

Where the mind leads, the body will follow.

ArcReactor™ – Pre-Workout Formula

It's time to train... Are you ready?...

We're not asking about whether training strategy, your diet or your gym bag is in order.

The question is: Are you ready to manifest the physique you see in your **mind's eye**? Are you building up your **focus**, laser like **intention**, and the unbreakable mental **strength** that will ensure that this workout **really** matters?...

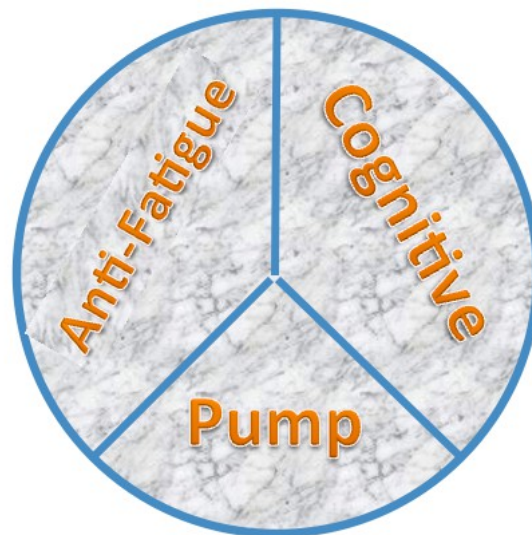
This is what ArcReactor™ is all about: Priming you **physiologically and psychologically** to perform **optimally**. We're talking about generating the mental fortitude to blast you through the physiological barriers, workout by workout, that stand in the way of the your physique, strength and human performance goals.

Switch On The ArcReactor™!

ArcReactor™ takes a three-pronged approach in preparing you for superhuman efforts:

- Prime **Pump** Performance Blend
- **Strength** / Endurance / **Anti-Fatigue** Performance Blend
- Neuro-AMP **Cognitive** Performance Blend

ArcReactor™ Performance Blends



Each Blend has been carefully formulated with **ingredients in clinically tested doses** – you won't find Granite supplements “fairy-dusted” with miniscule amounts to fancy up the label. Additionally, we include a smaller amounts of several **complementary bonus** ingredients, upon which a more aggressive supplement regime can be built (e.g., see patented [Carnosyn®](#) below) by supplementing at other times of the day.

Prime Pump Performance Blend

This synergistic blend of L-Citrulline (free form and as DL Malate), [Nitrosigine®](#), VasoDrive-AP™ and [HydroMax®](#) boosts blood flow, amplifying your pump you get from multiple angles. **Priming your pump** is just one way ArcReactor™ can promote muscle **gains**¹, not to mention make you feel great and look phenomenal. All you have to do is train like your life depends on it.

- The hefty 6g dose² of **L-Citrulline** bolsters nitric oxide synthesis [elevating both arginine³ and nitrite⁴!], opening up blood vessels, driving more blood into muscle, while improving exercise performance^{2,5,6} but diminishing muscle soreness⁵, and thus aiding recovery⁷!
- By adding [HydroMax®](#), a convenient, stabilized, powdered source of **glycerol** [as 65+% glycerol⁸], we've infusing ArcReactor™ with **cutting edge science**. Even at this **very low dose**^{9,10}], our preliminary data¹¹ suggest that [HydroMax®](#) increases intracellular hydration – crucial for maximizing the Pump.
- 750mg of [Nitrosigine®](#) (a silicon **stabilized arginine** source) is more than enough to rapidly elevate blood arginine levels and keep it there for hours¹², further driving the nitric oxide-mediated pump.
- The **casein-derived tripeptides** in **VasoDrive-AP™** have been demonstrated to normalize blood pressure¹³ by inhibiting angiotensin converting enzyme (ACE)^{14,15}. Inhibiting ACE and/or blocking the angiotensin II receptor also improves insulin sensitivity – vital for muscle blood flow and a good pump^{16,17} - and protects your muscle cells (and their mitochondria) against age and free-radical related dysfunction¹⁸⁻²⁰. However, it's the potential **ergogenic effects** of lowering ACE activity²¹⁻²⁴ that have prompted the suggestion ACE inhibitors be scrutinized as doping agents²⁵!

