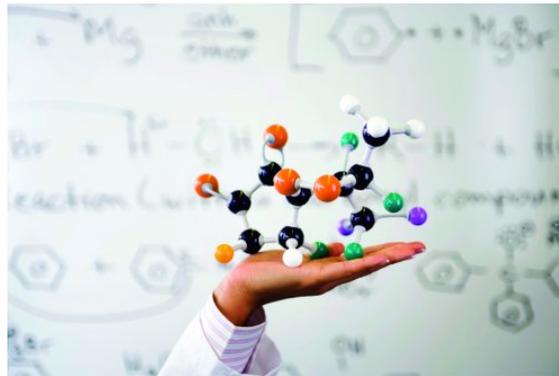


Master Amino Acid Protein

A Discovery That Redefines Supplementation

BY RENITA RIETZ



We are all aware of the importance of protein as one of the fundamental nutritional macronutrients required on a daily basis for optimal health. In fact the word protein itself is derived from a Greek word “proteos” that means “primary” or “that which takes the first place.” High quality nutritional protein is critical in the diet in order to obtain the essential constituent amino acids that the body cannot produce itself in order to synthesize the variety of structural and functional proteins in the body ranging from enzymes to hormonal chemical messengers to structural proteins such as collagen and elastin to immunoproteins and transport proteins such as lipoproteins for example that transport lipids in the blood. The diversity and range of proteins in the body is vast. Without them life would simply not be possible. The protein choices that we make each and every day directly influence our ability to function, regenerate and heal at an optimal level.

Protein in human metabolism is a complex topic. There are so many factors that need to be considered such as the type and quality of protein consumed as well as how protein is digested and subsequently absorbed and metabolized by the individual. To give one example, as we age our levels of hydrochloric acid in the stomach dramatically decline. Hydrochloric acid is absolutely essential for the conversion of pepsinogen to pepsin that facilitates the digestion of protein before entering the small intestine. Something as seemingly simple as this could impair the entire chain of events to follow. Protein will not be broken down and adequate essential amino acids will not be available for the synthesis of new tissue. Consider also the vegan or vegetarian who may not get the adequate amount or proportion of essential amino acids or the athlete or fitness enthusiast with higher protein needs.

For many, protein powders in smoothies as an adjunct to other daily protein has become the answer, however, many will be shocked to learn that isolated protein powders (whether they be whey, soy, pea, rice, hemp or any other protein isolate) are not the most efficient and effective way to obtain one’s daily protein requirements. A nutritional discovery was made by Dr. Luca-Moretti known as the Master Amino Acid Pattern® (MAP™), which is a very specific proportionality between the essential amino acids (not created by the body) for body protein synthesis. It represents the exact sequence of amino acids required for human nutrition; with only 1% metabolic waste and 99% of the constituent amino acids following the anabolic pathway to act as building blocks for the body’s many different proteins. This proportionality of amino acids is six times more effective than all protein powders or amino acid supplements. It is also three times more effective than dietary proteins such as meat, fish or poultry with an average of only 32% of their constituent amino acids acting as precursors for body protein synthesis.

Increasing one’s protein intake is often recommended in any weight loss program. The explosion of the paleo diet and people’s success stories are telling, however, few consider the long-term implications of high protein diets on kidney and liver as well as overall energy expenditure. Clinical studies have shown that the Master Amino Acid Pattern® (MAP™), can substitute dietary proteins or protein supplements in a safer and nutritionally more effective way. MAP™ provides a Body Protein Synthesis per minute

(BPS/min) equal to 99% NNU/ 23 min. It is 100% digested, 100% absorbed and 99% Net Nitrogen Utilized in 23 minutes without fecal waste and with no stress on the kidney or liver. The results of a comparative, double-blind, triple- and quintuple-crossover Net Nitrogen Utilization (NNU) clinical study has shown that 1% of MAP's constituent amino acids followed the catabolic pathway, thus releasing only 1% of nitrogen catabolites and energy. By comparison dietary proteins release an average of 68% nitrogen catabolites and energy.

Results of a multi-centric study have shown that by giving MAP™ as a sole and total substitute of dietary proteins to 500 overweight participants undergoing the American Nutrition Clinics/Overweight Management Program (ANC/OMP), the participants' body nitrogen balance could be maintained in equilibrium with essentially no calories (MAP 1 g=0.04 kcal), thereby preserving the body's structural and functional proteins, eliminating excessive water retention and preventing the sudden weight increase after the study. The results have shown that the use of MAP™ had the ability to prevent the adverse effects associated with a negative nitrogen balance, such as oversized or flabby tissue, stretch marks, sagging of breast tissue, increased hair loss, faded hair color, and fragile or brittle nails.

In a study of a 51-year-old female athlete during a desert crossing, while taking MAP™ as a sole and total substitute for dietary protein, and performing physical activity, the results showed increased body muscle mass, strength, and endurance, decreased body fat mass, greater increase in performance of the non-prevailing muscles compared to the prevailing muscles, improved cardio-respiratory performance and increased red blood cells.

In another study of 20 track athletes, those taking MAP™ as a dietary protein substitute had increased body muscle mass, strength, and endurance, decreased fat mass, increased basal metabolism rate and improved muscular and hematologic lactate clearance, which allows for better muscle performance and faster muscle recovery after physical activity.

This vegetarian protein is in a tablet form and can be taken at any time with or without a meal. While the individual dosage may vary according to nutritional status, age, gender, and the intensity and frequency of physical activity, the average suggested daily dosage should be 5-10 tablets a day. This product is readily available in most health food stores. The optimization of body protein synthesis from MAP™ will be of benefit for anyone wanting to increase lean muscle, strength and endurance, reduce fat, improve skin and connective tissue and provide faster recovery after physical activity. It is the ultimate protein source for the vegetarian or vegan, the aging whose digestive abilities are beginning to slow down, those recovering from any ailment needing to harness the body's energy, athletes and anyone interested in optimizing anti-aging, slowing down degeneration and increasing rejuvenation.

Renita Rietz is a health and nutrition writer and speaker who educates on the phytotherapeutic potential of indigenous foods and plants for prevention and regeneration.

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