

AminoBlend™

A Balanced Formula of 18 L-Crystalline Amino Acids

DESCRIPTION

AminoBlend™ capsules, provided by Douglas Laboratories, contain a nutritionally balanced mixture of essential, conditionally essential, and important non-essential amino acids in their physiological L-crystalline forms.

FUNCTIONS

Amino acids have many functions in the body. They are the building blocks for all body proteins—structural proteins that build muscle, connective tissues, bones and other structures, and functional proteins in the form of thousands of metabolically active enzymes. Amino acids provide the body with the nitrogen that is essential for growth and maintenance of all tissues and structures. Proteins and amino acids also serve as a source of energy, providing about 4 calories per gram. Aside from these general functions, individual amino acids also have specific functions in many aspects of human physiology and biochemistry. Amino acids serve as precursors for many nitrogenous substances. These include heme, purines, pyrimidines, hormones, and neuro-transmitters, including biologically active peptides. In addition, many proteins contain amino acids that have been modified for a specific function, e.g., calcium binding or collagen cross-linking. In the fasting state, blood plasma contains all metabolically important amino acids in characteristic concentrations, and each amino acid is present in a defined ratio relative to the others. After a meal, the ratios of plasma amino acids change to reflect amino acid intake, but return later to their original levels. Normal plasma amino acid levels are extremely susceptible to physiological state and show considerable variability. The plasma amino acid profile impacts the entry of individual amino acids into the tissues. Of particular importance is the effect of the plasma amino acid profile on the uptake of amino acids into the brain across the blood-brain barrier. As a result, alterations in the plasma amino acid profile can lead to changes in the amino-acid dependent synthesis of neurotransmitters and other nitrogenous compounds in the brain. AminoBlend was formulated to provide optimal amounts of those dietary amino acids that are most important in balancing a physiological plasma amino acid profile.

INDICATIONS

AminoBlend capsules may be a useful nutritional adjunct for individuals who wish to obtain a balanced spectrum of nutritionally important amino acids.

FORMULA (#ABL)

Each capsule contains:

L-crystalline amino acids..... 740 mg
L-Lysine, L-Arginine, L-Isoleucine, L-Leucine, L-Alanine,
L-Threonine, L-Histidine, L-Cystine, L-Methionine, L-Glutamine,
L-Tyrosine, L-Aspartic Acid, L-Valine, L-Glutamic Acid,
L-Phenylalanine, Glycine, L-Serine, and L-Cysteine HCl.

SUGGESTED USE

Two capsules, three times daily at the start of a meal, or as directed by physician.

SIDE EFFECTS

No adverse side effects have been reported.

STORAGE

Store in a cool, dry place, away from direct light. Keep out of reach of children.

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REFERENCES

- Caballero B, Finer N, Wurtman RJ. Plasma amino acids and insulin levels in obesity: response to carbohydrate intake and tryptophan supplements. *Metabolism* 1988;37:672-676.
- Davis JM, Bailey SP, Woods JA, Galiano FJ, Hamilton MT, Bartoli WP. Effects of carbohydrate feedings on plasma free tryptophan and branched-chain amino acids during prolonged cycling. *Eur J Appl Physiol* 1992;65:513-519.
- Harris RA, Popov KM, Zhao Y, Shimomura Y. Regulation of branched-chain amino acid catabolism. *J Nutr* 1994;124 Suppl.1499S-1502S.
- King PA. Effects of insulin and exercise on amino acid transport in rat skeletal muscle. *Am J Physiol Cell Physiol* 1994;266:C524-C530.
- Lal H, Chugh K. Metabolic and regulatory effects of branched chain amino acid supplementation. *Nutr Res* 1995;15:1717-1733.
- Millward J. Can we define indispensable amino acid requirements and assess protein quality in adults. *J Nutr* 1994;124 Suppl.1509S-1516S.
- Pijl H, Koppeschaar HP, Cohen AF, et al. Evidence for brain serotonin-mediated control of carbohydrate consumption in normal weight and obese humans. *Int J Obes Relat Metab Disord* 1993;17:513-520.
- Price GM, Halliday D, Pacy PJ, Quevedo MR, Millward DJ. Nitrogen homeostasis in man: Influence of protein intake on the amplitude of diurnal cycling of body nitrogen. *Clin Sci* 1994;86:91-102.
- Quevedo MR, Price GM, Halliday D, Pacy PJ, Millward DJ. Nitrogen homeostasis in man: Diurnal changes in nitrogen excretion, leucine oxidation and whole body leucine kinetics during a reduction from a high to a moderate protein intake. *Clin Sci* 1994;86:185-193.
- Reeds PJ, Hutchens TW. Protein requirements: From nitrogen balance to functional impact. *J Nutr* 1994;124 Suppl.1754S-1764S.
- Young VR. Adult amino acid requirements: The case for a major revision in current recommendations. *J Nutr* 1994;124 ..Suppl.1517S-1523S.

For more information on AminoBlend™ visit douglaslabs.com

† 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.

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**You trust Douglas Laboratories.
Your patients trust you.**