

CITRAGLOW™

BIOFLAVONOID, 100% SOLUBLE, DERIVED FROM CITRUS PEELS



ANTIOXIDANT &
ANTI-INFLAMMATORY



CIRCULATION



SKIN HEALTH

✓ Neutral Taste

✓ Colorless

✓ Odorless

Recommended dose:

100 - 500 mg/serving

 **Prinova**
NAGASE Group

What is CITRAGLOW™

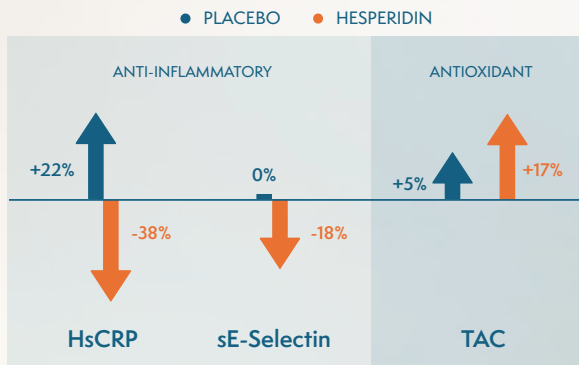
CITRAGLOW™ is a 100% soluble form of Hesperidin, developed by Nagase Group using proprietary in-house enzyme technology

~4x more bioavailable than hesperidin⁶



7 Clinical Published Studies – Human, Double-Blind, Placebo-Controlled

HESPERIDIN (HSD) ANTIOXIDANT AND ANTI-INFLAMMATORY EFFECT



+13% Improvement Total Antioxidant Capacity (TAC)^{2*}
Reduction of Key Anti-Inflammatory Markers^{1*}

Figure 1. Effect of hesperidin treatment (n=24, 500 mg/d for 3 wk) on circulating inflammatory marker and vascular adhesion molecules¹. Mean percent change of TAC in type 2 diabetic patients with hesperidin treatment (n=64, 500mg/d for 6wk)².

IMPROVEMENT IN SKIN DULLNESS & TEXTURE

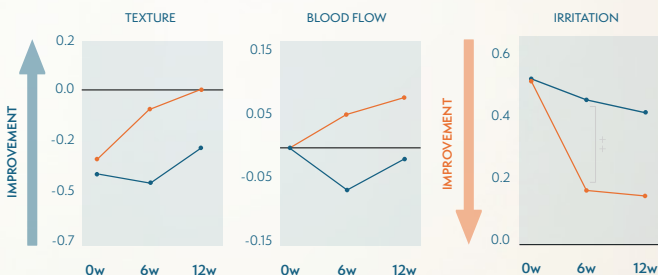


Figure 2. Effect of CITRAGLOW™ on texture via visual assessment by dermatologist, blood flow via spectrophotometer, irritation via subject survey (n=42, 340mg/d for 12 wk)³

CITRAGLOW™ INCREASES BLOOD FLOW AFTER SINGLE DOSE

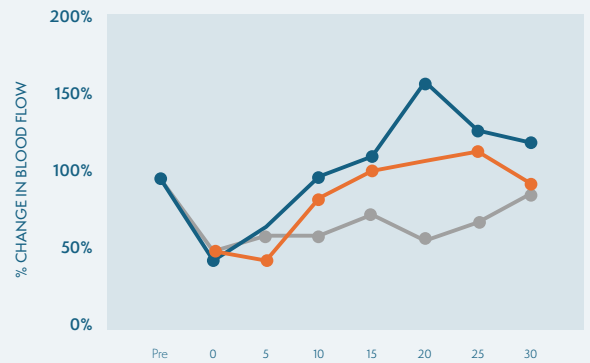


Figure 3. Change in the blood flow during cooling stress test after single administration (n=11, 250mg single dose) & daily use of CITRAGLOW™ (n=11, 250mg/d for 7 days). Placebo calculated as average of single administration and daily use case.⁴ Similar effect studied and verified at 100mg dose (n=18).³



