

Performax Labs 3DPUMPMaX: The Best Way to Test 3DPUMP Breakthrough!

written by Mike Roberto | April 22, 2022

Looking for the best way to try the new 3DPUMP Breakthrough ingredient all on its own? **Performax Labs 3DPUMPMaX** is the way to go, bringing it in 8 capsules!

After their wildly successful rebrand that included upgraded *HyperMax Extreme* and *VasoMax* pre workout supplements, Performax Labs is back with yet another way to get you pumped to the gills. This time, they're keeping it "simple", with a capsule-based pump supplement that's made primarily from one patented ingredient: *3DPUMP Breakthrough*:



Test 3DPUMP with Performax Labs 3DPUMPMaX

3DPUMPMaX is a stimulant-free capsule-based pre-workout supplement that leverages a full 6 gram dose of 3DPUMP, amplified by 50 milligrams of AstraGin. With the citrulline, amla, and glycerol inside, this should enable incredible nitric oxide production, increased blood flow, and better hydration, leading to epic *pumps*.

It will stack great with nearly any supplement, but taken alone, this is the best way to evaluate the true power of 3DPUMP, so you can feel it for yourself.

We cover the science behind the 3DPUMP, diving deeper into the patent's pilot study and the key specifics in the amla fruit extract inside. First, take a moment to subscribe to our Performax Labs news alerts so you stay up to date with the *maxed out* brand:

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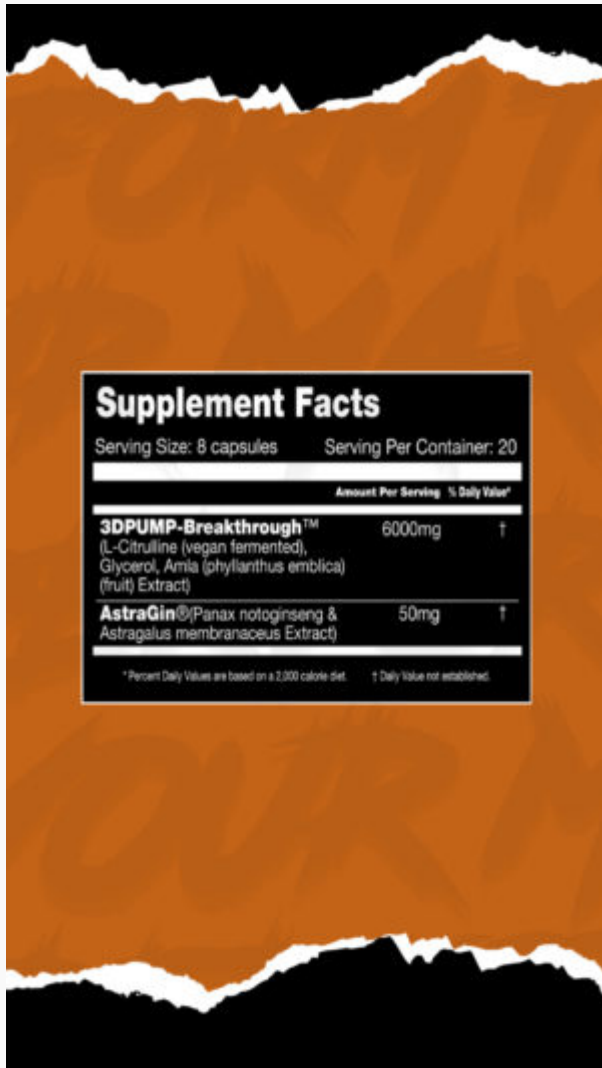
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3DPUMPMAX Ingredients

Performax Labs is keeping this one simple: 3DPUMP amplified with AstraGin. Let's dive into the three components *within* 3DPUMP:

- **3DPUMP-Breakthrough (L-Citrulline (vegan fermented), Glycerol, Amla (phyllanthus emblica) (fruit) Extract) – 6000mg**



