Rich Piana's 5150 Pre Workout: Involuntary Psychiatric Hold

written by Mike Roberto | February 1, 2021
The 5-Percenters asked for it, and they *got* it.

Out of **5% Nutrition's** entire pre-workout range, its most powerful product is **5150**, an ultra-high stimulant supplement and the flagship product of the Legendary Series. It's important to note that **5150 is not for everyone, but if it's for you, you're going to *love* it**. Just like Rich!

5150 is back and better than ever!

This is a very stimulant heavy pre workout supplement, which may be too intense for some users. But if you're the type of person who enjoys a hefty dose of caffeine before the gym, along with other exotic ingredients, then 5150's up your alley.

Here are some of 5150's unique features:

- Formulated with what 5% Nutrition calls a *"stim-heavy caffeine complex"* that delivers intense, long-lasting energy
- *Citrulline* as the main nitric oxide booster to increase muscular pumps and performance
- Uses *Cocoabuterol* and synephrine HCL to suppress appetite
- Reduces muscle fatigue and recovery time
- Heightens mental focus and mind-to-muscle connection… if you can ride the stim wave

Needless to say, 5150 is the strongest pre-workout that 5% Nutrition offers. So start with half a scoop to assess your tolerance, don't exceed the recommended serving size, and avoid use within 4 to 5 hours prior to sleep.

Keep reading to learn more about 5150's intense formula and make sure to sign up for 5% Nutrition news and deal alerts below so you don't miss out on any future content.

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Note: There have been a few versions of 5150, so check each store's label to verify what you're getting. When in doubt, get it straight from 5percentnutrition.com with our coupon.

5150 Ingredient Analysis

5% Nutrition recommends mixing one scoop with 6 to 8 ounces of cold water and consuming approximately 30 minutes before training. But if you're new to the high-stim pre workouts, start with half a scoop to assess your tolerance and *never* combine 5150 with other stimulant-containing supplements or beverages.

Here's what one serving (~13.3 gram) of 5150 contains:

- **L-citrulline – 4g**

BLUE ICE

Supplement Facts

Serving Size: 1 Scoop (13.3g)
Servings Per Container: 30

	Amount Per Serving	% Daily Value*
Vitamin B3 (as niacin)	30 mg NE	188%
Vitamin B-12 (as cyanocobalamin)	1,000 mcg	41667%
L-Citrulline	4,000 mg	**
Beta Alanine	3,000 mg	**
L-Taurine	2,000 mg	**
N-Acetyl L-Tyrosine	750 mg	**
Choline Bitartrate	500 mg	**
Alpha-Glyceryl Phosphoryl Choline 50%	200 mg	**
Cocoa Alkaloid Extract (*Theobroma cacao L.*) (seed) (Cocobuterol)	80 mg	**
Synephrine Hydrochloride	45 mg	**
Toothed Clubmoss (*Huperzia serrata*) (aerial parts) (standardized to 1% Huperzine A)	50 mcg	**
Stim-Crazy Caffeine Complex	513 mg	**
Caffeine Anhydrous, Dicaffeine Malate (Infinergy™), Theobromine, Caffeine (from Green Tea (Leaf)), Yerba Mate Extract (Leaf), Guarana Seed Extract (*Paullinia cupana*), Rauvolfia Canescens (Alpha-Yohimbine) (Whole Plant), Green Coffee Bean Extract (Seed), Gotu Kola Extract (*Centella asiatica*) (Whole Herb)		

*Percent Daily Values are based on a 2,000 calorie diet.
** Daily Value not established.

Other Ingredients: Silicon Dioxide, Citric Acid, Natural Flavors, Sucralose, Blue No. 1.

The new and improved formula for 5150 Pre-Workout!

L-citrulline is a naturally occurring amino acid that's found in some fruits, such as watermelon. Since L-citrulline is such a strong nitric oxide booster,[1,2] it's one of the most common ingredients in pre-workouts. Once L-citrulline is absorbed into the bloodstream, it gets sent to the kidneys where it's converted into another amino acid called L-arginine. Finally, an enzyme called nitric oxide synthase uses L-arginine to create nitric oxide (NO).[1,2]

Nitric oxide is a neurotransmitter that tells blood vessels to relax, which allows for oxygen-rich blood to travel more efficiently throughout the body. A greater amount of blood flow delivered to working muscles results in enhanced muscular pumps and performance.[1,2]

Moreover, L-citrulline is involved in ureagenesis, which is responsible for eliminating ammonia from the body.[1,2] Excessive amounts of ammonia can significantly reduce the body's ability to generate energy in the form of adenosine triphosphate (ATP). By assisting with the clearance of ammonia, L-citrulline may delay the onset of fatigue.