Response to Cold Stress Test

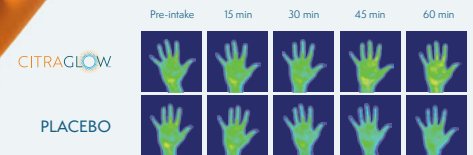


Figure 4. A comparison of blood flow following a single intake of beverages containing 0 (placebo) or 200 mg of CITRAGLOW™ in healthy adult women showed that, under a 24°C environment (a condition in which blood flow tends to decrease at rest), blood flow on the surface on the hand was improved

*Human Clinical studies reference dosage of Hesperidin, not CITRAGLOW™ *These claims have not been evaluated by the FDA. *Additional clinical data available upon request.

1.Rizza, S., et al. (2011). Citrus polyphenol hesperidin stimulates production of nitric oxide in endothelial cells while improving endothelial function and reducing inflammatory markers in patients with metabolic syndrome. The Journal of Clinical Endocrinology & Metabolism, 96(5), E782–E792. <https://doi.org/10.1210/jc.2010-2879>
 2.Homayouni, F., et al. (2018). Blood pressure-lowering and anti-inflammatory effects of hesperidin in type 2 diabetes: A randomized double-blind controlled clinical trial. Phytotherapy Research, 32(6), 1073–1079. <https://doi.org/10.1002/ptr.6046>
 3.Morishito, N., et al. (2020). Effects of glucosyl hesperidin on skin blood flow and temperature: A randomized, double-blind, placebo-controlled, crossover study. Clinical and New Drugs Journal, 57(2), 129–134.
 4.Yoshitani, K., et al. (2008). Effect of -glucosyl hesperidin on poor circulation in women. Journal of Nutritional Science and Vitaminology, 61, 233–239.
 5.Endo, S., et al. (2015). Dietary glucosyl hesperidin improves blood flow, skin color, and skin conditions. The Society for the Study of Hesperidin.
 6.Yamada, M., et al. (2006). Bioavailability of glucosyl hesperidin in rats. Bioscience, Biotechnology, and Biochemistry, 70(6), 1386–1394.

*Additional references available upon request.



CITRAPEAK®

Unlock your pre-workout pump

 **Prinova**
NAGASE Group



*7 Published Clinical Studies, Human,
Double Blind, Placebo-Controlled*



Activates in 30 Minutes²

18%

*Increase in Blood Flow
Seen in Clinical Study³*



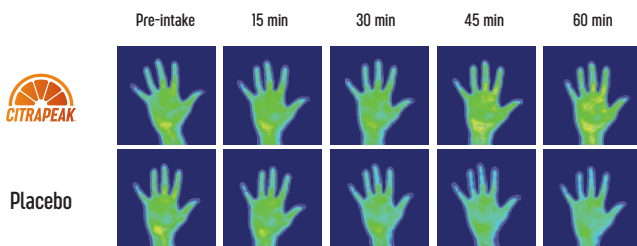
*InVitro Study Shows
Increase in Nitric Oxide^{4*}*

What is CITRAPEAK® ?

CITRAPEAK® is the industry's first 100% soluble form of hesperidin, a flavonoid found in citrus fruit peels. Solubility means fast release, allowing the vasodilation and pump effects of hesperidin to shine in pre-workout applications. Derived from orange peels, CITRAPEAK® is clean, near colorless, and near tasteless. A broad body of clinical work supports the effectiveness of CITRAPEAK®.¹

INCREASE THERMOGENIC EFFECT

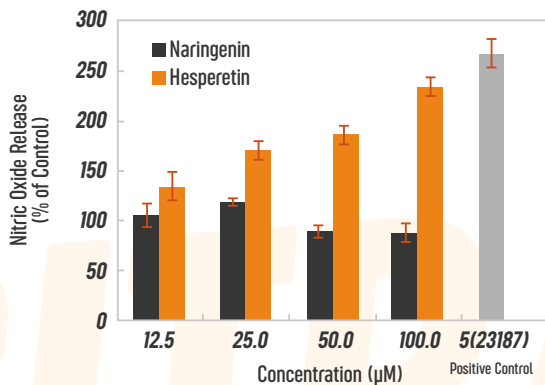
Cold condition test - test group 5.4°F warmer (surface temp)¹
Users report increased sweating at room temperature
Notable difference on dose #1 after 30 minutes



