

InnovaPharm NovaPump: 2019's Best Pump Supplement Already Out in January?!

written by Mike Roberto | January 20, 2019

November 2019 Update: *This formula has somehow been improved upon, with InnovaPharm adding **nootropics** in their upgraded **NovaPump Neuro** formula!*

Pre-workouts have become the go-to supplement for gym goers around the world. However, not everyone can handle the *massive* amount of stimulants and caffeine that companies have turned to in the last few years. Thankfully, *InnovaPharm* (who also makes a spectacular stimulant-based pre workout named Limitless) has dropped a new caffeine-free pre-workout: **NovaPump!**



The year is young but this stimulant-free masterpiece may not get topped in a *long* time...

We've had this article ready for a while, but decided to hold off because the first batch sold out before we could even publish it – this stuff is *that* good!

Innovation and Pumps with *Two* New Ingredients

The premise of NovaPump is simple: InnovaPharm sought to create an ergogenic

stimulant-free pre-workout that brings something *new* to the table. All of the stimulants and mega-doses of caffeine aren't always necessary (especially if training at night), and even many of those stim-based pre workouts need a boost in the pump department. NovaPump one provides *well* beyond that, and definitely isn't your same old nitric oxide supplement.

Meet Super Spinach and PegaPump

Thankfully, InnovaPharm lived up to their name and broke the mold with two ingredients we haven't seen before: **Super Spinach** and **PegaPump**. We'll never say no to new ways of enhancing nitric oxide synthesis and all of the benefits that brings, and clearly the customer base didn't either – it sold out far faster than anyone predicted. Now that it's back in stock, you can check our NovaPump prices and sign up for InnovaPharm news alerts to get contacted for their giveaways and reviews, and then we'll get to the science!

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Mike's NovaPump Review

Stim-Free *Absurdity!* I'm not even sure I'm worthy of this supplement, to be quite honest:

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NovaPump Ingredients

NovaPump's label has the "40/20 serving split", meaning you get 40 servings at half of a scoop, or 20 servings at the *full scoop* dosage. Below we show dosages based upon the full scoop serving size:

- **Citrulline Malate (8g)**

Supplement Facts					
Serving Size: 1/2 Scoop 1 Scoop (8g/16g)		Servings per Container: 40/20			
	Amount Per 1/2 Scoop	%DV	Amount Per 1 Scoop	%DV	
Citrulline Malate	4g	**	Citrulline Malate	8g	**
GlycerPump™ Glycerol Powder (65%)	2g	**	GlycerPump™ Glycerol Powder (65%)	4g	**
Super Spinach® Red Spinach (Amaranthus tricolor) Leaf Extract	500mg	**	Super Spinach® Red Spinach (Amaranthus tricolor) Leaf Extract	1g	**
Agmatine Sulfate	500mg	**	Agmatine Sulfate	1g	**
PegaPump™ Peganum Harmala L. Extract	125mcg	**	PegaPump™ Peganum Harmala L. Extract	250mcg	**

** Daily Value (DV) Not Established

Other Ingredients: Natural and Artificial Flavor, Silica, Citric Acid, Bitterness Blocker, Sucralose, Acesulfame K

InnovaPharm's NovaPump brings *two* new ingredients: **Super Spinach** and **PegaPump**

The most recognizable ingredient of the formulation, **citrulline malate** is a combination of citrulline and malic acid. *Citrulline* is a precursor of *arginine* – the compound that leads to nitric oxide production in your body. You may ask yourself – if I wanted more nitric oxide, I should supplement with arginine then, no? While this was a commonly held thought for years, research has showed that arginine suffers from poor bioavailability as it's broken down by arginase in the gastrointestinal tract.[1]

Citrulline is much more bioavailable than arginine, making it the ideal precursor to use for supplementation.[1] By elevating the amount of L-citrulline in the blood, the body produces more nitric oxide than by supplementing arginine itself!

Now for the “why”: nitric oxide allows more blood to flow throughout the body by *relaxing the vasculature*. This enhanced blood flow is the physiological mechanism behind the “pumps” the industry has connected to citrulline. The heightened blood flow that occurs upon citrulline supplementation may also improve recovery, increase nutrient uptake, oxygen utilization during exercise, reduce fatigue, and even help relieve training-related soreness.[2-5]

The dose here is also great as 8g is right in line with the current literature, and there have even been studies showing 6g of citrulline malate (yielding a bit over 3g actual L-citrulline) leads to clinical benefits.

Long story short, this dosage of citrulline lets you feel *massive and vascular* during your workout, but we've seen it all before, and InnovaPharm knew they'd have to bring a hell of a lot more. Good news: they did. Let's keep going.

- **GlycerPump (4g) (Glycerol Powder 65%)**

GlycerPump™

GLYCEROL POWDER 65%

A more stable form of Glycerol Powder
yielding 65% glycerol content.