3DPUMP Breakthrough is a new patented pump ingredient that has a novel blend of nitric oxide boosters in **L-citrulline** and **amla fruit extract** along with hyper-hydrating agent **glycerol**. Launched in late 2021, it's one of the hottest new ingredients in the industry, and is patent-protected.[1]

Although it's not shown on the label, we can verify that the ingredient is *only* being sold with the following blended doses:

- 3 grams of L-citrulline
- 1.2 grams of glycerol
- 165 milligrams of amla

Inside of the 3DPUMP patent, there's a *pilot study* that gives us some details, and it provides a few clues as to what makes this more special than just utilizing citrulline alone:

The 3DPUMP Pilot Study

The researchers behind 3DPUMP conducted a placebo-controlled pilot study to measure *thigh circumference* and *total body mass* before and after a leg day. The participants were *weight trained men* whose ages averaged the late 20s.[1]

The materials

Each was randomized into one of four different groups on four different leg days (which all consisted of the same workout):[1]

- Placebo (water)
- 1.5 grams of glycerol (65% yield)
- 150 milligrams of amla fruit extract*
- 1.35 grams of glycerol (65% yield) *and* 150 milligrams of amla fruit extract*

**Note that this pilot study used a slightly smaller amount of amla than the 165 milligrams that ended up in the final 3D PUMP production ingredient.*

The exercises

Every day was the same leg day, with a 3-day washout in between sessions. The participants took their drink, waited 30 minutes, and began their workout. They had to do loaded goblet squats and seated leg extensions, performing 3 sets of 10-12 reps, resting 60 seconds between sets. There were two minute rests between the exercises.[1]

After each session, the participants underwent DEXA scans, which measured their thigh circumference.

The results

6G's OF

3D PUMP
BREAKTHROUGH™

PATENTED COMBINATION OF CITRULLINE,
GLYCEROL AND AMLA EXTRACT FOR
SUPERIOR PUMPS

Performax Labs brings you this unique new pump agent that will amplify your citrulline pumps... and then some!

Each group gained lean body mass *and* leg size, but group four – **the glycerol + amla fruit extract group** – had **significantly better results**. They had a whopping *2.21 centimeter gain in thigh circumference*, and averaged *693.1 grams increased total lean body mass*. The placebo group had gains, but less impressive – *1.12 centimeter thigh circumference increase* but only *30.4 gram total lean body mass increase*. [1]

Both of these are very impressive – it's the increased thigh circumference gain that indicates an increased pump. The increase in total lean body mass could possibly be attributed to the unique hydrating effect where *less urination occurs after taking glycerol*, which we find very convenient for training sessions. However, these were *lean* body mass measurements, and it seems like amla had a major part of driving even more water *and* blood into the cells.

Another interesting take is that the amla-*only* data showed better increases than the glycerol-*only* data (likely non-statistically significant). All in

all, this indicates that the *amla* is the unheralded hero in 3D PUMP. So let's cover that in greater detail, then get to citrulline and glycerol:

- **Low molecular tannins from *amla* fruit extract – 3DPUMP's secret weapon – 165 mg**

Amla fruit is scientifically known as *Phyllanthus emblica* and is sometimes called *Indian Gooseberry*. It has rich historical history because it provides cardiovascular health benefits – there are many antioxidants inside that promote better endothelial function and reduced platelet aggregation.[2] Researchers have published studies calling it “*the ayurvedic wonder*”,[3] and 3DPUMP's creators seem to have figured out some of the best parts to extract out of it, getting a lot out of a low dose.



At the time of 3DPUMPMax's announcement, there isn't any research specific to *Amla* and *athletes*, but the pilot study leads us to believe it's the key. Anytime you see “improved endothelial health” or “better blood flow” in research studies, there's a good chance it could work well in a pre-workout pump ingredient.

So what's inside *amla* that's making it work?