Research has shown that supplementing with anywhere from 3 to 6 grams of L-citrulline may:

- Boost muscular endurance and strength
- Decrease muscle soreness
- Reduce perceived exertion (how difficult an exercise feels)
- Lower blood pressure[1,2]

- **Beta-Alanine – 3g**

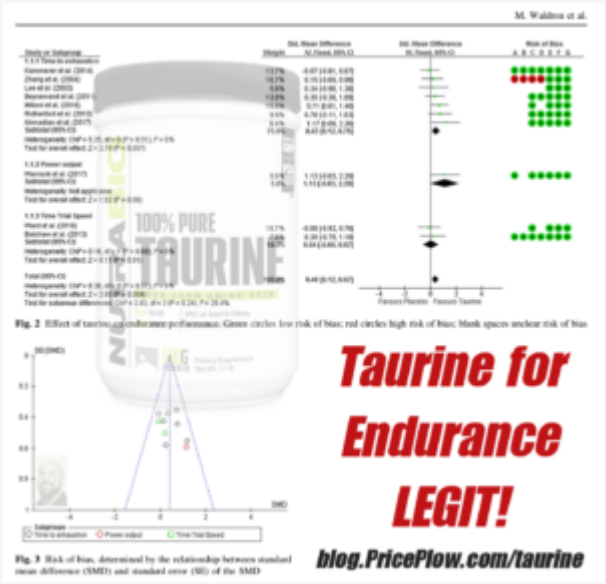
The *original* 5150 labels. How can you NOT love this brand?!

The next ingredient commonly added to pre-workouts is **beta-alanine**. If you feel a tingling sensation (paresthesia) in your face or hands after taking 5150, don't be alarmed! Paresthesia is a typical side effect of beta-alanine, but it's harmless and should subside with prolonged use.

5% Nutrition didn't include 3 grams of beta-alanine for the sensory experience alone. The amino acid actually increases muscular endurance and strength by raising levels of carnosine in skeletal muscle.[3] Carnosine is a dipeptide molecule that's made up of two amino acids, L-histidine, and beta-alanine. Carnosine primarily serves as a proton buffer, which helps the body continue regenerating the ATP required for exercise. If protons, such as hydrogen ions, accumulate in the muscle, it can drop pH levels and negatively affect the user's energy systems.

So the longer the body maintains homeostatic pH levels in working muscles, the longer you'll be able to engage in intense exercise. According to a study published in the journal *Amino Acids*, beta-alanine is an effective ergogenic aid that can significantly increase performance during physical activities.[3]

- **Taurine – 2g**



Taurine, long used for a 'filler' amino acid, turns out to be *legit for endurance*… and after a *single* use![4]

Taurine is a conditionally essential amino acid that's involved in physiological functions such as:

- Osmoregulation
- Bile salt formation
- Stabilization of cell membranes
- Calcium signaling
- Scavenges free radicals[5,6]

Taurine is most known for its health benefits. But, authors of a recent meta-analysis published in the journal *Sports Medicine* discovered that supplementing with taurine can be beneficial for increasing muscular endurance.[4]

Furthermore, taurine may improve cognitive function and increase NO levels even further by:

- Reducing neuroinflammation
- Combating oxidative stress
- Restoring the function of key transporters and receptors
- Stimulating physiological pathways
- Activating nitric oxide synthase
- Enhancing NO bioavailability
- Promoting mitochondria production[4-7]

Overall, taurine has numerous health and performance benefits, so we're glad to see 5% Nutrition uses an efficacious dose in 5150.

- **N-Acetyl-L-Tyrosine – 750mg**

  To boost focus, 5% Nutrition contains 750 milligrams of **N-acetyl-L-tyrosine** (NALT). Similar to taurine, tyrosine is a conditionally essential amino acid, which means that the body's ability to synthesize a sufficient amount may be limited, specifically under certain conditions. For example, in times of high-stress (i.e. intense exercise, injury, or illness), your body likely needs a supplemental form of tyrosine because it can't produce enough on its own. Research shows that supplementing with tyrosine can improve mental focus, energy, alertness, and adaptation to stress.[8]

  Tyrosine carries out its effects by increasing the production of crucial neurotransmitters, such as dopamine, noradrenaline, and adrenaline.[8] Neurotransmitters are chemical messengers that help relay signals between neurons. Since exercise can deplete neurotransmitter levels, supplementing with tyrosine may prevent that from occurring, resulting in improved focus, mental energy, and concentration.[8]

- **Choline Bitartrate – 500mg**

Choline bitartrate is a combination of choline and two tartaric acids. It's intended to enhance choline's bioavailability. Similar to NALT, choline bitrate is a precursor to acetylcholine.