A comparison of blood flow following a single intake of beverages containing 0 (placebo) or 200 mg of CITRAPEAK® in healthy adult women showed that, under a 24°C environment (a condition in which blood flow tends to decrease at rest), blood flow on the surface on the hand was improved

INCREASE NITRIC OXIDE

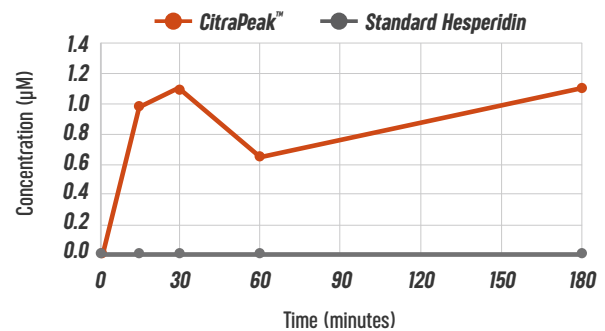
CITRAPEAK® is broken down in body into Hesperetin
In vitro study (below) shows Nitric Oxide increase caused by Hesperetin⁴



*These claims have not been evaluated by the FDA.

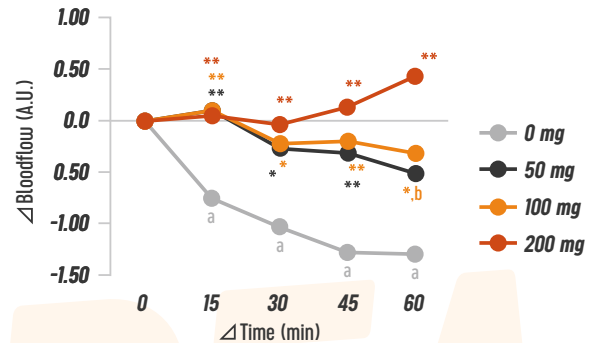
TIME RELEASE

100,000x more soluble than standard hesperidin⁵
Activates in 30 minutes²
3.7x more bioavailable than standard hesperidin from 0-60 min²



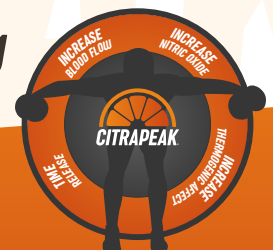
INCREASES BLOOD FLOW

18% increase in blood flow vs. control³
Dose dependent affect



Test Condition: 24°C, RH55% with test solutions at 24°C, n=12. Subjects minimized their movements during the test period, which reduces facial blood flow. Facial blood flow was measured using a laser doppler blood flowmeter before and after consuming the test solutions. (** p<0.01, * p<0.05 vs. placebo, a: p<0.01, b: p<0.10 v. time 0)

Serving Size 200mg
Manufactured by Nagase Group



1. K. Yoshitani et al. Effect of α-Glucosylhesperidin on Poor Circulation in Women. Journal of Nutritional Science and Vitaminology 61: 233-239 (2008)
2. M Yamada et al. Bioavailability of Glucosyl Hesperidin in Rats. Bioscience Biotechnology and Biochemistry 70(6): 1386-1394 (2006)
3. S. Endo. Dietary Glucosyl Hesperidin Improves Blood Flow, Skin Color and Skin Conditions. The Society for the Study of Hesperidin (2015)
4. L Liu et al. Distinct Effects of Naringenin and Hesperetin on Nitric Oxide Production from Endothelial Cells. Journal of Agricultural and Food Chemistry 56: 824-829 (2008)
5. H Mitsuzumi et al. Glucosyl Hesperidin Lowers Serum Triglyceride Level in the Rats Fed a High-Fat Diet through the Reduction of Hepatic Triglyceride and Cholesteryl Ester.
6. Yoshitani, K., et al. (2008). Effect of α-glucosyl hesperidin on poor circulation in women. Journal of Nutritional Science and Vitaminology, 61, 233–239.

colostrumXP™

Premium Colostrum for Powder RTM

ColostrumXP stands out as the best-tasting and most rapidly dispersing colostrum on the market. Made in USA and expertly agglomerated in-house by Prinova, it assures exceptional quality, availability, and consistency.