Low Molecular Weight Tannins

The amla used in 3DPUMP is standardized for >68% *low-molecular weight tannins (LMWt tannins)*, specifically *punigluconin*, *pedunculagin*, *emblicanin-A*, and *emblicanin-B* – and likely a few others.[4] In the body, these tannins get converted into the powerful *uroolithins A-D*,[5] which have been shown to improve mitochondrial health and output over time.[6]

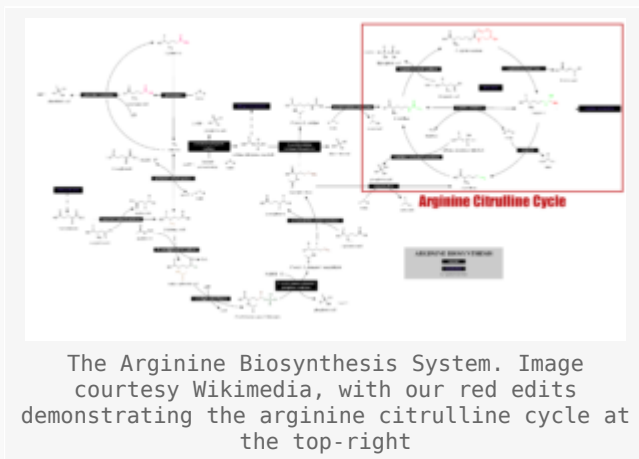
Even better, research has shown that *uroolithin B* has some very anabolic properties.[7] There may even be some nootropic qualities as well.[8]

Again, note that the final production run of 3DPUMP used even *more* amla than the pilot study (165 milligrams as opposed to 150), so the effects in future studies may be even *better*.

The other two ingredients aren't just taking up space, though. Most of us know the benefits of nitric oxide boosting *citrulline* and hyper-hydrating *glycerol*, but let's cover them as well:

- **L-Citrulline – 3 g**

In 8 capsules of 3DPUMPMax, you'll also get **3 grams of L-citrulline**, which is a clinically-studied dose that has been shown to boost nitric oxide (NO) production (equivalent of roughly 6 grams of citrulline malate).[9] L-citrulline gets converted to *L-arginine*, which is the precursor to nitric oxide in the nitric oxide synthase pathway.[10]



With the increase in nitric oxide, the body experiences an effect known as *vasodilation*, relaxing and widening the blood vessels, which then leads to improved blood flow.[11,12] This has been well-researched for its cardiovascular benefits (such as lower blood pressure[13]), but for us, we zoom in on the *pumps* that we get from that blood flow!

L-citrulline has become a “de-facto standard” ingredient in pre-workout / nitric oxide boosters for this effect, replacing L-arginine that was used

decades ago because citrulline performs better.[11] Reason being, when supplementing L-arginine, too much gets broken down too quickly before it can get converted to NO, by citrulline bypasses this “first pass effect”, ultimately getting *more* plasma arginine and nitric oxide than had you supplemented arginine itself![11,14,15]

Other benefits of citrulline



Prepare for the PUMPDEMIC! Performax Labs has upgraded VasoMax, and with a fully-dosed blend of both 3DPUMP and Nitrosigine, this one's going to blow the doors off the gym

Research has shown that citrulline's blood flow improvements lead to other benefits downstream, such as better recovery, greater work output, and more ATP (cellular energy) production.[16-18] It's been studied well-enough to have confirmation from meta-analyses, with researchers concluding that citrulline also lowers perceived training exertion and even helps with waste removal (hence the reduction in soreness).[19]

That covers the two endothelial health boosting ingredients, which provide the blood-based pump. How do you amplify that? With more *water*:

- **Glycerol: “Hyperhydrate” your body**

In the 3DPUMP pilot study, we saw how the combination of Amla *and* glycerol significantly improved both thigh circumference and lean body mass.[1] Amla supports blood flow, but it's the **glycerol** that supports *water retention* and *hydration*. Paired together, there's a powerful, complementary effect.

