

L-TRYPTOPHAN

L-Tryptophan is the precursor to the neurotransmitter serotonin. Serotonin levels in the brain influence sleep cycles, appetite, and mood. When serotonin levels are deficient, a person may experience symptoms of insomnia, depression, or food cravings. L-Tryptophan naturally converts to serotonin, and supplementation with this essential amino acid will address serotonin deficiencies without side effects or toxicity. L-Tryptophan (500 mg) from Craig Nutraceuticals, Inc. (CNI) is the highest quality and purest L-Tryptophan available anywhere in the world today.

Quick facts: L-Tryptophan

- **Naturally enhances relaxation and sleep**
- **Helps relieve anxiety**
- **Acts as a natural mood enhancer**
- **Reduces minor premenstrual symptoms**
- **Facilitates gut motility**
- **Reduces cravings for carbohydrates**
- **Pair with CNI's enteric coated 3-Phos-B to ensure maximum uptake and conversion**

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DIRECTIONS

As a sleep aid, take 1 to 3 capsules 15 to 30 minutes before bedtime. If serotonin deficiencies are noted in depression, and for anxiety and mood enhancement, take 2 capsules 30 minutes before dinner and 2 capsules 15 to 30 minutes before bed.

Tryptophan should be taken with a high quality vitamin B complex. We recommend CNI's 3-Phos-B to ensure maximum uptake and conversion to serotonin. Take with water or juice; for proper uptake, do not take L-Tryptophan with hot liquids, milk, or other proteins. For best results, take 30 minutes *before* or one hour *after* meals containing *protein*.

WHAT IS TRYPTOPHAN?

Tryptophan, an essential amino acid, is the precursor to serotonin. Serotonin is a neurotransmitter responsible for transmitting nerve impulses in the brain, inducing sleep and tranquility, and stabilizing function of the central nervous system. Serotonin deficiencies, which are related to L-Tryptophan deficiencies, are well documented in cases of depression and insomnia.

CONVERSION TO SEROTONIN

Vitamin B-6 is necessary for Tryptophan metabolism and conversion to serotonin. CNI's 3-Phos-B contains the active form of B-6—known as Pyridoxal-5'-Phosphate—and helps ensure proper conversion to serotonin. Balancing serotonin levels often proves very helpful for those with sleep disturbances, moderate anxiety, or carbohydrate cravings related to serotonin deficiencies. Tryptophan also helps to correct neurotransmitter imbalances in persons whose serotonin levels are low as a result of chemical addiction.

TRYPTOPHAN AND SLEEP

Sleep deprivation is a serious concern for many, and low serotonin levels are often the cause of this problem. Tryptophan converts to serotonin helping to induce relaxation and naturally enhance sleep. In extreme problems, Tryptophan should be taken in the early evening and again at bedtime.

MOOD ENHANCEMENT

It has been well documented that low Tryptophan and serotonin levels correlate with depression. If depression also involves catecholamine biochemistry, then taking Tryptophan in a regimen along with Tyrosine is recommended. Since they compete for uptake in the brain, and because Tryptophan induces sleep, it is recommended that Tryptophan be taken prior to dinner and again at bedtime. Tyrosine should be taken prior to breakfast and again during mid-morning. This prevents competition for uptake.

AUTISM

Low levels of Tryptophan have been documented in autistic children, suggesting a possible defect in the conversion of Tryptophan to serotonin.

PAIN TOLERANCE

Increased serotonin levels have a positive effect on pain tolerance, and may be especially useful for chronic pain related to arthritis and lower back problems. In one study, Tryptophan was administered at the dose of one 500 mg. capsule every 2 hours (total 6 per day) with a resulting 50% reduction in pain intensity. CNI's D-Phenylalanine is also recommended for those suffering from chronic pain.

APPETITE CONTROL

For those on a weight reduction program it is important to note that some studies suggest that supplementation with L-Tryptophan can help control appetite.

CHEMICAL ADDICTION

Cocaine addiction causes a deficiency of L-Dopamine and can lead to imbalances of serotonin and catecholamines. In this scenario, administering both L-Tyrosine and L-Tryptophan can help correct such imbalances. This regimen has been used in chemical dependency units as an adjunct to conventional therapies. Tryptophan may also be helpful for those addicted to nicotine.

JET LAG

Supplementing with L-Tryptophan is recommended for those who travel and experience jet lag. It is most effective when taken in conjunction with L-Tyrosine to increase catecholamine as well as serotonin production.

ELIMINATION

L-Tryptophan increases peristaltic action in the small and large intestine by increasing contraction and expansion of the intestinal muscles of the digestive tract. Persons taking regular daily doses of L-Tryptophan report improvements in terms of regularity and consistency of bowel movements.

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