- Proprietary fluid bed agglomeration process
- Premium taste
- Made in USA, from USA Cows
- Supply chain security with quality and consistency

Product Names	IgG Content	COO	Agglomerated	Labeling	FBSS #
C-220	20%	USA	yes	Colostrum	33812
C-230	20%	USA	yes	Colostrum	33869



Made in US



Calf First



Antibiotic Free



Hormone Free



Non-GMO



Great Tasting



Agglomerated

- Available carrier-free

For questions or requests, please reach out to our team at:

info@prinovausa.com

Eggtein™

Instant Egg White

powered by Papetti's®

A new standard in dairy-free protein performance. Agglomerated for improved sensory in RTM applications.



Eggtein™ Instant Egg Whites is a premium, US-origin solution for brands seeking a clean, dairy-free protein with superior solubility and taste. Combining industry-leading Papetti's® egg white protein by Michael Foods and Prinova's proprietary in-house agglomeration technology, Eggtein™ delivers unmatched performance in Ready-To-Mix (RTM) Applications:

- Taste
- Functionality
- Product Consistency
- Product Performance

Secure, domestic supply. Made in the USA.

- 100% domestically sourced and processed.
- Prinova & Michael Foods partnership ensures secure, 100% US-origin supply chain and reduced pricing volatility.

Clean label

Eggtein™ is a dairy-free, neutral-tasting protein without unnecessary additives. Ideal for clean-label brands and consumers.



APPLICATIONS



**Ready-To-Mix
Powdered Beverages**



**Sports & Performance
Nutrition**



**Keto & Carnivore
Lifestyles**



**Dairy-Free
Applications**

Protein Type	Eggtein™	Whey Protein Concentrate 80	Whey Protein Isolate	Soy Protein Concentrate
Protein (min %)	80	80	88	80
Fat (max %)	0.2	7.0	0	1.0
Protein PDCASS	1.0	1.0	1.0	1.0





HYDRO BEEF™

Grass-Fed Beef Protein Isolate



97%

Protein



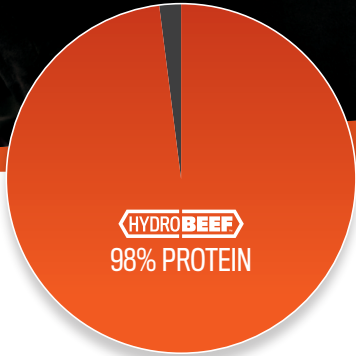
Dairy-Like Mouthfeel



Grass-Fed

What is HYDROBEEF™?

HydroBeef™ is a beef protein isolate made from grass-fed EU origin cows. As an allergen free, whole food protein source, HydroBeef™ is ideal as a stand-alone protein source, or as a primary protein driver in meal replacements. Manufactured by industry leader Essentia in Sweden – quality is unmatched. Sensory experience is similar to whey. Great taste is achievable in sweet and savory applications.



Unagglomerated material

Ideal for formulas at 30-50% inclusion rate

Labeled:
Beef Protein Isolate



Premium agglomerated material for spoon stir

Ideal for mixing into hot liquid

Labeled:
Beef Protein Isolate, Sunflower Lecithin

FORMULATION CONCEPTS

Paleo Protein

20g HydroBeef Instant™
Allergen Free
Paleo Friendly
Great Taste

Whole Food Meal Replacement

Base-load protein with HydroBeef™
"Real food protein source"
Great taste and mouthfeel

Paleo Bar

20g HydroBeef in 50g bar
Great functionality



microfuse™

Micronized Pea Protein



BEST-IN-CLASS SENSORY EXPERIENCE

Microfuse™ Pea Protein stands out for its improved taste and mouthfeel.