GlycerPump is a new, stable form of 65% glycerol powder made by Pinnacle Ingredients. We've used it before, but never 4g at once!

Glycerol, known to all biochemistry majors as the backbone of triacylglycerols, is one of the oldest dietary supplements still in use. The industry primarily uses glycerol as a *hydration* enhancing agent. However, most products used inferior forms of glycerol that had a low amount of actual glycerol by weight, spoiled easily, and even left disgusting clumps and chunks in shaker cups.

Pinnacle Ingredients blessed the industry when **GlycerPump** dropped. We still think of it as one of the nicer “supplement solutions” in the last few years, since other forms of glycerol were really getting annoying. GlycerPump solves the problem by using a specific preparation with *spray drying* that eases the clumping, the spillage, and allowed for more glycerol per gram.

Cell saturation: drink your water!

The Mother Lode of Pumps



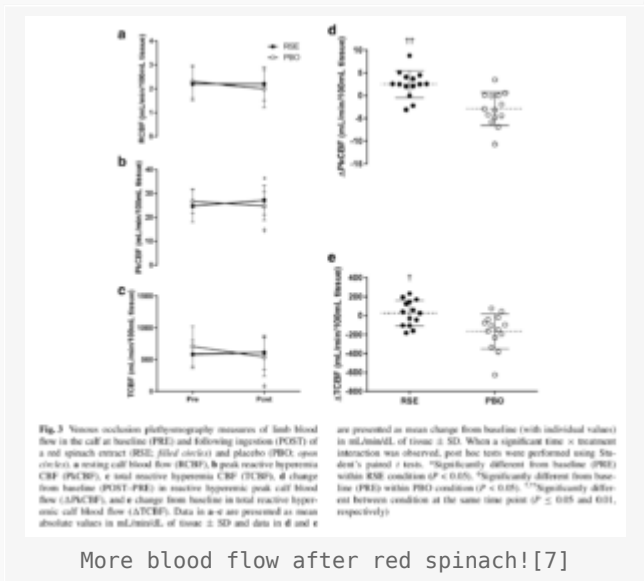
Meet the Mother Lode of Pumps: *NovaPump*.

Glycerol will help saturate your muscle cells with water as long as you take it with *plenty of fluids*. More fluid in the cell, as you likely have guessed by now, means a bigger muscle.[6] We like to refer to the “swelling” induced by GlycerPump as “water pumps,” and it gives that “swole” effect to many users when properly hydrated. The key here is to **consume tons of water whenever you use glycerol** to see the best side of this ingredient.

And the dose? 4g is *hilariously* above the competition, so InnovaPharm has our approval so far! In fact... we had never tried a dose this large before NovaPump! So while that's new in a way, it's time to get a new *ingredient*:

- **Super Spinach (1g) (Red Spinach – Amaranthus Tricolor Leaf Extract)**

Yes, you read that title correctly. **Super Spinach** is an extract of **red spinach leaf** full of blood flow enhancers, meant to take on all of those beet root extracts (too many of which are non-standardized and relatively weak).



Monstrous pumps, monstrously long

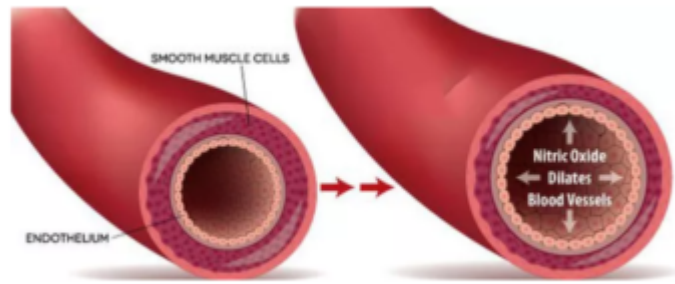
In a recent investigation, **red spinach extract increased nitric oxide 50x more than beet juice and 4x more than beet root extract.**[7] Since beetroot juice is the gold standard of nitric oxide boosting compounds, this is no meager finding. It doesn't end there – the **red spinach extract also may keep nitric oxide levels boosted for an entire 24 hours.**[8] So we have a *massive boost that lasts a long time.*

As you may have guessed, the enhanced blood flow will compound with citrulline to provide more nutrient delivery, increased stamina, and reduced fatigue. It's hard to tell what dose is the *ideal* dose for a new ingredient – but we can tell you we feel the pumps!

Expect to see more coming out about Super Spinach. Because it's so full of nutrients and may even lower blood pressure thanks to those vasodilation properties, it's being introduced to the general health market and we expect a lot more research to come.

How Nitric Oxide Works...

NO is naturally made in the endothelium (blood vessel walls). One of the most important functions of NO is its crucial effect on the cardiovascular system. NO helps support the relaxation of blood vessels allowing them to dilate and expand, promoting healthy blood pressure, increased circulation and allowing oxygen to flow more freely to cells.



