# Corticare B™

### **Optimal Support for Coenzyme A Production**



Available in 120 capsules & 240 capsules

#### Discussion

**Pantothenic Acid (as d-calcium pantothenate)** Pantothenic acid, a B complex vitamin also known as vitamin B5, occurs as an unstable oil. Its water-soluble salt, d-calcium pantothenate, is the form most commonly used in supplements. D-calcium pantothenate is composed of 91.5% pantothenic acid and 7.5% calcium. Among its many physiological functions, pantothenic acid is a precursor to the synthesis of coenzyme A (CoA), is an essential cofactor for ATP production, and is essential to the adrenal cortex for production of glucocorticoids.\*

#### Vitamin B6 (as pyridoxal 5'-phosphate and pyridoxine HCI)

Corticare B<sup>™</sup> provides vitamin B6 as both pyridoxine HCl and activated pyridoxal 5'-phosphate, the form in which B6 is transported in the blood. Physiologically, vitamin B6 influences the adrenal glucocorticoid receptor, stimulates the secretion of adrenal catecholamines, and aids in sodium and potassium balance.\*

**Vitamin C (as magnesium ascorbate)** The release of adrenocorticotropic hormone (ACTH) from the pituitary gland in tandem with the body's physiological response to stress will deplete the relatively large amount of vitamin C typically stored in the adrenal cortex.<sup>[1]</sup> This vitamin is essential for the synthesis of epinephrine, the hormone secreted by the adrenal medulla in response to stress. Epinephrine, in turn, plays a role in the synthesis of aldosterone, the hormone that regulates blood pressure, volume, and pH.\*

**Folate (as calcium folinate and 5-MTHF)** Corticare B provides the activated form of folic acid—5-MTHF as Quatrefolic<sup>[2]</sup>—to ensure superior bioavailability. Folic acid is important for building and repairing protein that may be broken down by stress hormones. It is also key to the synthesis of serotonin, a neurotransmitter that affects mood, appetite, and sleep,<sup>[3, 4]</sup> all of which are often negatively affected by stress.\*

## **Clinical Applications**

- » Supports Adrenal Hormone Synthesis\*
- » Supports Adrenal Physiological Functions\*
- » Supports Energy Production\*

Corticare B<sup>™</sup> supplies significant amounts of water-soluble B vitamins that are essential to energy metabolism. These vitamins support many physiological functions associated with adrenal hormone production and regulation. They also assist in the production of energy through enhancement of coenzyme A synthesis. Activated B vitamins such as pyridoxal 5'-phosphate and 5-methyltetrahydrofolate (5-MTHF) are used in the formula for optimal clinical effectiveness. 5-MTHF supports healthy folate nutrition, especially in those with genetic variations in folate metabolism, while the Quatrefolic<sup>®</sup> form ensures superior bioavailability. The addition of L-carnitine enhances the activation of pantothenate kinase, the first and most critical enzyme involved in the metabolic conversion of pantothenic acid to coenzyme A.\*

**L- Carnitine (as tartrate)** This conditionally essential nutrient derived from lysine is needed for the "carnitine shuttle." It transports long-chain fatty acyl CoA from the outside to the inside of the mitochondria, making it a key nutrient in the production of energy.\*

**BioPerine**<sup>®</sup> This patented extract of black pepper (*Piper nigra*) has been shown to significantly enhance the availability of vitamin C and vitamin B6.<sup>\*[5]</sup>

#### **Corticare B Supplement Facts**

Serving Size: 2 Capsules

	Amount Per Serving	%Daily Value
Vitamin C (as magnesium ascorbate)	75 mg	125%
Vitamin B6 (as pyridoxal 5'-phosphate and pyridoxine HCI)	75 mg	3750%
Folate (200 mcg as calcium folinate and 200 mcg as 5-methyltetrahydrofolate <sup>†</sup> )	400 mcg	100%
Pantothenic Acid (as d-calcium pantothenate)	750 mg	7500%
L-Carnitine (as tartrate)	150 mg	* *
Black Pepper Extract ( <i>Piper nigrum</i> )(fruit)(BioPerine®‡)	3 mg	**
** Daily Value not established		

Other Ingredients: HPMC (capsule), magnesium stearate, and silica.

\*BioPerine is a registered trademark of Sabinsa Corp. BioPerine is protected by US Patents 5,536,506; 5,744,161; 5,972,382; and 6,054,585.

**DIRECTIONS:** Take two capsules daily, or as directed by your healthcare practitioner.

**DOES NOT CONTAIN:** Wheat, gluten, corn protein, yeast, soy, animal or dairy products, artificial colors, artificial sweeteners, or preservatives.

**CAUTIONS:** Consult your healthcare practitioner before use. Keep out of reach of children. Avoid if allergic to any ingredient.

STORAGE: Keep tightly closed in a cool, dry place.



#### **References**

- 1. Murray RK, Granner DK, Mayes PA, et al. *Harper's Biochemistry*. 25 ed. Stamford, CT: Appleton & Lange; 2000.
- Quatrefolic<sup>®</sup> The fourth generation folate. www.quatrefolic.com. Accessed July 12, 2011.
- Miller AL. The methylation, neurotransmitter, and antioxidant connections between folate and depression. *Altern Med Rev.* 2008 Sep;13(3):216-26. [PMID: 18950248]
- Trivedi MH. The link between depression and physical symptoms. *Prim Care Companion J Clin Psychiatry*. 2004;6(Suppl 1):12-6. [PMID: 16001092]
- BioPerine<sup>®</sup> An Ingredient of Sabinsa. www.bioperine.com. Updated April 20, 2010. Accessed July 12, 2011.