PROPRIETARY MICRONIZATION

Prinova's unique technology optimizes mesh size distribution, enhancing solubility and texture in both powder RTM and aseptic beverages.

U.S. ORIGIN & RELIABLE SUPPLY

Made from USA pea protein to mitigate import risks and ensure a stable supply chain.



PRINOVA'S NORTON SHORES, MI FACILITY

Leading-edge milling technology precisely adjusts particle size for optimal sensory performance.

PROCESS OPTIMIZATION

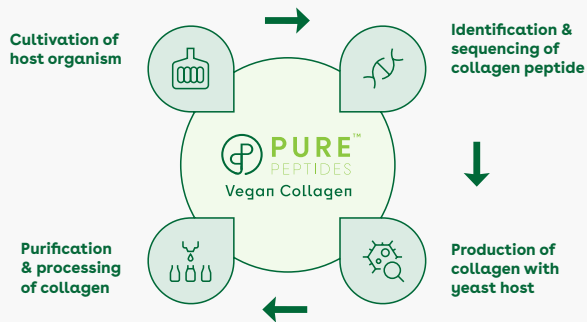
Not just finer particles, but a carefully managed particle size distribution to elevate taste and mouthfeel.





Pure Peptides™ Vegan Collagen

Prinova's Pure Peptides™ offers revolutionary vegan alternative to traditional animal collagen sources.



Produced via fermentation, Pure Peptides™ is the only 100% vegan collagen protein available in the U.S.*

*Only self-GRAS affirmed vegan collagen peptide commercially available today.

Vegan & Non-GMO Compliant



Health Benefits



Anti-aging



Wrinkles



Firmness



Texture

300mg Pure Peptides™ as efficacious as 5g of marine collagen

Clinical data pre-publication

✓ ODORLESS




✓ NEUTRAL TASTE

✓ COLORLESS



Potential Skin Health Support with Pure Peptides™

*clinical data is currently in pre-publication

-  PURE™ PEPTIDES Vegan Collagen
-  Fish Collagen 5g
-  Placebo

SKIN FIRMNESS

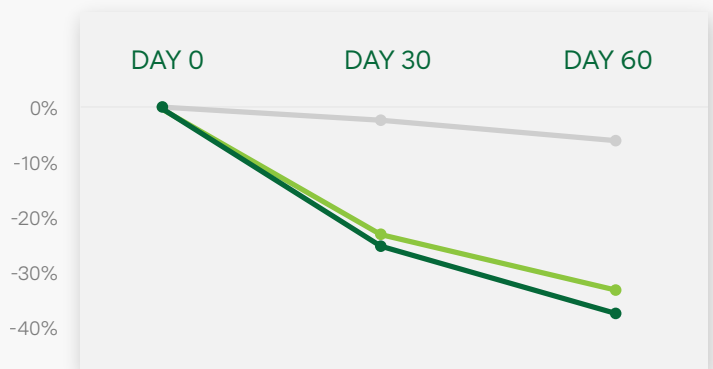


Figure 1. Effect measured via Griffith's Ranking System (n=90). Pure Peptides shown as weighted average of 200mg and 350mg dose of Pure Peptides™. Clinical data in pre-publication.

PORE ASSESSMENT

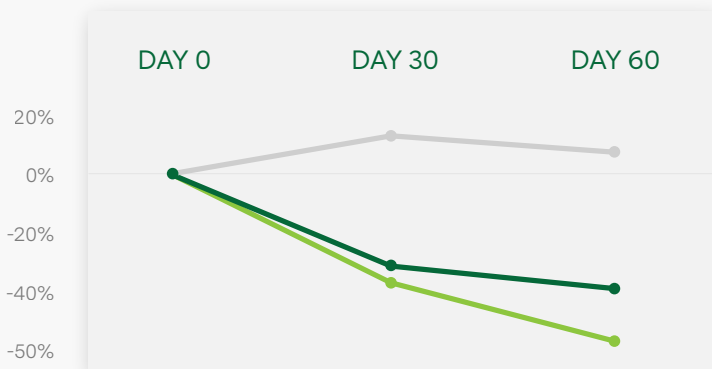


Figure 2. Effect measured via 3-D Imaging comparison (n=90). Pure Peptides shown as weighted average of 200mg and 350mg dose of Pure Peptides™. Clinical data in pre-publication.

