



EAAAlpha™

Clinically Optimized EAA Blend

 Prinova
NAGASE Group



26 Human Studies
in Development



Patent # - 9,364,463 B2

3X

MPS vs Whey Protein

32X

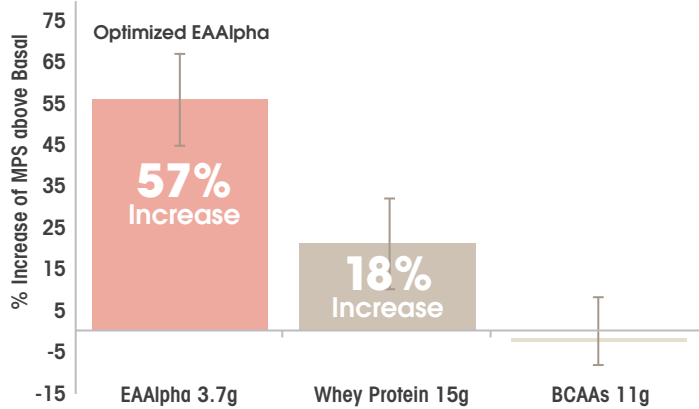
MPS vs BCAA's

What is EAAAlpha™?

EAAAlpha™ is a patented, clinically studied blend of nine essential amino acids. It delivers an optimal ratio of EAA's for muscle protein synthesis. Invented by Dr Robert Wolfe, the leading research authority globally on amino acids, after over 40 years of clinical research and 26 clinical studies.

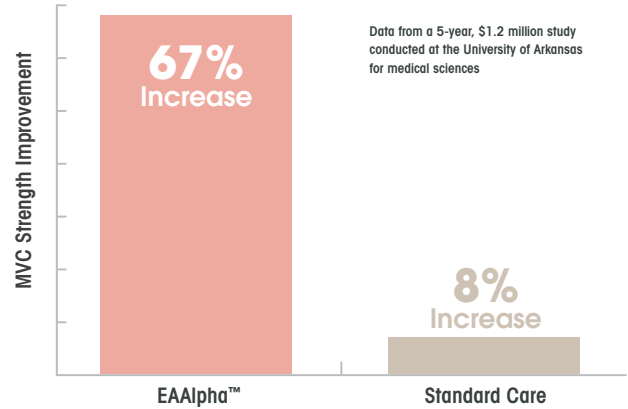
Stimulation of Muscle Protein Synthesis

(N=23 Participants, Analysis by muscle biopsy¹)



Effectiveness of EAAAlpha™

Note: Results of EAAAlpha vs Standard care improvement rates



Protein Quality of Different Foods Based on DIAAS Score

	DIAAS (%)	% Protein	Kcal/g Protein	Energy (kcal)	% Daily Energy Expenditure	Nutrient Intake (g)
EAAAlpha™ EAA Formulation	321.0	100	4	61.1	2.5	15.2
Whey Protein Isolate	133.0	80.6	4.2	146	6.0	43
Milk (whole)	143.1	3.2	19.4	626	25.6	1009
Soy Milk	136.1	3.3	16.3	553	22.6	1029
Egg (hard boiled)	133.1	12.6	12.4	430	17.6	275
Beef ¹	117.9	26.4	9.5	372	15.2	148
Wheat Bread	50.0	12.9	19.1	1765	72.0	716
Peanut Butter	44.0	24	24.5	2573	105.0	438
Chickpea	30.9	4.9	17.9	2676	109.2	3051

Serving Size **3.7g**

EAAAlpha™
Manufactured by Nagase Group

1. International Society of Sports Nutrition Conference 2019, Improved Muscle Protein Synthesis is Achieved with 3.6g of Free Form Essential Amino Acid Ingestion in Elderly David D. Church¹, Arny A. Ferrando¹, and Robert R. Wolfe¹, ¹Department of Geriatrics, Donald W. Reynolds Institute on Aging, Center for Translational Research in Aging & Longevity, University of Arkansas for Medical Sciences, Little Rock, AR, USA

2. Ferrando AA, Bamman MM, Schutzler SE, Spencer HJ, Evans RP, Wolfe RR. Increased nitrogen intake following hip arthroplasty expedites muscle strength recovery. Journal of Aging Research and Clinical Practice 2013; 2(4): 369, 2013.

3. **The comparison is between different studies, but the studies were conducted in the same facility and the same protocols were used. The following papers are the refs for the graph. The 3.6 gm dosage is Improved Muscle Protein Synthesis is Achieved with 3.6g of Free Form Essential Amino Acid Ingestion in Elderly David D. Church¹, Arny A. Ferrando¹, and Robert R. Wolfe¹. Paddon-Jones D, Sheffield-Moore M, Zhang X-J, Katsanos CS, Wolfe RR. Differential stimulation of muscle protein synthesis in elderly humans following isocaloric ingestion of amino acids or whey protein. Exp Gerontol 41:215-219, 2006. Katsanos CS, Kobayashi H, Sheffield-Moore M, Aarsland A, Wolfe RR. A high proportion of leucine is required for optimal stimulation of the rate of muscle protein synthesis by essential amino acids in the elderly. Am J Physiol Endocrinol Metab 291:E381-E387, Aug 2006. FERRANDO, A. A., B. D. WILLIAMS, C. A. STUART, H. W. LANE, AND R. R. WOLFE. Oral branched chain amino acids decrease whole-body proteolysis. J.P.E.N. 19:47-54, 1995.

*This statement has not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.