



**interACTIVE**  
NUTRITION™

# BCAA™

CONSERVE MUSCLE  
MASS AND REDUCE  
MUSCLE BREAKDOWN

## Benefits

- Stimulates Protein Synthesis
- Improves Both Mental & Physical Performance
- Reduces Muscle Breakdown
- Prolongs Moderate Exercise Performance

Among the most beneficial and effective supplements in any sports nutrition program are BCAA (Branch Chain Amino Acids). These are the essential amino acids: Leucine, Isoleucine, and Valine.

## Features

BCAAs, the core ingredients of BCAA ELITE™, features many advantages to conserve muscle mass and to reduce muscle breakdown.

BCAA supplementation, before and after exercise, has beneficial effects for decreasing exercise-induced muscle damage and promoting muscle-protein synthesis.<sup>1</sup>

BCAAs are not only substrate for protein synthesis, but also modulate several components to the synthetic machinery and help to conserve muscle mass.<sup>2</sup>

BCAA supplementation may prevent muscle loss during chronic hypobaric hypoxia.<sup>3</sup>

Intake of BCAA during exercise can prevent or decrease the net rate of protein degradation caused by intense exercise.<sup>4</sup>

BCAA supplementation can reverse the reduction in serum glutamine concentration observed after prolonged intense exercise such as an Olympic triathlon.<sup>5</sup>

Consumption of BCAA before or during endurance exercise may improve both mental and physical performance.<sup>6</sup>

The result of studies suggest that an intake of BCAA has an anabolic effect on protein metabolism during the recovery period after exercise rather than during the actual exercise.<sup>7</sup>

## Support Studies

An experimental result indicated that ingestion of BCAA reduces the perceived exertion and mental fatigue during exercise and improves cognitive performance after the exercise.<sup>8</sup>

The data suggests that increased BCAA availability before exercise, when initial muscle glycogen is normal, results in significantly greater plasma NH<sub>3</sub> response during exercise than placebo administration.<sup>9</sup>

No toxic effects of BCAAs were observed in humans at a dose of 2.5 g/kg/day for 3 months or 1.25 g/kg/day for 1 year. There are no reports concerning BCAA toxicity in relation to exercise and sports.<sup>10</sup>

A variety of regimen has been studied in human clinical trial. No adverse reaction was reported with the consumption of 14, 30, 22 and 40 g / day.<sup>11</sup>

## References

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11. Anura V Kurpad, Tony Raj, Antoine El-Khoury, Rebecca Kuriyan, Kalburgi Maruthy, Sudhir Borgohila, Deepak Chandukudlu, Meradith M Resgen and Vernon R Young "Daily requirement for and splanchnic uptake of leucine in healthy adult Indians" American Journal of Clinical Nutrition, Vol. 74, No. 6, 747-755, Dec. 2001.

## BCAA Elite™

Available in Tropical Punch, 600g

## BCAA Muscle Guard™

Available in 240 capsules

### Recommended Use or Purpose:

This product stimulates muscle protein recovery and decreases exercise-induced muscle breakdown.

### Ingredient Info

	Per 1 scoop (5g) powder	Per 1 capsule (0.675g)
L-Leucine USP	2.25g	0.304g
L-Valine USP	1.5g	0.202g
L-Isoleucine USP	1.25g	0.169g

### \*Non-Medicinal Ingredients:

Microcrystalline cellulose, Magnesium stearate, Gelatin.

### Dose (adults):

**BCAA Muscle Guard** — 4 capsules before and 4 capsules after daily intense exercise with a glass of water.

**BCAA Elite** — Mix one scoop (20g) in 250mL of water and consume immediately. Take one serving prior to exercise and one serving following exercise.

Consult a health care practitioner for long-term consumption.

**Cautions:** Not intended for children, pregnant or breast feeding women. People with health conditions should consult a health care practitioner before consuming this product.

\*Ingredients and nutrition facts may vary per flavour.



For further information please contact InterACTIVE Nutrition at:  
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