WRINKLES (CROW'S FEET)

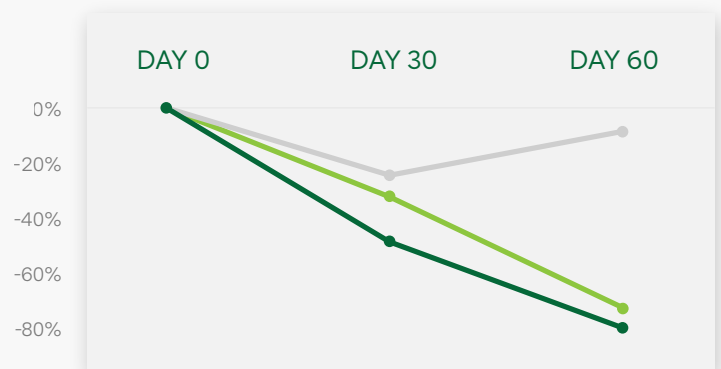


Figure 3. Effect measured via Modified Fitzpatrick Scale (n=90). Pure Peptides shown as weighted average of 200mg and 350mg dose of Pure Peptides™. Clinical data in pre-publication.

SMOOTH PROTEIN™

EXPECT MORE FROM VEGAN



Functional Across Applications



Premium Mouthfeel



Next-Level Taste and clean finish

Smooth Protein™ is exclusively distributed by Prinova LLC.

WHAT IS SMOOTH PROTEIN™?

Smooth Protein™ is the premium plant-based protein portfolio that brings vegan to the next level. The five different sources of Smooth Protein™ were created using advanced technology from the leading scientists in the sports nutrition industry.

SMOOTH PROTEIN™

GAME-CHANGING TOOL IN VEGAN PROTEIN FORMULATION KIT | NEW TECHNOLOGY AND RAW MATERIAL SOURCES | AUGMENTS PEA PROTEIN



SUNFLOWER SEED PROTEIN

55% PROTEIN

FLAVOR: NUTTY



WATERMELON SEED PROTEIN

75% PROTEIN



MUNG BEAN PROTEIN

85% PROTEIN

IMPROVES MOUTHFEEL



FAVA BEAN PROTEIN

90% PROTEIN

IMPROVES MOUTHFEEL



ORGANIC PUMPKIN SEED PROTEIN

70% PROTEIN

FINISH: SMOOTH

FORMULATION CONCEPTS

Smooth Protein™ moves the needle on sensory and allows for customization for premium offering of vegan protein.

NUTTY FLAVOR ENHANCEMENT

Pea Protein	Mung Bean	Watermelon	Pumpkin	Sunflower	Total Delivered
10g	0g	2.5g	2.5g	5g	20g

SMOOTH PROTEIN™

Pea Protein	Mung Bean	Watermelon	Pumpkin	Sunflower	Total Delivered
10g	5g	2.5g	2.5g	0g	20g

DAIRY-LIKE MOUTHFEEL

Pea Protein	Mung Bean	Watermelon	Pumpkin	Sunflower	Total Delivered
11.25g	5.5g	0g	3.25g	0g	20g

PURESEED™ - SEED ORIGIN ONLY

Pea Protein	Mung Bean	Watermelon	Pumpkin	Sunflower	Total Delivered
0g	0g	7g	7g	1g	15g

HOW SMOOTH PROTEIN™ IS MADE

- pH control throughout the manufacturing process to avoid denaturation
- Enzymatic Hydrolysis used to reach the desired molecular weight of the proteins
- Partial size control for improved mouth-feel

Request a sample and start delivering smooth tasting protein in your products:

innovative.products@prinovaUSA.com