This neurotransmitter is highly concentrated in the neuromuscular junction (where the nervous system communicates with skeletal muscles).[9] So it's essential that acetylcholine is present to facilitate muscular contractions. Therefore, supplementing with choline bitartrate may enhance the mind-to-muscle connection.

Acetylcholine is also heavily involved in learning, memory, and regulation of the endocrine system.[9] Furthermore, choline is an essential nutrient that's important for overall health.

It's primarily found in meat, poultry, egg yolks, sunflower seeds, and seafood.[10] Although the human body can produce choline endogenously, it's not an adequate amount[10]. So consuming additional choline from food and supplements is recommended.

- **Alpha-Glyceryl Phosphoryl Choline 50% (Alpha-GPC) – 200mg**

Choline bitartrate isn't the only source of choline in 5150. To ensure your acetylcholine levels are topped off, 5% Nutrition also added 200 milligrams of **alpha-glyceryl phosphorylcholine** (alpha-GPC). It may seem strange to use two different sources of choline, but each one may have its own unique benefits.

Studies have shown that supplementing with alpha-GPC may increase:

- Focus
- Mental energy
- Mind-to-muscle connection
- Strength
- Performance[11-13]

Similar to choline bitartrate, alpha-GPC carries out its effects by preventing the reduction in acetylcholine levels. But some evidence suggests that alpha-GPC increases growth hormone secretion, which may lead to greater gains in strength, power, and muscle.[11-13] Growth hormone is a peptide hormone produced by the pituitary gland that activates cell reproduction, regeneration, and growth.

What's 5150 Mean?

"Involuntary psychiatric hold".

Section 5150 of the California Welfare and Institutions Code allows a clinician to involuntarily confine a person suspected to have a mental disorder.

As you can imagine, this is a "no-joke" supplement.

- **Cocoa Alkaloid Extract (Theobroma Cacao L.) (Seed) (as Cocoabuterol) – 80mg**

This is one of our favorite patented ingredient thanks to the N-coumaroyldopamine and N-caffeoyldopamine.

Cocoabuterol is commonly found in fat burners and thermogenics because of its ability to:

- Suppress appetite
- Increase energy
- Enhance thermogenesis
- Elevate mood[14,15]

Cocoabuterol is a trademarked form of Theobroma cacao (also known as theobromine) seed extract that's standardized to contain at least 50% alkaloids, which is its primary bioactive constituent. Cocoabuterol was specifically formulated to have an extended half-life and increased bioavailability, which is why we're glad to see 5% Nutrition using this over the generic version.

Research shows that theobromine mainly expresses its effects by blocking adenosine receptors and serving as an antagonist of phosphodiesterase. Furthermore, Theobroma cacao contains large quantities of polyphenols and alkaloids that offer other health benefits, including:

- Anti-inflammatory
- Antioxidant
- Cardioprotective
- Antitumoral[14,15]

The company may not market 5150 as a fat burner, but Cocoabuterol, with its "stim-crazy caffeine complex," can help users shed a few pounds of body fat.

- **Synephrine Hydrochloride (HCL) – 45mg**

Is this all sounding too aggressive and high-stim? Then you may wish to step down just a bit to Kill It *Reloaded* – still very strong and powerful!

Synephrine hydrochloride (HCL) is an alkaloid naturally found in the rinds of bitter orange. Similar to Cocoabuterol, synephrine is commonly found in fat burners and thermogenics. Synephrine can increase metabolism and boost energy levels by acting upon beta-2 and beta-3 adrenergic receptors.[16]

Synephrine may promote fat loss by freeing fatty acids from adipose tissue (fat storage) and using it for energy production.[16] Some research shows that synephrine suppresses appetite levels.[16]

You'll see it's often compared to ephedrine, a prescription drug and strong stimulant that's now banned because their chemical structures and mechanisms of action are similar. However, synephrine is considered much safer than ephedrine, in part because it's not as powerful and isn't addicting.[17]

- **Toothed Clubmoss (Huperzia Serrata) (Aerial Parts) (Standardized to 1% Huperzine A) – 50mcg**

  Toothed clubmoss, commonly known as Huperzia serrata extract, is used in 5150 as a source of huperzine A, a powerful cholinesterase inhibitor.[18] Simply put, huperzine A helps prevent the breakdown of acetylcholine.

