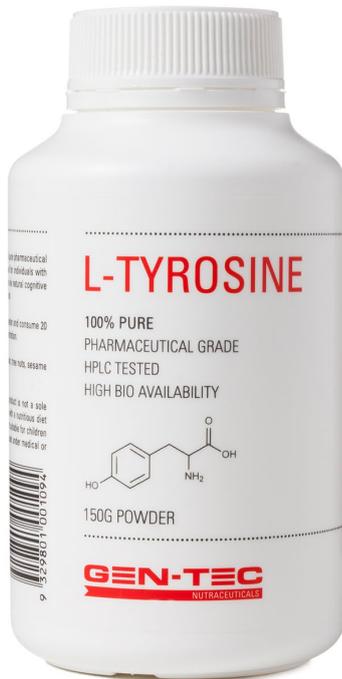


PRODUCT INFORMATION



L-TYROSINE

BASIC FUNCTIONS

Mood enhancement, Mental focus.

Performance is a fine balance between not only physical ability, but mental capability to perform well and sustain motivation. During times of physical and mental fatigue we don't perform as well as we could, therefore supplying the brain with nutrients is just as important as nourishing the physical body with nutrients. Tyrosine is a non-essential amino acid that is primarily used for the manufacture of neurotransmitters (chemical hormones) like dopamine, norepinephrine and epinephrine (O'Brien et al., 2007). Tyrosine is made in the central and peripheral nervous system as well as the adrenal medulla where it is stored to make epinephrine (which is released during intense exercise). Overall these neurotransmitters improve focus, energy and motivation, however when demand exceeds supply like during prolonged exercise and stressful periods we can experience fatigue and a lack of focus. Studies that looked at heightened dopamine levels during exercise in warm environment's (30°C+) found that the performance and motivation of these subjects were higher than subjects who had lower dopamine levels (Tumilty et al., 2011). This leads to the possibility that the ingestion of amino acid Tyrosine during intense exercise may either increase performance or alleviate the symptoms of fatigue.

Nemours studies reported the beneficial effects of tyrosine under various conditions. One of which is the ability of tyrosine to improve cold-induced working memory and prevent attention narrowing under stress (O'Brien et al., 2007, Mahoney et al., 2007). Furthermore, Tyrosine is observed to increase performance on stress-sensitive attention tasks which would otherwise lead to a decline in cognitive (mental ability) capacity (Mahoney et al., 2007). During acute periods of stress there is a heightened use of tyrosine-dependent neurotransmitters which is a contributing factor to the reduction in motivation, attention and working memory. Therefore consuming tyrosine can increase "brain power" under times of moderate-heavy stress (Mahoney et al., 2007). This amino acid may also play a role in the suppression of appetite as it works on neurotransmitters responsible for appetite suppression.

MAHONEY, C. R., CASTELLANI, J., KRAMER, F. M., YOUNG, A. & LIEBERMAN, H. R. 2007. Tyrosine supplementation mitigates working memory decrements during cold exposure. *Physiology & Behavior*, 92, 575-582.

O'BRIEN, C., MAHONEY, C., THARION, W. J., SILS, I. V. & CASTELLANI, J. W. 2007. Dietary tyrosine benefits cognitive and psychomotor performance during body cooling. *Physiology & Behavior*, 90, 301-307.

TUMILTY, L., DAIVSON, G., BECKMANN, M. & THATCHER, R. 2011. Oral tyrosine supplementation improves exercise capacity in the heat. *European Journal of Applied Physiology*, 111, 2941-2950.

SIZE: 150 grams powder
FLAVOUR: Natural



GEN-TEC
NUTRACEUTICALS

100% Australian Owned and Manufactured. Gen-Tec sources the world's finest quality raw materials and use internationally recognised bio chemists to produce leading products that live up to my expectations!

Nick Jones, Mr Australiasia, Mr Australia, Mr World
Enquiries +61 8 8362 5965 Visit gen-tec.com.au