

Plant-Based Bioactive Peptides for Athletes*

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WHAT ARE PRO-FORMANCE PEPTIDES™?

Pro-Formance Peptides™ by Designs for Sport® harnesses the power of PeptiStrong™, a cutting-edge, plant-based bioactive peptide derived from fava beans (*Vicia faba*). This innovative supplement is engineered to support muscle strength, endurance, recovery, retention, and overall performance.* It is ideal for athletes and fitness enthusiasts seeking to fuel their performance and maintain healthy muscle function.* The bioactive peptides in PeptiStrong™ were discovered and isolated through advanced lab testing and AI machine learning, ensuring the highest potential clinical benefits for muscle health.¹

HOW PRO-FORMANCE PEPTIDES™ WORKS

Maintaining healthy muscle mass is essential for more than just athletic performance; it also impacts overall health, including heart health, metabolic health, cognitive function, physical independence, and injury recovery. Skeletal muscle is crucial in maintaining a healthy body composition, metabolic rate, and overall physical function.² It also functions as an endocrine organ, producing myokines that regulate metabolism, inflammation, and other systemic processes.^{3,4} Pro-Formance Peptides™ supports muscle health by balancing muscle protein synthesis and breakdown.* This balance lowers the association of certain muscle-wasting conditions, such as sarcopenia,2 and to support recovery from physical activity.* The bioactive peptides in PeptiStrong™ support muscle protein synthesis by upregulating key pathways like mTOR and phosphorylated-S6.2 Additionally, they support a healthy inflammatory response post-exercise by reducing tumor necrosis factor-alpha (TNF- α) secretion, thereby promoting muscle health and recovery.5,6



FORMULA HIGHLIGHTS

Powered by PeptiStrong™, Pro-Formance Peptides™ delivers 2.4 g of highly absorbable bioactive peptides per serving. One clinical study demonstrated that PeptiStrong™:

- Helped increase muscle recovery rate by 144%¹
- Helped increase performance recovery by 54%¹
- Helped reduce muscular fatigue by 47%

Pro-Formance Peptides™ is gluten-free, dairy-free, soy-free, vegan, and non-GMO, making it suitable for a wide range of dietary needs.

BENEFITS FOR MUSCLE STRENGTH, ENDURANCE, AND RECOVERY*

PeptiStrong™ supports muscle health by promoting muscle protein synthesis, reducing muscle atrophy, and supporting muscle fiber density.^{2,5} One of the potential benefits of Pro-Formance Peptides™ is the product's ability to support healthy muscle recovery and endurance, particularly following intense physical activity or resistance training.* Intense exercise can cause muscle damage, leading to delayed onset muscle soreness (DOMS),¹ which can negatively impact athletic performance. Pro-Formance Peptides™ may help mitigate the development of DOMS.¹ By supporting muscle recovery, these peptides may help athletes maintain their performance levels and reduce downtime between training sessions.*

CLINICAL EVIDENCE

PeptiStrong $^{\mbox{\tiny M}}$ is a cutting-edge new ingredient at the forefront of emerging research, with ongoing studies in progress. In a randomized, double-blind, placebo-controlled trial involving 30 healthy men aged 30 to 45, subjects who took 2.4 g of PeptiStrong™ daily for 14 days post physical exertion showed significant improvements in muscle recovery and performance.¹ The study found that the PeptiStrong™ group was able to maintain their muscle strength with no significant reduction 48 hours after intense physical exertion and even experienced a significant increase from baseline after 72 hours, translating to a 144% increase in muscle recovery rate. In contrast, the placebo group experienced a significant decrease in muscle strength after 48 hours and did not return to baseline at 72 hours.¹ Additionally, the PeptiStrong™ group displayed a 54% increase in isokinetic leg extension performance and a 47% reduction in muscular fatigue compared to the placebo group, highlighting the supplement's potential clinical benefit in promoting athletic performance and muscular endurance.1

Beyond performance metrics, the PeptiStrong™ group also exhibited notable changes in myokine activity. Myokines are cytokines released by muscle cells in response to muscular contractions and can indicate muscle tissue injury. The PeptiStrong™ group experienced a significant 56% reduction in myostatin release, which supports an anabolic response and promotes muscle protein synthesis.¹

In a separate clinical study, a larger serving size of 10 g/day of PeptiStrong™ was compared with milk protein concentrate (MPC) during seven days of leg immobilization followed by 14 days of remobilization.⁷ The PeptiStrong™ group demonstrated increased myofibrillar protein synthesis rates during remobilization compared to the MPC group⁷, suggesting potential benefits when combined with other protein sources like whey protein.*

