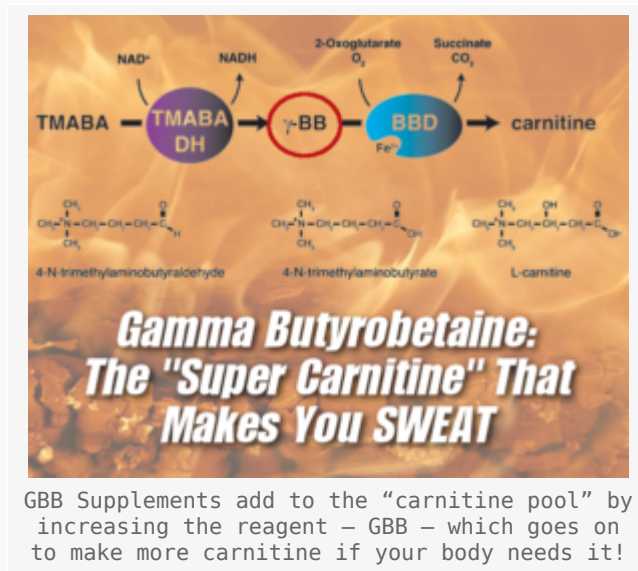
Considered a cousin of *ephedrine*, **synephrine** is a *fully legal* alkaloid that's been shown to *increase metabolism*. In one study, synephrine supplementation increased subjects' basal metabolic rate by *183 calories per day*, compared to a placebo control.[11]

Besides increasing the amount of energy you burn at *rest* every day, synephrine is also an effective *ergogenic aid* that can increase your body's endurance and power during a workout.[12]

Synephrine's mechanism of action is *beta agonism*,[13] the same as ephedrine. The reason synephrine isn't banned is that it's not nearly as strong as ephedrine – at the same dose, the effects are far less pronounced.[13] Research has shown that despite its ability to increase fat burning, synephrine has a more minimal effect on heart rate and blood pressure, compared to ephedrine and other flavonoids.[14,15]

- **ProGBB (Gamma-butyrobetaine Ethyl Ester HCl) – 50mg**

ProGBB is a trademarked form of **gamma butyrobetaine** (GBB) developed by SYNMR Biotechnology. GBB is a *carnitine precursor*, which gets converted into L-carnitine by *gamma-butyrobetaine dioxygenase* (BBD).[16]



By raising carnitine levels, GBB can help aid *fat loss*. Carnitine is responsible for moving fatty acids into your cells' *mitochondria*, which, in turn, burn those fatty acids for energy.[16]

GBB does this by increasing the activity of *brown adipose tissue*, a type of fat tissue that drives *thermogenesis*. Ultimately, most of the calories that GBB helps you burn are lost as *heat*, which is why carnitine has been observed to raise the temperature of lab animals who take it.[17]

That's why we sometimes refer to GBB as "the super carnitine that makes you sweat."

If you want to learn more about what GBB is and how it works, read *ProGBB: The Gamma Butyrobetaine Supplement that Enhances Carnitine*, our in-depth discussion of this stellar ingredient.

- **CaloriBurn GP *Aframomum melegueta* (Seed) (Standardized to 6-paradol 12%) – 50 mg**

CaloriBurn is a trademarked *Aframomum melegueta* extract, developed by NNB Nutrition. It's standardized for *6-paradol*, a molecule that also occurs in *ginger* and is largely responsible for the root's signature flavor.

100% natural proprietary extraction technology

GRAS - Popular Cooking Spice

Preserves ALL the metabolism-enhancing bioactive compounds

Non-Spiked (Adulterated) Product

Proven Potency (Ultra-Low Dose)

Ensured Level of Active Compounds

CaloriBurn preserves all of the metabolism-enhancing bioactive compounds from aframomum melegueta

We like 6-paradol because it helps change your body's *fatty acid composition* for the better. 6-paradol intake has been shown to help convert *white adipose tissue* (WAT) into *brown adipose tissue* (BAT). These two types of fat tissue serve very different functions: WAT helps your body build up long-term stores of energy that are tapped under *starvation conditions*, while BAT is the location where a process called *non-shivering thermogenesis* takes place, in which your body burns calories for *heat*, usually to maintain its core temperature in cold conditions.[18]