  If you combine huperzine A with other supplemental forms of choline, such as choline bitartrate and alpha-GPC, they work synergistically to boost acetylcholine levels. So while choline bitartrate and alpha-GPC actively increase acetylcholine production, huperzine A keeps acetylcholine levels elevated for longer.[18] Some evidence suggests that huperzine A has neuroprotective properties as well.[18]

- **Stim-Crazy Caffeine Complex – 513mg**

One of 5150's main features is its stim-crazy caffeine complex!

5% Nutrition's "stim-crazy caffeine complex" helps make 5150 such a hard-hitting pre-workout. Since it's a proprietary blend, we don't know the exact dose of each ingredient. But in total, it has 400 milligrams of caffeine per scoop, from eight different ingredients.

Here's what goes into 5% Nutrition's stim-crazy complex:

- **Caffeine anhydrous:** This is the same caffeine you find in coffee, soda, and tea, except the water molecule has been removed. It's also faster-acting.
- **Dicaffeine malate (as Infinergy):** This is caffeine and malic acid blend. Compared to caffeine anhydrous, it yields about 75% caffeine by volume and delivers a more smooth and sustained release because it takes longer for the body to break down.
- **Theobromine:** Theobromine has a similar chemical structure to caffeine. Therefore, it stimulates the central nervous system through the same mechanism, resulting in an increase in energy and alertness. However, theobromine provides a smoother, longer-lasting boost than pure caffeine anhydrous.
- **Green tea leaf:** While coffee has 80 to 100 milligrams per 8 ounce cup, green tea averages around 25 milligrams.
- **Yerba mate leaf extract:** The yerba mate plant is a member of the holly family and it's used to make tea. It combines healthful polyphenols found in tea with the caffeinated kick of coffee.
- **Guarana seed extract:** Depending on how guarana seed extract is prepared, it can have up to four times the amount of caffeine content compared to coffee beans. Research shows it can provide an additional stimulatory effect, on top of caffeine.[19]

- **Alpha-yohimbine:** A synthetic form of yohimbine naturally found in Yohimbe tree bark, alpha-yohimbine is widely used for its stimulatory and fat-loss properties.
- **Green coffee bean extract:** Green coffee bean extract comes from coffee beans that haven't been roasted yet, so they contain a fair amount of caffeine and beneficial chlorogenic acids.
- **Gotu kola extract:** Gotu kola has a long and storied history in traditional Chinese medicine for treating numerous skin conditions. More recent clinical trials show that it helps reduce symptoms of anxiety.[20] So it may help take the edge off the 400 milligrams of caffeine in 5150, but won't make you feel less energized.

See *all* of the 5150 Flavors below – some may be from older versions, however!

> With this combination of stimulants, 5150 is almost guaranteed to give you intense, long-lasting energy that will power you through any workout.

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5150 Flavor Variations

Here are all of the available 5150 flavors:

What Does 5150 Mean?

Section 5150 refers to a California mental health welfare code. Here's what 5% Nutrition had to say about what 5150 means to them and why it inspired the name

of a high-octane pre-workout supplement:

5% Nutrition's Legendary Series… for the true Legend, Rich Piana

"Rich Piana originally went with the name 5150 for this ultra-high stimulant pre-workout because he wanted to convey that this pre-workout was not for the ordinary, but for only the serious stim junkies among us. And while Rich wasn't insinuating that taking a few scoops of 5150 pre-workout would result in a 72-hour "involuntary psychiatric hold," he wanted to convey that this product meant business!"

Since 5% Nutrition caters to a more hardcore bodybuilding crowd, they wanted to create a pre-workout that delivers a specific type of experience. If you decide to try 5150, we suggest assessing your tolerance by starting with half of a scoop. With 400 milligrams of caffeine and a variety of exotic stimulants, we don't recommend taking 5150 daily. Perhaps save it for the days you need it most and use a lower-stimulant pre-workout like Kill-It Reloaded for your daily workouts.

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Note: *This article was originally published in 2015, but updated in early 2020 with the most recent formula*.

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