Also known as *glycerin*, glycerol is a *sugar alcohol* that makes up the basis of numerous biological molecules and fatty acids (for instance, *triglyceride* has a glycerol backbone).[20] When ingested, it's been shown

to increase the body's total volume of water.[21] It does this by binding to water, helping the body you load the blood, plasma, and muscle tissue.[22]

This can lead to a "cell hydration pump" we sometimes call a "water pump", but it assumes that you drink it with enough water, which is a highly strong recommendation for 3DPUMPMax. With enough glycerol and water added, researchers have noted a state of "hyperhydration".[22-25] Such a state leads to better endurance and improved heat tolerance, but it's key to emphasize that dose and water intake matters.[21,23,24,26]

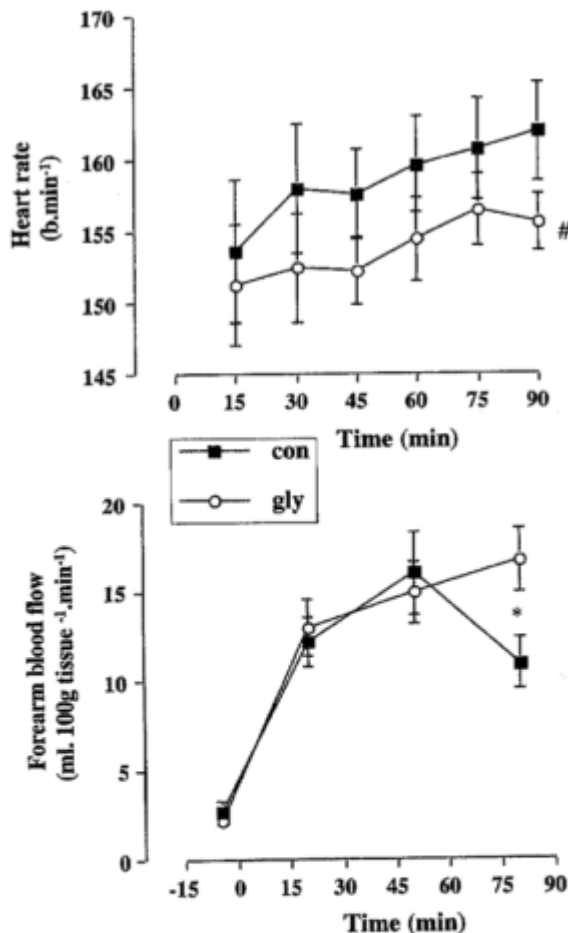


Figure 5 — Heart rate (top) and forearm blood flow (bottom) during 90 min of bicycle exercise at 98% lactate threshold with the ingestion of $1 \text{ g} \cdot \text{kg}^{-1}$ body weight of glycerol in $20 \text{ ml} \cdot \text{kg}^{-1}$ bw dilute cordial (GLY) or $20 \text{ ml} \cdot \text{kg}^{-1}$ bw dilute cordial (CON). #Main treatment effect ($p < .05$). *Difference ($p < .05$) compared with CON. Data expressed as means \pm SE ($n = 6$).

The lowered heart rate is expected given the above data, but look at the significantly increased forearm blood flow after an hour! [23] This is perfect for a pre workout

Most glycerol research has been performed on *endurance* athletes. Trained athletes have been shown to last longer with glycerol than without, going longer distances before succumbing to exhaustion.[24] Research has shown that 20 days of glycerol use improves both aerobic *and* anaerobic power,[25] however, so there's a good chance that it'll be beneficial to lifters using 3DPUMPMax.

To make matters even better, and synergizing with the other two 3DPUMP components, glycerol has also been demonstrated to provide *better blood flow* in tests on the forearms, as well as reduced cardiovascular stress.[23] Speaking of stress, this is a highly emphasized ingredient to use if training in heat, which it can protect against.[23,24]

Again, to get the most out of this ingredient, make sure you stay hydrated with plenty of water when using 3DPUMP. Don't worry about trips to the bathroom – thanks to its ability to increase water retention, glycerol has actually been shown to *reduce* urination volume after use![24,25]

With the trifecta of ingredients inside, there's a reason why savvy brands like Performax Labs are leaning so heavily on 3DPUMP. You'll also find it in the new *VasoMax and HyperMax Extreme* formulas! But 3DPUMPMax is the best way to try it solo... well, *nearly* solo. Next up, we amplify the citrulline uptake:

- **AstraGin (Panax notoginseng & Astragalus membranaceus Extract) – 50mg**

Just like in VasoMax, Performax Labs is adding the industry's premier bioavailability booster in **AstraGin** from *NuLiv Science*. This is a patented extract of *Astragalus membranaceus* and *panax notoginseng* that works to boost the absorption of the other ingredients inside, with data provided supporting its use alongside citrulline.[27]

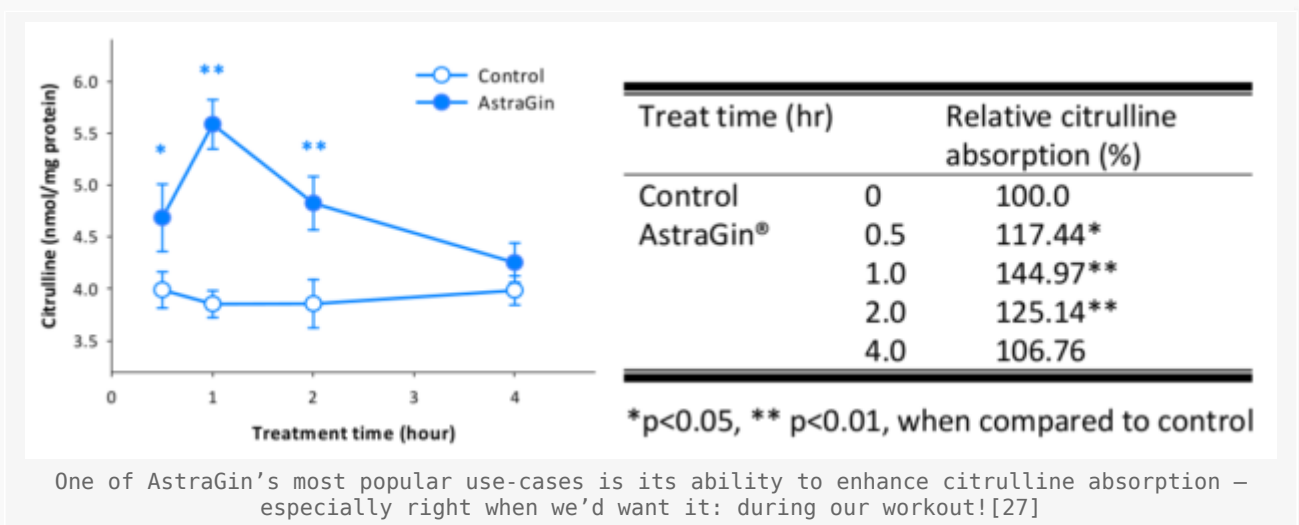


In general, AstraGin works through two mechanisms:[27]

1. It improves gut permeability, enabling more nutrients to be absorbed through the intestinal walls
2. It boosts increases expression of key intestinal nutrient transporters like *SGLT1*, *CAT1*, and *GLUT4*

Once inside the intestinal cells, they can be transported to the liver via the portal vein, and then through the rest of the body – far better than simply being excreted!

NuLiv Science has provided data showing that AstraGin promotes better uptake of citrulline, which is in 3D PUMP as discussed above:[27]



Finally, the data also shows better liver cell ATP production, which may also promote improved energy in training sessions.

And that's it! Just 3DPUMP and some extra amplification.



Performax Labs is bringing the *house* down with the latest in their HyperMax series. This could be your first chance to try 3DPUMP Breakthrough!

The *Pumpedemic* continues! The best way to test 3D PUMP

When 3DPUMP first hit the scene, we thought that Performax Labs had gone *all-in*, putting it in both the new HyperMax Extreme 3D *and* VasoMax. But that was premature – *now* they're all in!

Those two pre-workouts are downright incredible, but there are other ingredients in them that confound the experience. If you're looking to experience 3DPUMP *on its own*, 3DPUMPMax is by far the best way to do that.

Just make sure you get plenty of water to take full advantage of it. And once you've assessed, you can consider stacking this with the incredibly popular *OxyMax* fat burner for a unique weight loss stack that'll preserve your pumps!

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