

PRODUCT INFORMATION

BETA-ALANINE

BASIC FUNCTIONS

Buffer lactic acid, Improve performance.

Every athlete who wants to increase performance has generally tried creatine and definitely seen a result, however what they haven't generally tried is supplementing Beta-alanine. Beta-alanine is an amino acid that works with the essential amino acid histidine to form Carnosine. Carnosine is a di-peptide that increases anaerobic performance by buffering intracellular acidity levels, which put simply is a reduction in lactic acid build up or an enhancement of lactic acid clearance. Increased muscle carnosine levels can enhance the muscles buffering capacity on average by 10%, which when combined with creatine and other essential nutrients you can expect a noticeable improvement in strength/ anaerobic performance.

Supplementation with beta-alanine can increase muscle carnosine levels by up to 80% within 8 weeks (Sale et al. 2006). Many studies report an increase in performance for high intensity activities that last up to 60 seconds such as sprinting, resistance training, cycling, strength, power etc (Smith-Ryan et al., 2012, Sale et al., 2011). The most common question people ask about the supplement is does it hold body water? The answer is no, you get raw increases in your cells buffering capacity without any water weight gain. Moreover unlike other amino acids there isn't a known upper limit for beta-alanine supplementation as muscle carnosine levels rise in all subjects but the level varies. Consuming more than 10g/d can result in paraesthesia which is a harmless tingling sensation in the skin that disappears after 1-2 weeks (Saunders et al., 2012).

The people who would benefit from beta-alanine the most are;

1. Females as they generally have lower muscle carnosine levels than men
 2. Vegetarians as they generally consume less histidine and beta-alanine in their diet
 3. People over 25 years of age as muscle carnosine levels decrease as we age
 4. Non-athletic populations as they generally have lower muscle content levels
- However note that all people appear to increase muscle carnosine levels when supplementing beta-alanine so technically everyone is a candidate for using this amino acid to enhance performance.



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Sale C., Saunders B., Harris RC. 2006. The absorption of orally supplied beta-alanine and its effect on muscle carnosine synthesis in human vastus lateralis. *Amino Acids*, 30, 279-89. Epub 2006 Mar 24.

SALE, C., SAUNDERS, B., HUDSON, S., WISE, J. A., HARRIS, R. C. & SUNDERLAND, C. D. 2011. Effect of beta-alanine plus sodium bicarbonate on high-intensity cycling capacity. *Medicine & Science in Sports & Exercise*, 43, 1972-8.

SAUNDERS, B., SALE, C., HARRIS, R. C. & SUNDERLAND, C. 2012. Effect of beta-alanine supplementation on repeated sprint performance during the Loughborough Intermittent Shuttle Test. *Amino Acids*, 43, 39-47.

SMITH-RYAN, A. E., FUKUDA, D. H., STOUT, J. R. & KENDALL, K. L. 2012. High-velocity intermittent running: effects of beta-alanine supplementation. *Journal of Strength & Conditioning Research*, 26, 2798-805.

SIZE: 200 grams powder
FLAVOUR: Natural