In other words, the higher your BAT to WAT ratio, the more energy you'll burn off as heat,[19,20] giving you a *faster metabolism*. One interesting aspect of this process is that BAT doesn't *just* burn fat: it can also use *glucose* as a substrate for non-shivering thermogenesis.[21]

The ability of BAT to use *both* substrates means that even if you don't lose weight, having more BAT can improve your glucose levels and blood lipids.[21]

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Certificate of Analysis: Grains of Paradise Extract (GF200114)
 High Performance Thin Layer Chromatography with Photo-Documentation

Company Name: Nanjing Nutraceutical Bio-Tech Co., Ltd
 Title: Grains of Paradise Extract
 Part Part: 000000
 Sample Received: 02/20/20
 Sample Packaging: 10g Pouch
 Type of Material: powdered extract
 Appearance: Fine Light Brown Powder Color Reddish
 Lot Number: GF200114-44-0000-0000
 S/N: 0000000001
 Latin Name: *Aframomum melegueta* K. Schum. (Zingiberaceae)
 Reference Sample: Lane 5 (Std) (AFR00000001) Lane 6 (Std) (AFR00000002) Aframomum melegueta (Std) Lane 6 (Std) (AFR00000003)
 Lane 7 (Std) (AFR00000004) Engler's Aframome (Std) from Alkermid Labs, Garden Grove, CA
 A. Clark, B. Albrecht, M. S. Edwards, S. Kulkarni, M. Hwang, K. Tran, J. Lopez, J. Jones (2019)
 Sample Preparation: 0.5g/Std, 10g (Batch) (Batch) control/Std at 50°C for 30 min.
 Stationary Phase: silica gel 60, HPLC grade
 Mobile Phase: Toluene:ethyl acetate (2:3:5)
 Detection: (1) Vanillin/Sulfuric, 100°C, 5 min, vs (Reich, E., 2007)
 (2) Vanillin/Sulfuric, 100°C, 5 min, versus (Reich, E., 2007)
 Reference Standard: Lane 6 (Std) (AFR00000001), Lane 7 (Std) (AFR00000002), Lane 8 (Std) (AFR00000003), Lane 9 (Std) (AFR00000004), Lane 10 (Std) (AFR00000005), Lane 11 (Std) (AFR00000006), Lane 12 (Std) (AFR00000007), Lane 13 (Std) (AFR00000008), Lane 14 (Std) (AFR00000009), Lane 15 (Std) (AFR00000010)
 Reference Source: Methods Developed by Alkermid Labs
 GF SOP 02-01

Comments & Conclusions: Lanes 4, 5 are the test sample Grains of Paradise Extract (GF200114), Lanes 6, 7, 8, 9, 10 are the reference samples used for comparison. The test sample Grains of Paradise Extract (GF200114) is consistent with the chromatographic profile of the reference samples of Aframomum melegueta, used above. **This test sample Grains of Paradise Extract (GF200114) met characteristics of Aframomum melegueta seed.**

NOTE: The above conclusion may be a function of the solvent system used in this analysis. The solvent system used for this analysis is not intended to be used for other samples. The quality and purity of the reagents, solvents, and standards used in this analysis are not guaranteed. The results of this analysis are for informational purposes only and are not intended to be used for regulatory or legal purposes. The results of this analysis are for informational purposes only and are not intended to be used for regulatory or legal purposes.

Examined, Reviewed & Authorized by: Khairi H Tran, HPLC, R&D Supervisor, Alkermid Labs
 Report Date: 03/04/20

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This *third-party* lab result confirms that we have *true* grains of paradise, with at least the four peaks we also want. See more in our main *CaloriBurn* article.

Multiple human studies have produced evidence that grains of paradise can be effective for speeding up metabolism. In one study, researchers actually *measured* the basal metabolic rates of healthy men between the ages of 20 and 32 after consuming a grains of paradise extract. The study authors found that the supplement increased the rate of calorie burn.

