# **BCAA Powder**

## Branched-chain amino acids with added L-glutamine

BCAA Powder combines the branched-chain amino acids (BCAAs)—leucine, isoleucine, and valine—along with the amino acid L-glutamine in a great-tasting, orange flavored powder. These four amino acids have a synergistic effect in fueling and building muscle, supporting the immune system and intestinal health, and facilitating maintenance of the body's antioxidant stores.\* This product is designed to be consumed before, during or after exercise. It contains no sugar, and is sweetened with organic stevia leaf extract.

BCAAs make up 35% of the essential amino acids in muscle protein. Beyond being part of the physical structure of muscles, BCAAs also serve as fuel for muscles, which may help reduce the breakdown of muscle tissue that sometimes occurs during intense physical training and may also facilitate recovery.\* Additionally, BCAAs help promote the synthesis of muscle proteins, making them a useful addition to exercise and bodybuilding regimens.\*

### May help support\*:

- Maintenance of lean muscle tissue
- Exercise endurance and capacity
- Recovery from strenuous physical activity
- Reduction in post-exercise muscle soreness

BCAAs are unique in that even in the absence of resistance training (weightlifting), they've been shown to stimulate lean muscle synthesis. For this reason, they may be helpful for anyone looking to build lean mass, in particular those recovering from injury or trauma, individuals with conditions that may result in accelerated breakdown of muscle tissue, and older individuals who may be at risk for losing muscle mass through the natural aging process.

#### **Synergy with Glutamine**

Strenuous activity is known to negatively impact intestinal function and the immune system. BCAAs may help reduce this effect, particularly when combined with L-glutamine. Glutamine is the body's most abundant amino acid. The body can synthesize it from other amino acids, so it's not technically classified as an "essential" amino acid. However, prolonged physiological and metabolic stress, such as endurance athletics or recovery from trauma, may result in the body using more glutamine or using it more quickly than this internal synthesis can keep up with. In these situations, glutamine is considered a conditionally essential amino acid, meaning that it must be consumed in the diet or from supplements in order to ensure an adequate supply.

Glutamine is considered a fuel for the immune system; it contributes to the functioning of white blood cells and is a building block for glutathione, often called the body's "master antioxidant." Glutamine is also a key fuel for enterocytes, the cells that line the small intestine. Many athletes experience occasional issues associated with increased intestinal permeability. Glutamine supports the integrity of the intestinal lining which may help protect against this.

#### **How to Take**

- As a dietary supplement, mix 9 grams (approx. one scoop) into 10-12 ounces of water per day, or as directed by your health care practitioner.
- Can be taken pre, peri or post workout.



Consult with your healthcare practitioner about your specific circumstances and any questions you may have.

\*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.