

L-Tyrosine
An Amino Acid Precursor for Neurotransmitters and Thyroxine

DESCRIPTION

L-Tyrosine capsules, provided by Douglas Laboratories®, contain 800 mg pure L-tyrosine.

FUNCTIONS

Amino acids have many functions in the body. They are the building blocks for all body proteins – structural proteins that build muscle, connective tissues, bones and other structures, and functional proteins in the form of thousands of metabolically active enzymes. Amino acids provide the body with the nitrogen that is essential for growth and maintenance of all tissues and structures.

Proteins and amino acids also serve as a source of energy, providing about 4 calories per gram. Aside from these general functions, individual amino acids also have specific functions in many aspects of human physiology and biochemistry.

Tyrosine is a precursor of important neurotransmitters in the brain, such as dopamine, epinephrine (adrenaline) and norepinephrine (noradrenaline). The synthesis of these neurotransmitters is limited by the rate of tyrosine entry from plasma into the brain. For example, low plasma levels of tyrosine, as can result from the use of oral contraceptive drugs, cause lower norepinephrine synthesis which is associated with mood changes and other neurological signs.

Tyrosine is also a precursor of the thyroid hormones triiodothyronine and thyroxine. In the thyroid gland, these hormones are synthesized from a precursor protein called thyroglobulin, which is a large protein rich in tyrosine residues that are reacted with iodine. When needed, thyroid hormones are released via hydrolysis from thyroglobulin. Thyroglobulin functions as storage for the thyroid hormones; a several weeks’ supply of these hormones exists in the normal thyroid gland. Once released, thyroid hormones act via specific cell receptors to increase oxygen consumption and basal metabolic rate.

L-tyrosine is a conditionally essential amino acid that can be manufactured by the body from the essential amino acid phenylalanine. Therefore, adequate tyrosine production depends on a sufficient supply of phenylalanine in the diet.

INDICATIONS

L-tyrosine capsules may be a useful nutritional adjunct for individuals who wish to supplement their diets with significant amounts of L-tyrosine.

FORMULA (TYR)

Each capsule contains:
 L-Tyrosine 800mg

SUGGESTED USE

One to two capsules daily on an empty stomach with plenty of liquid, or as directed by physician.

SIDE EFFECTS

No adverse side effects have been reported.

STORAGE

Store in a cool, dry place, away from direct light. Keep out of reach of children.

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For more information on L-Tyrosine visit douglaslabs.com

† 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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Your patients trust you.**