HOW TO USE PRO-FORMANCE PEPTIDES™

This supplement may be beneficial when used alongside other performance-supportive ingredients such as collagen peptides, creatine monohydrate, and complete proteins, with expected complemenary effects. Based on an in vitro study (submitted for publication), Pro-Formance Peptides™ may have synergistic and additive effects in promoting muscle health and performance when combined with leucine.*

BENEFITS

- Supports optimal muscle development and maintenance, which is crucial for athletes aiming to build and preserve muscle mass.^{1,2,7}
- May help counteract the natural age-related decline in muscle strength, helping athletes stay strong and competitive.^{2,7}
- May help maintain a lean physique and efficient metabolic function, essential for peak athletic performance.^{1-4,7,8}
- Contributes to overall well-being and physical health, helping athletes to remain active and perform at their best over the long term.²⁷
- Promotes faster recovery of muscle strength after intense workouts, helping to mitigate downtime and support training effectiveness.^{1,2,7}
- May help promote endurance capacity, helping athletes push through challenging workouts and competitions.^{1,2}
- Supports healthy exercise-induced inflammatory responses, promoting recovery and attenuating muscle soreness.^{1,2,5}

HOW TO TAKE

For optimal results, it is recommended to take 4 capsules of Pro-Formance Peptides™ per day or as directed by a health-care practitioner.



Five distinct clinical benefits in each serving:

SOY-FREE



Supplement Facts

Serving Size 4 capsules Servings per Container 30

Amount Per Serving		% Daily Value
Calories	10	
Total Carbohydrate	1g	1%*
Protein	1 g	0%*
PeptiStrong [™] Fava Bean (<i>Vicia faba</i>) Protein Hydrolysate	2.4 g	**
*Percent Daily Values are based on a 2,000 calorie diet. **Daily Value not established.		

PROMOTES A HEALTHY INFLAMMATORY RESPONSE TO EXERCISE*

PROMOTES MUSCLE GROWTH*

PROMOTES MUSCLE PROTEIN SYNTHESIS*

HELPS REDUCE MUSCLE BREAKDOWN*

BOOSTS OVERALL ENERGY LEVELS*





GLUTEN-FREE



DAIRY-FREE



0 GRAMS SUGAR



NON-GMO



HIGHLY ABSORBABLE*

Warning: Consult your health-care practitioner prior to using this product if you are pregnant, nursing, taking medication, under 18 years of age, or have a medical condition.

^{*}These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

PRO-FORMANCE PEPTIDES™



References

- Kerr A, Hart L, Davis H, et al. Improved strength recovery and reduced fatigue with suppressed plasma myostatin following supplementation of a *Vicia faba* hydrolysate, in a healthy male population. *Nutrients*. 2023;15(4):986. doi:10.3390/nu15040986
- 2. Cal R, Davis H, Kerr A, et al. Preclinical evaluation of a food-derived functional ingredient to address skeletal muscle atrophy. *Nutrients*. 2020;12(8):2274. doi:10.3390/nu12082274
- 3. Karstoft K, Pedersen BK. Skeletal muscle as a gene regulatory endocrine organ. *Curr Opin Clin Nutr Metab Care*. 2016;19(4):270-275. doi:10.1097/MCO.00000000000283
- 4. Pratesi A. Skeletal muscle: an endocrine organ. Clin Cases Miner Bone Metab. 2013;10(1):11-14. doi:10.11138/ccmbm/2013.10.1.011
- 5. Corrochano AR, Cal R, Kennedy K, et al. Characterising the efficacy and bioavailability of bioactive peptides identified for attenuating muscle atrophy within a *Vicia faba*-derived functional ingredient. *Curr Res Food Sci.* 2021;4:224-232. doi:10.1016/j.crfs.2021.03.008
- Doherty A, Wall A, Khaldi N, Kussmann M. Artificial intelligence in functional food ingredient discovery and characterisation: a focus on bioactive plant and food peptides. Front Genet. 2021;12:768979. doi:10.3389/ fgene.2021.768979
- Weijzen MEG, Holwerda AM, Jetten GHJ, et al. Vicia faba peptide network supplementation does not differ from milk protein in modulating changes in muscle size during short-term immobilization and subsequent remobilization, but increases muscle protein synthesis rates during remobilization in healthy young men. J Nutr. 2023;153(6):1718– 1729. doi:10.1016/j.tjnut.2023.01.014
- 8. Argilés JM, Campos N, Lopez-Pedrosa JM, Rueda R, Rodriguez-Mañas L. Skeletal muscle regulates metabolism via interorgan crosstalk: roles in health and disease. *J Am Med Dir Assoc*. 2016;17(9):789-796. doi:10.1016/j.jamda.2016.04.019

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