In another study, *women* aged 20 to 22 who took a grains of paradise extract had significantly lower levels of *visceral fat* by the end of the study period.[22]

• **White Willow (Salix Alba) Bark Extract – 50 mg**

White willow bark extract is standardized for *salicin*, a *precursor* to aspirin. Salicin itself has aspirin-like effects, but is actually metabolized into *acetylsalicylic acid* (aspirin) and other *salicylates* after its ingested.[23,24]

Salicin and its *salicylate* derivatives have powerful anti-inflammatory properties,[25] which can be crucial for weight management as *chronic inflammation* is strongly associated with *insulin resistance* and obesity.[26,27]

Aspirin and the other salicylates, which have broadly similar mechanisms of action, have been investigated as potential therapeutic agents in the

treatment of *type 2 diabetes*, owing to their ability to reduce blood glucose and *increase insulin sensitivity*. [28]



How you say "ECA Stack" without saying "ECA Stack"

Part of aspirin's effect on blood glucose can be attributed to the fact that it *stimulates mitochondrial respiration*, shifting cells' metabolism away from fat oxidation and toward glucose oxidation. Since everyone is so obsessed with "being in ketosis" these days, increasing sugar burning might sound like a bad thing, but think of it this way: the more glucose your cells burn, the less time that glucose hangs out in your bloodstream where it can potentially form advanced glycation end products (AGEs) or damage surrounding tissue via hyperglycemia. [29]

Aspirin also has powerful *anti-estrogenic effects* because of its ability to inhibit *aromatase*, the enzyme that converts testosterone into estradiol estrogen. [29]

Because it has these properties, aspirin is part of the famous "ECA" stack

that consists of *ephedrine*, *caffeine*, and *aspirin*. Although the ECA stack received wide anecdotal and scientific support as a weight loss supplement, the aforementioned FDA ban on ephedrine put a damper on the ECA party.

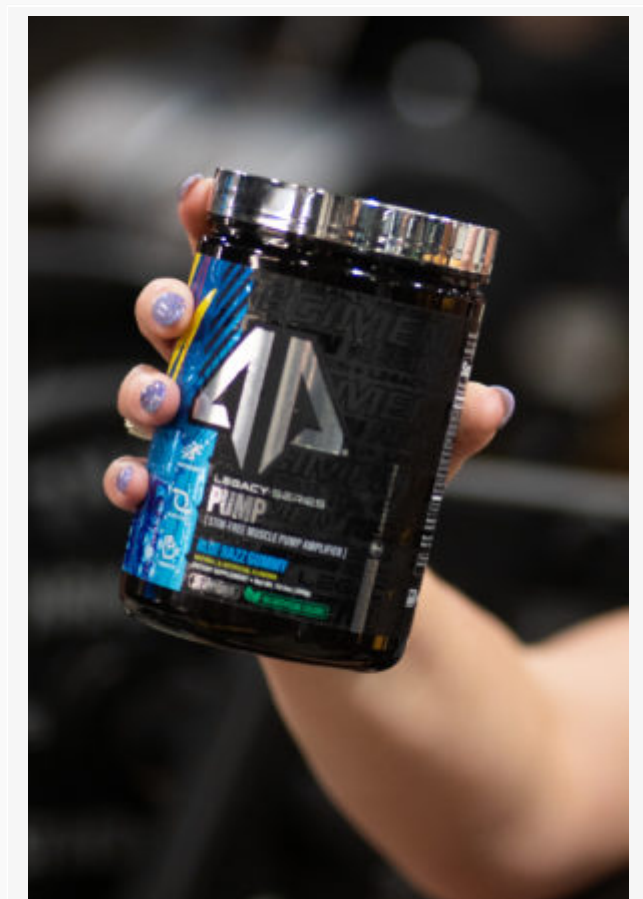
Every once in a while you'll see a supplement trying to recreate some version of the ECA stack, which is pretty much what Alpha Prime is doing with Top Burn. Here, instead of *ephedrine*, you have *ephedra* + *synephrine*. And instead of *aspirin* you get *willow bark extract*, an aspirin-like compound and aspirin precursor.

