

PRODUCT INFORMATION

ARGININE AKG

BASIC FUNCTIONS

Vasodilation, Nitric Oxide Production, Creatine Synthesis, Connective Tissue support, Growth Hormone support.

Arginine (Arg) is classified as a conditionally essential amino acid. This means under times of intense stress, illness or trauma the body requires more than what it can make (Botchlett et al., 2013). Arginine alpha-ketoglutarate (AAKG) is a derivative of arginine that increases nitric oxide production more effectively. The benefits of increased NO production is an increase in vasodilation which increases the diameter of blood vessels (hoses). This in turn leads to an increase in blood flow by relaxing the vascular cells (bigger pipes) which leads to greater oxygen and nutrient transportation. Clinically, AAKG and Arg has been used to treat patients with cardiovascular problems and erectile dysfunction as the vasodilatory properties of Arg improve blood flow, regulate inflammation and can reduce proteins sticking the blood vessel walls, thus smoother flow of blood (Campbell et al., 2006). Furthermore, Arginine is also converted to Ornithine which is an amino acid that works with Proline to improve collagen production (healthy joints) and wound healing (Arthur, 2009).

Moreover, in exercising individuals Arginine is involved in the synthesis of Creatine which is an amino acid that increases strength and performance by up to 15% in most athletes. As Creatine is heavily used during high intensity exercises, the demand on creatine synthesis is much greater, therefore the supplementation of Arg will support continual production to meet demands. In addition, Arg supplementation during exercise leads to venous pooling (a pump). This sensation of a "pump" is heightened due to the improvement in blood vessel size. Moreover, the effects arginine has on growth hormone release has been documented in various population groups with the overall consensus being that arginine stimulates the posterior pituitary gland to release growth hormone, which may be of benefit for recovery and body composition depending on the individual (Crowe et al., 2006, Collier et al., 2005).

A further crucial role that Arg plays in both health and in performance is its ability to firstly scavenge free radicals (eliminate bad toxins) and remove waste products that are metabolically created through intense exercise. Therefore the more arginine there is (within limits) the better your body can remove excess waste products, improve nutrient delivery and improve vascular function (Collier et al., 2005, Arthur, 2009)



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

PRODUCT INFORMATION

ARTHUR, R. 2009. Amino Acids. Journal of Complementary Medicine: CM, The, 8, 46-52.

BOTCHLETT, R., LAWLER, J. M. & WU, G. 2013. Chapter 45 - L-Arginine and L-Citrulline in Sports Nutrition and Health. In: BAGCHI, D., NAIR, S. & SEN, C. K. (eds.) Nutrition and Enhanced Sports Performance. San Diego: Academic Press.

CAMPBELL, B., ROBERTS, M., KERKSICK, C., WILBORN, C., MARCELLO, B., TAYLOR, L., NASSAR, E., LEUTHOLTZ, B., BOWDEN, R., RASMUSSEN, C., GREENWOOD, M. & KREIDER, R. 2006. Pharmacokinetics, safety, and effects on exercise performance of L-arginine alpha-ketoglutarate in trained adult men. Nutrition (Burbank, Los Angeles County, Calif.), 22, 872-81.

COLLIER, S. R., CASEY, D. P. & KANALEY, J. A. 2005. Growth hormone responses to varying doses of oral arginine. Growth Hormone & IGF Research, 15, 136-139.

CROWE, M. J., WEATHERSON, J. N. & BOWDEN, B. F. 2006. Effects of dietary leucine supplementation on exercise performance. European Journal of Applied Physiology, 97, 664-72.

SIZE: 200 grams powder
FLAVOUR: Natural