



# The Master's Club

## Fitness & Lifestyle Wellness

### Branched Chain Amino Acids (BCAA)

**Branched Chain Amino Acids** (BCAA's) play an integral part in the muscle building process and are essential for energy production.

BCAA's are different from amino acids in that they are metabolized in the muscle, not the liver. As a result, weight training dramatically increases BCAA uptake, creating a higher demand for them.

Since **Branched Chain Amino Acids** (Leucine, Valine and Isoleucine) are essential amino acids which cannot be made within the body, they must be supplied through foods and / or supplementation.

If you're working out hard to gain lean muscle tissue, then, the **Branched Chain Amino Acid Formula** may be right for you. This state-of-the-art formula plays a principle role in muscle recovery, muscle growth and energy maintenance.

It accomplishes this by precisely balancing the 3 branched chain aminos, **L-Leucine, L-Isoleucine** and **L-Valine** along with a supporting amino acid complex.

It also contains the highest grade chromium (polynicotinate) and vitamin B-6 to further enhance uptake.

Our **Branched Chain Amino Acid Formula** was especially developed for fitness enthusiasts by top sport nutrition researchers including **Dr. Edward Lieskovan**-Pharm. D. / professor at University of Southern California; **William Register**, 5 times Mr. America Finalist and Director of Services for SporTelesis, Inc., and **John E. Logsdon**, nutrition expert and developer of several highly-regarded nutrition programs.

Its precise formulation is based on studies conducted by the National Academy of Science. Each BCAA tablet contains 600 mg of isolated free form and peptide bonded Branched Chain Amino Acids.

#### What You Should Know About Leucine, Isoleucine & Valine

**Leucine, isoleucine, and valine** are the branched chain amino acids that comprise 70 percent of the available free nitrogen necessary for the synthesis of lean muscle tissue. It is critical that these three essential amino acids are accessible to the body during and after strenuous physical activity in order to reduce endogenous protein degradation.

#### Leucine

The undisputed preeminent amino acid, leucine not only builds muscle tissue, but also promotes the healing of wounded bone tissue

#### Supplement Facts

Serving Size 10 Tablets  
Servings per Container 9

Amount Per Serving	% D.V.*
<b>Calories</b>	65
Calories from Fat	5
<b>Total Fat</b>	1 g 2 %
<b>Total Carbohydrates</b>	0.5 g < 1 %
<b>Sodium</b>	30 mg 1 %
<b>Potassium</b>	90 mg 3 %
<b>Protein</b>	13.5 g 28 %
Vitamin B6 (as pyridoxine HCl)	50 mg 2,500 %
Calcium	50 mg 5 %
Phosphorus	50 mg 5 %
Chromium (as chromium polynicotinate)	100 mcg 83 %
Amino Acid Complex	13.5 g †
Partially Hydrolyzed Whey Protein Concentrate	
L-Leucine (BCAA)	3,000 mg †
L-Isoleucine (BCAA)	1,500 mg †
L-Valine (BCAA)	1,500 mg †

\*Percent Daily Values are based upon a 2,000 calorie diet.

†Daily Value not established

Other Ingredients: Stearic Acid, Microcrystalline Cellulose, Magnesium Stearate,

#### TYPICAL AMINO ACID PROFILE\*\*\*

L-Isoleucine	1,500 mg	L-Proline	526 mg
L-Leucine	3,000 mg	L-Serine	452 mg
L-Valine	1,500 mg	L-Threonine	592 mg
L-Alanine	420 mg	L-Tyrosine	266 mg
L-Arginine	234 mg	L-Glycine	164 mg
L-Lysine	818 mg	L-Methionine	194 mg
L-Histidine	174 mg	L-Aspartic Acid	990 mg
L-Cystine	210 mg	L-Glutamic Acid	1,566 mg
L-Tryptophan****	108 mg	L-Phenylalanine	288 mg

This high potency muscle support formula contains 6,000 mg of isolated free form and peptide bonded Branch Chain Amino Acids (L-Isoleucine, L-Leucine and L-Valine) per serving.

This product has not been evaluated by the Food and Drug Administration. It is not intended to diagnose, treat, cure, or prevent any disease. Consult your physician before taking any nutritional supplement.

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*Continued --*

but also promotes the healing of wounded bone tissue and skin. Leucine has also been found to be helpful in lowering high levels of blood sugar, and detoxifying high ammonia counts in cells which have been produced by faulty amino acid metabolism (ketoaciduria).

## **Isoleucine**

This amino acid is essential not only for optimal growth in infants, but also to help maintain nitrogen equilibrium in adults. Isoleucine is necessary in the formation of red blood cells and is an important intermediary in the Krebs's cycle of energy production.

## **Valine**

In addition to working strongly with leucine to reduce ketoaciduria, valine is also used clinically to treat severe amino acid deficiencies (which are the result of various drug-related addictions). Three of valine's carbon atoms are used to manufacture succinates, which in turn help isoleucine to work more efficiently during cellular respiration.

## **Vitamin B6**

Vitamin B6 is a water soluble vitamin consisting of three related compounds: pyridoxine, pyridoxal, and pyridoxamine. Vitamin B6 facilitates the conversion of stored liver and muscle glycogen into useable energy and is intimately involved in the active transport of amino acids from the intestinal mucosa into the cells for metabolism.

## **Chromium** (*polynicotinate*)

A pure niacin-bound form of chromium that works to increase the effectiveness of insulin. Insulin is required for transport of amino acids into the cell where they are used to build new muscle tissue.

In addition, a scientifically balanced amino acid complex has been added to each BCAA tablet to further support the maintenance of lean muscle tissues and vigor during exercise.