Health Benefits of the Prime Pump Performance Blend:

Nitrosigine® and L-Citrulline have the potential to aid in coronary artery dilation (oxygen delivery to the heart muscle)²⁶ [and possibly improving heart²⁷], as well as enhance immune function²⁸, and even protect against injury to the gut (GI tract)²⁹ and kidneys²⁶. By inhibiting the ACE, VasoDrive-AP™ can help preserve blood vessel (endothelium) health, a good thing when it comes to preventing heart disease¹⁵ and heart enlargement³⁰⁻³².

Strength/Endurance/Anti-Fatigue Performance Blend

Everyone loves a great pump, but it's mechanical overload and metabolic stress – the heavy and hard, fatiguing (and painful) training – that are tried and true muscle growth signals³³⁻³⁸. In other words, outrageous gym performances goes hand in hand with outrageous physiques, and the ArcReactor™ Strength/Endurance/Anti-Fatigue Performance Blend exploits the synergy³⁹ of 4 ergogenic ingredients (in scientifically-backed dosages) to put you on the path to outrageousness:

- **Creatine monohydrate** is a supplement staple⁴⁰ for good reason: It increases **performance**⁴¹, **muscle** and **strength** gains^{42,43}, and is intrinsically anabolic⁴⁴. We intentionally put [Creapure®](#) creatine into the ArcReactor™ - as part of a **pre-workout** formulation – to make use of the creatine-loading effect of muscle contraction^{43,45,46}. For an even better creatine-loading effect, you can employ an intra-workout carb source (like **Recovery Factor X™**). Why you ask?.. The pairing of creatine along side carbohydrate means both more creatine storage⁴⁷ **as well as** more glycogen storage⁴⁸. Thus, intra-workout carbs (plus creatine) means higher glycogen levels⁴⁹ and sustained performance during your workout^{50,51}.
- **β-Alanine** supplementation fills your muscles' carnosine tanks^{52,53}, topping off your capacity to buffer acidity during high intensity efforts⁵⁴. This means a **stronger kick** at the finish line⁵⁵, better performance lifting weight⁵² or doing intervals⁵⁶, and more importantly, **more muscle mass**⁵⁶. [In other words, we've stacked β-alanine with creatine in ArcReactor™ to give you better gains^{57,58}.] The 1.8g dose of β-alanine (as patented [Carnosyn®](#)) found in ArcReactor™ alone should produce a modest increase in muscle carnosine levels⁵⁹, but limit the skin-tingling (paresthesia) side effect^{54,59} that larger doses of β-alanine are famous for. [NOTE: Ergogenic effects from β-alanine are a probably a matter of increasing muscle carnosine over time⁶⁰. Supplementing with ~3-4g of additional β-alanine, spread throughout the day should produce much higher carnosine levels more quickly^{52,53}, but a cumulative dose of ~180g, spread over a longer loading period, should also do the trick^{60,61}.]
- **L-Ornithine L-Aspartate (LOLA)** adds even more supplement synergy to ArcReactor™. In small doses like those in the **Strength/Endurance/Anti-Fatigue Performance Blend**, this simple ingredient has been shown to reduce muscle damage⁶² and perceived fatigue⁶³, as well as to synergize with caffeine (see below) as a mood-enhancer⁶⁴. When stacked with **arginine**⁶² (see above), or with carbs, protein and **creatine**⁶⁵, LOLA amplifies fat loss and gains in fat-free mass and strength. [**Higher doses** of LOLA may even enhance IGF-1 delivery to muscle⁶⁶, lower protein breakdown^{67,68} and counter^{69,70} the fatiguing effects of ammonia⁷¹.]
- Found naturally in food, **Betaine** is cell volumizer (osmolyte) and source of methyl groups, meaning it's good for the liver and kidney⁷², and used in the synthesis of molecules like creatine and carnitine⁷³. Betaine is both **ergogenic** and inherently **anabolic**: Just two weeks of supplementation

(2.5g / d via 2 x 1.25g doses) can increase bench and squat performance, jumping power⁷⁴⁻⁷⁶, and make fatiguing exercise feel easier⁷⁷. When fed to growing livestock, betaine increases muscle gains and reduces body fat⁷³. More importantly, in exercising **humans** (like you, you animal!), the same modest dosing regime is enough to amplify both the intracellular anabolic signaling and reduce blood cortisol⁷⁸, both of which mean more muscle growth^{79,80}.