We like this strategy, and expect it to be effective.

- **CapsiAtra (Cayenne Pepper Fruit Extract) – 25 mg**

CapsiAtra is a trademarked sweet pepper extract developed by Glanbia Nutritionals. It's standardized to contain 2.3% *dihydrocapsiate* by weight, and was developed to compete with *capsaicin-standardized extracts*.

Capsaicin has been an industry mainstay for a long time and has been shown to support fat loss by increasing thermogenesis.[30] But it comes with some concerning adverse effects in susceptible individuals. Among them are *higher blood pressure* and *faster heart rate*. [30] Capsaicin is also pungent, which understandably turns some consumers off.



A Legacy you can hold. Stack Top Burn with

Dihydrocapsiate has similar effects,[31,32] helping increase caloric expenditure in those who take it, but *without* the adverse cardiovascular effects associated with capsaicin.[30]

It apparently works to increase body temperature, in part, by stimulating *vanilloid* receptors.[33]

- **Rauwolscine (2.5 mg) & *Rauwolfia vomitoria* Extract (1.5 mg)**

Extracts of the *Rauwolfia vomitoria* plant are usually standardized for **rauwolscine**. Interestingly, Top Burn from Alpha Prime contains *both* the purified active ingredient *and* the rauwolscine-containing full spectrum plant extract.

Rauwolscine is an *alkaloid* often referred to as “alpha yohimbine.” Although it has a similar mechanism of action to yohimbine, and similar effects, it’s *much* stronger.

Yohimbine itself is *also* a bioactive constituent of *Rauwolfia vomitoria* extracts. Like rauwolscine, it’s an *alpha-2 antagonist*, which means that it activates the *adrenaline* and *noradrenaline* receptors in your cells, thus mimicking the action of those hormones.

The upshot is that yohimbine reduces appetite,[34] aids weight loss,[35] and improves focus.[36] *Rauwolscine* does the same – it helps prevent your body from storing fat, while increasing its body’s supply of accessible energy.[37,38]

Tolerance of rauwolscine varies from individual to individual: most people are fine, but some will get jitters.

- **3,5-Diiodo-L-Thyronine – 150 mcg**

3,5-Diiodo-L-Thyronine, is a *thyroid hormone metabolite* often used in fat burner supplements because of its powerful ability to increase metabolic rate and fat oxidation. Also known as *T2* (following the same naming convention as *T3* and *T4*, the thyroid hormones themselves), this ingredient has stimulant-like pro-metabolic effects *without* causing adverse cardiovascular events associated with stimulant use, like increased heart rate or blood pressure.[39-41]

It should go without saying that if you have a diagnosed thyroid condition, or even *suspect* you might have one, you should consult with your doctor before taking *T2*.

Dosing suggestions



This is a *one capsule* product, so there's not much to say besides *take it in the morning before eating* and get ready to go.

AP suggests that you do not take more than two capsules in any 24 hour period. This is definitely one that you don't mix with other stimulants, not even coffee or tea!

For training, we definitely suggest stacking it with the Alpha Prime Supps Legacy *Pump* formula, which is stimulant-free and will provide some nitric oxide and ergogenic enhancement.

Top Burn: When you need it *strong* and in a hurry

The Top Burn fat burner is exactly what it says it is – *thermal*. This is not for rookies, it's not for beginners, and it's not for anyone with a low stimulant tolerance. It's powerful and it's nearly guaranteed to wire you up.



Follow our Alpha Prime Supps news on
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If you're low on time in your prep, or the average weight loss capsule isn't doing it for you lately, then this is one of those "next level" options that bring serious heat. This brings "ECA stack" style power without it actually *being* the ECA stack.

Additionally, the high-energy components should keep your head and body going in the gym, even when calories are low. We don't *always* want to be in a

ridiculously tired state from dieting, but it does happen towards the end of preps... and Top Burn is the kind of fat burner that helps competitors get over the final hurdle.

AP Regimen Top Burn – Deals and Price Drop Alerts

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