

# Nutritional Combination Relieves Depression and Low Energy Naturally

## Natural Formula Corrects Deficiencies That Can Lead to Depression

The nutrients in Elopex™ are important for normal production of adrenal hormones and synthesis of neurotransmitters. This natural mood elevator supplies specific vitamins, minerals, amino acids and glandular support to correct deficiencies which contribute to symptoms including:

- Depression
- Low Energy
- Low Blood Pressure
- Low Functioning States
- Tiredness
- Tendency toward Allergies
- Poor Wound Healing

### ELOPLEX™ Natural Mood Elevator

Product No.422      Fill Size: 60 Capsules

Each capsule contains:	% Daily Value
Vitamin C . . . . . 100 mg.	166%
Vitamin B-6 . . . . . 10 mg.	500%
Pantothenic Acid . . . . . 50 mg.	500%
Zinc (as zinc proteinate) . . . . . 3.3 mg.	22%
Copper (as copper proteinate) . . . . . 0.3 mg.	15%
L-Tyrosine . . . . . 150 mg.	*
DL-Phenylalanine . . . . . 80 mg.	*
Raw Porcine Hypothalamus . . . . . 15 mg.	*
Raw Porcine Adrenal . . . . . 10 mg.	*

Other ingredients: magnesium stearate, rice flour, gelatin.

\*Daily Value not established.

**Suggested Use:** One or two capsules, three times daily.

## Neurotransmitter Synthesis Responds Rapidly to Changes in Availability of Chemical Precursors

A deficiency of certain neurotransmitters (chemicals in the brain that transmit signals from one nerve cell to another) can cause depression. These include norepinephrine, dopamine and serotonin.<sup>(1)</sup> Synthesis of brain neurotransmitters, important in mind, mood and memory functions, responds rapidly to changes in availability of their chemical precursors. Serotonin depends largely upon the concentrations of tryptophan; dopamine and norepinephrine vary with the availability of the amino acids **tyrosine**<sup>(5,6)</sup> and **phenylalanine**.<sup>(2)</sup> Tyrosine and phenylalanine have been shown to alleviate depression in many persons.<sup>(1)</sup>

Because of its action in the central nervous system, **L-phenylalanine** elevates moods, enabling the individual to overcome depression. It also decreases pain associated with migraines, menstruation and arthritis. It has been used to improve memory and learning and also in treating obesity.<sup>(7)</sup>

**L-tyrosine** is used not only in the treatment of depression and anxiety, but for allergies and headaches as well. Tyrosine supports adrenal, thyroid and pituitary function. A lack of tyrosine triggers a deficiency of norepinephrine at a specific brain location, which results in depression and mood disorders.<sup>(7)</sup>

**Vitamin B-6** has been used to correct disturbances of hormonal metabolism in women suffering from premenstrual syndrome and in correcting blood sugar imbalances. Adequate levels of B-6 are required for proper metabolism of the amino acid tryptophan. Abnormalities of tryptophan metabolism may contribute to glucose intolerance.<sup>(2)</sup> Current research indicates that depressed patients have disturbed serotonin production. The neurotransmitter serotonin is derived from dietary tryptophan with the aid of vitamin B-6.<sup>(3)</sup>

**Vitamin C** aids in the metabolism of tyrosine and phenylalanine. Large concentrations of vitamin C are found in the adrenal glands and the vitamin is essential in the formation of adrenaline. The vitamin is used rapidly during periods of stress and any stress that is sufficiently severe or prolonged will cause depletion of vitamin C in the tissues.<sup>(1)</sup>

Vitamin C is also a cofactor in the production of carnitine which is required in muscle for proper metabolism of fatty acids and energy production.<sup>(4)</sup> A deprivation study in penitentiary inmates showed that progressively decreasing quantities of vitamin C resulted in fatigue, lassitude, reduced energy and depression, long before obvious clinical scurvy was evident.<sup>(5)</sup>

**Pantothenic acid** stimulates the adrenal glands and increases production of cortisone and other adrenal hormones important for healthy skin and nerves. There is a close correlation between pantothenic acid tissue levels and functioning of the adrenal cortex. A deficiency may lead to adrenal exhaustion and hypoglycemia. Diminished adrenal function may lead to physical and mental depression.<sup>(1)</sup>

Because the brain contains one of the highest concentrations of pantothenic acid, mental symptoms such as insomnia, fatigue and depression can be a result of deficiency.<sup>(1)</sup>

**Zinc and copper** are essential elements in cell membranes for conversion of triiodothyronine for incorporation into the cell. Marginal deficiency of copper or zinc may be responsible for lowered basal metabolic rates, even though the serum level of thyroxin is within normal limits. Deficiency of zinc in rats significantly impairs thyroid hormone function.<sup>(5)</sup> Zinc and copper are also cofactors for cytochrome C, important in electron transport and energy production.<sup>(2)</sup>

Zinc and vitamin C are important to the immune system and for wound healing.<sup>(2)</sup> The immune system of a depressed individual is usually very low and therefore ineffectively responds to diseases.<sup>(1)</sup>

## Glandular Concentrates Contain Naturally Occurring Precursors and Polypeptides to Support Function

It is the function of the adrenal hormones, adrenaline and noradrenaline, to prepare the body for responding to stress. Inadequate output results in compromised stress reactions. Adrenaline and noradrenaline's functions are accomplished by increasing metabolic rate and excitability of the whole body. Specifically they:

- Increase the release of glucose into the blood. If the body lacks this normal function, the result is prolonged states of low blood sugar with low functioning states physically, mentally and emotionally.
- Alleviate abnormal low blood pressure.

Under stress the hypothalamus secretes corticotropin-releasing factor (CRF) which causes the anterior pituitary to release adrenocorticotrophic hormone (ACTH). This increases adrenal production of glucocorticoids, often increasing cortisol secretion twenty fold.<sup>(6)</sup> The following effects result:

- Blood sugar is elevated
- Inflammation is blocked
- Wound healing is enhanced
- Resistance to all forms of physical or mental stress increases

Glandular concentrates supply naturally occurring precursors and polypeptides to support glandular function.

Glandulars are not hormones. They activate the gland to produce hormones. The entire point of glandular therapy is to normalize the affected gland or tissue, not to stimulate it. Consequently, it makes little difference whether the affected gland is overactive or underactive.

WARNING: This information is provided for health care professionals only. **This publication and the product contained herein have not been approved or evaluated by the Food and Drug Administration. This publication, and the product contained herein are not intended to diagnose, treat, cure or prevent any disease.** The product relates to nutritional support only.

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