Health Benefits of the Strength/Endurance/Anti-Fatigue Performance Blend:

Creatine supplementation may protect against heat, musculoskeletal injury and neurodegeneration⁴². Both creatine and betaine are heart friendly via their anti-inflammatory effects⁸¹⁻⁸⁴ and by lowering blood homocysteine levels⁸⁵⁻⁸⁷, a predictor of heart disease⁸⁸. Additionally, evidence is starting to accumulate that increasing carnosine levels via β -alanine supplementation could theoretically have anti-tumor and anti-diabetic effects⁶¹.

Neuro-AMP / Cognitive Performance Blend

The rubber meets the road – **hard** – with ArcReactor™’s Neuro-AMP / Cognitive Performance Blend. When it’s time to blast through your workout with laser-like focus, count on ArcReactor is an energy source to turbo-charge your willpower.

- The Neuro-AMP / Cognitive Performance Blend stacks three **purine alkaloid** sources of clean cognitive energy: **Theacrine (100mg)**, **caffeine (250mg)** and **theobromine(60mg)**. When it comes to strength and power performance⁸⁹⁻⁹⁴ caffeine isn’t **always** an effective ergogenic for everyone, all the time⁹¹. So, ArcReactor™ contains maybe the “cleanest” over-the-counter stimulant of them all: **Theacrine** (as **Teacrine®**). Theacrine improves mood, focus, subjective feelings of energy, and motivation to exercise, but actually **decreases anxiety**. Even after months of daily use (300mg) theacrine does not lose effectiveness or hook you into a nasty habit⁹⁵ [unlike caffeine^{91,96}]. On the other hand, co-administering theacrine **with** caffeine may actually prevent de-sensitization⁹⁷. The ArcReactor™ “alkaloid trinity” is topped off by a small dose of **theobromine**, another mood booster for some individuals⁹⁸⁻¹⁰⁰ that counterbalances the caffeine’s hypertensive (blood pressure elevating) effect^{101,102}. It’s possible that theobromine may synergize with caffeine to promote arousal¹⁰³ but reduce perceived exertion during exercise because it’s also a bronchodilator^{97,104-107}.
- **N-Acetyl L-Tyrosine** is ArcReactor™’s soluble source of L-tyrosine¹⁰⁸⁻¹¹⁰, a precursor for catecholamine synthesis (e.g., noradrenaline and dopamine)¹¹¹⁻¹¹³, thus supporting brain neurotransmitter levels¹¹⁴ to improve cognitive performance^{115,116}. For instance, in lab animals put under stress, tyrosine normalizes feeding and activity behavior^{114,117}. In stressed “gym animals” (that’s you, by the way), tyrosine may actually promote the aggressive mentality¹¹⁸ needed to push past performance barriers.

- [GS15-4®](#) is a panax **ginseng extract** that's enzyme-fermented to dramatically increase ginsenoside bioavailability¹¹⁹. Ginsenosides are **adaptogens**, meaning they reduce the stress response¹²⁰, e.g., by enhancing mitochondrial function and protecting against free radicals¹²¹. Ginsenosides are yet another way ArcReactor™ can help you kick butt in the gym by improving **both** psychological and physical performance¹²² during exercise¹²³.

Health Benefits of Neuro-AMP / Cognitive Performance Blend

Theacrine increases libido and has antioxidant (and thereby hepatoprotective¹²⁴, anti-inflammatory and pain-relieving¹²⁵ properties. Theacrine could even improve your blood lipid profile⁹⁵. Both tyrosine and ginsenosides such as those in [GS15-4®](#) improve cognitive performance^{122,126,127} [e.g., they improve memory^{128,129}]. Finally, adding L-Ornithine (see Strength/Endurance/Anti-Fatigue Performance Blend) to caffeine may make it an even better mood enhancer⁶⁴.

Disclaimer: Responses to alkaloid stimulants are variable^{99,130}. L-Tyrosine may interact with certain drugs (such as MAOIs, Levodopa and thyroid medications).

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