

# **BCAA DRINK**

Powerful Amino Acid Blend Designed for Quick Muscle Recovery and Ultimate Lean Body Mass<sup>+</sup>

#### STRAWBERRY KIWI

### **Dynamic BCAA Drink Supplementation**

Dynamic BCAA Drink is a naturally flavored pre- and post-workout amino acid supplement that is ideal for anyone from casual gym goers to even elite athletes. Dynamic BCAA Drink contains key branched-chain amino acids (BCAAs) proven to:

- Support muscle protein synthesis<sup>+†1,2</sup>
- Assist recovery during and after resistance training<sup>+†3</sup>
- Support body composition<sup>+†4</sup>
- Reduce fatigue, allowing you to train harder and longer\*\*

### **How Dynamic BCAA Drink Works**

Branched-chain amino acids (BCAAs) are comprised of three essential amino acids: leucine, isoleucine, and valine. These particular amino acids must be obtained through diet since humans don't synthesize them endogenously. BCAAs are rapidly absorbed into the blood and take action quickly.

Research has found that BCAAs are critical substrates for positively regulating muscle protein synthesis.<sup>\*1</sup> In turn, supplementing with BCAAs helps to promote muscle growth, prevent muscle tissue breakdown, lessen soreness after training, and support fat loss.<sup>\*†3,4</sup>

The muscle protein synthesis pathway is initiated by molecules called mTOR protein complexes. Research has found that the BCAA L-leucine activates key enzymes in the mTOR pathway.<sup>1</sup> However, L-leucine on its own does not sufficiently increase muscle protein synthesis (it is more efficient in the presence of the other two BCAAs).<sup>\*2</sup>



Moreover, L-isoleucine appears to be responsible for enhancing glucose uptake into skeletal muscle tissue (by increasing expression of glucose transporter 4), which supports preservation of lean body mass.<sup>+† 4</sup>

## Why Use Dynamic BCAA Drink?

Dynamic BCAA Drink contains no artificial sweeteners, gluten, GMOs, dairy, or added sugars; instead, we use stevia and natural flavors. Better yet, it mixes easily in water and comes in a refreshing strawberry-kiwi flavor.

## **Supplement Facts**

Serving Size: About 1 Scoop (10.5 g) Servings Per Container: About 30

Ingredients: Calories	Amount 15	% <b>DV</b>
Total Carbohydrates	3 g	1%*
L-Leucine	3 g	**
L-Isoleucine	1.5 g	**
L-Valine	1.5 g	**

Other Ingredients: Pineapple Fruit Powder, Natural Flavors, Citric Acid, Fruit and Vegetable Juice (Color), Silica, and Stevia Leaf Extract.

<sup>†</sup> In combination with proper diet and exercise.

**Directions:** Mix 1 scoop in 6-8 ounces of water before and after your workout as a dietary supplement, or as directed by your healthcare practitioner.

**Caution:** If you are pregnant, nursing, or taking medication, consult your healthcare practitioner before use. Keep out of reach of children.

#### References:

- Blomstrand E, Eliasson J, Karlsson HK, Köhnke R. Branched-chain amino acids activate key enzymes in protein synthesis after physical exercise. *J Nutr.* 2006 Jan;136(1 Suppl):269S-73S.
- Suryawan A, Torrazza RM, Gazzaneo MC, Orellana RA, Fiorotto ML, El-Kadi SW, Srivastava N, Nguyen HV, Davis TA.Enteral leucine supplementation increases protein synthesis in skeletal and cardiac muscles and visceral tissues of neonatal pigs through mTORC1dependent pathways. *Pediatr Res.* 2012 Apr;71(4 Pt 1):324-31.
- Howatson G, Hoad M, Goodall S, Tallent J, Bell PG, French DN. Exercise-induced muscle damage is reduced in resistance-trained males by branched chain amino acids: a randomized, double-blind, placebo controlled study. *J Int Soc Sports Nutr.* 2012 May 8;9(1):20.
- Manders RJ, Little JP, Forbes SC, Candow DG. Insulinotropic and muscle protein synthetic effects of branched-chain amino acids: potential therapy for type 2 diabetes and sarcopenia. *Nutrients*. 2012 Nov 8;4(11):1664-78.





 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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