How Nitric Oxide Works (Image Courtesy SuperSpinach)

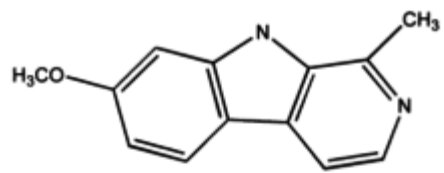
- **Agmatine Sulfate (1g)**

Agmatine is the logical next step in a supplement that includes both citrulline and red spinach extract. Agmatine is an inhibitor of *arginase* – an enzyme that breaks down arginine in the body.[9] As discussed in the section on citrulline, arginine gets converted to nitric oxide via nitric oxide synthase. If we stop the breakdown of arginine, our body can convert more arginine into nitric oxide – so we get *even more* nitric oxide boosting.

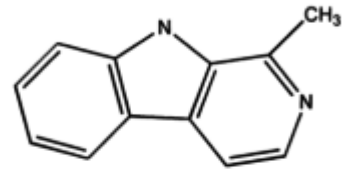
We liken agmatine to “playing defense” with our pump ingredients. It’s in the formula to help citrulline and Super Spinach work more efficiently by helping produce more nitric oxide. 1g is right around the dose we like for serious pumps (1.5g is what we would suggest if taking it *alone* but that’d be overkill here).

Not done with new ingredients yet:

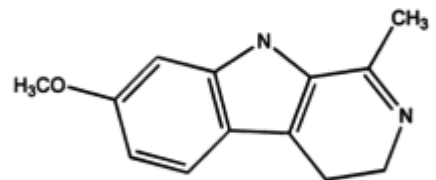
- **PegaPump (250mcg) (Peganum Harmala L. Extract)**



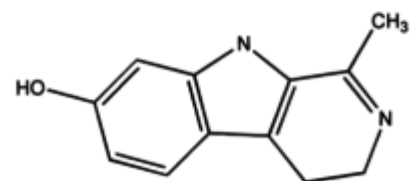
Harmine



Harman



Harmaline



Harmalol

Fig. 1. Chemical structures of harmala alkaloids.

Peganum Harmala brings some very potent NO-boosting alkaloids[10]

PegaPump is an extract of *Peganum harmala*, a plant known as the *Syrian rue*. PegaPump focused on specific alkaloids of the plant, like *Harmine*, *Harmaline*, and *Harmalol* that promote vasorelaxation.[10] Vasorelaxation means that a blood vessel is less constricted – which means it can accommodate more blood flow.

You can think of PegaPump has the haymaker of the vascular-relaxing combination present in NovaPump: The first jab is a big dose of citrulline, Super Spinach provides the left cross, and PegaPump is the final match-ending uppercut.

Beyond this extract, *Syrian rue* is used worldwide as a cardiovascular health-promoting herb – specifically as a treatment for hypertension and heart

disease. Research shows that Syrian rue may help reduce systemic blood pressure and total peripheral resistance (think the resistance blood must overcome to flow), improve the peak flow out of the aorta, and even act as an immune-boosting compound.[11-14] While InnovaPharm went with PegaPump as a pump inducer, the general health benefits lifters get per serving are amazing!

We're still holding our breath for some human trials on PegaPump – but we're optimistic. If the results continue to turn out this well, harmala extracts could also revolutionize capsule-based pump products because of *its tiny* effective dose. InnovaPharm, as always, is on to something here...

Current Flavors



The full NovaPump Back Label

Citrulline malate is a sour-tasting powder. To accommodate this intrinsic trait of citrulline (the most dominant ingredient by weight) – InnovaPharm went with the following fun flavoring options:

We're pretty sure we know which of the three sold out first (unicorns are all the rage lately), but don't sleep on unflavored if you're stacking this with a stimulant-based pre that already tastes great! Stim-free products often forget their place in stacks, so we're ecstatic that InnovaPharm gave consumers flexibility!

Conclusion: 2019 just started and it's already game over

NovaPump is tough to beat. Especially because it has *two* ingredients never before seen in the niche. We talk about "stim-junkies" out there, but there's a class of "stim-free junkie" out there too, and clearly they approved of this label just like we do, given the nearly-immediate sell-out of the first batch.

NovaPump has all the right ingredients, it innovates in all the right places, and it even has great flavor options. Unless another pump product drops that *somehow blows* this formula out of the water, InnovaPharm may have already won stim-free pre-workout of the year, and the year is young.



Stacked with something as simple as a choline source and caffeine – NovaPump could even be in the running for best pre-workout of the year across *all* categories – especially if Super Spinach and PegaPump work out for everyone.

If you find yourself in need of some massive pumps and want something *new* but still want to fall back on our favorite time-tested ingredients – NovaPump is how we start the year *right*.

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