# Stress-B-Plus™

### DESCRIPTION

Stress-B-Plus<sup>™</sup>, manufactured by Douglas Laboratories, is a comprehensive B supplement providing all of the essential B vitamins as well as related nutrients.

## **FUNCTIONS**

As co-enzymes, the B vitamins are essential components in most major metabolic reactions. They play an important role in energy production, including the metabolism of lipids, carbohydrates, and proteins. B vitamins are also important for blood cells, hormones, and nervous system function. † As water-soluble substances, B vitamins are not generally stored in the body in any appreciable amounts (with the exception of vitamin B-12). Therefore, the body needs an adequate supply of B vitamins on a daily basis.

Thiamin, riboflavin, and niacin are all essential coenzymes in energy production. Thiamin is converted quickly into thiamin pyrophosphate, which is required for glycolytic and Krebs cycle reactions. Thiamin also appears to be related to nerve impulse transmission. Riboflavin is a component of the coenzymes FAD and FMN, which are intermediates in many redox reactions, including energy production and cellular respiration reactions. Niacin is also a component of the coenzymes NAD and NADP, which are involved in energy production, as well as biosynthetic processes. †

Vitamin B-6 is a coenzyme in amino acid metabolism. It is necessary for the metabolism of homocysteine and the conversion of tryptophan into niacin. Vitamin B-6 dependent enzymes are also needed for the biosynthesis of many neurotransmitters, including serotonin, epinephrine, and norepinephrine. Vitamin B-12 and folic acid are coenzymes in DNA and RNA metabolism. Both of these B vitamins assist in homocysteine metabolism. Folic acid serves as a methyl donor and vitamin B-12 as a coenzyme in the conversion of homocysteine to methionine. †

Biotin and pantothenic acid are also coenzymes essential for energy production from dietary fats, carbohydrates, and proteins. Pantothenic acid is a component of coenzyme A and of phosphopantetheine, and is therefore essential for Krebs cycle operation. Biotin is involved in many carboxylation reactions associated with gluconeogenesis, the Krebs cycle, and fatty acid synthesis. †

While not truly vitamins choline, inositol, and para-aminobenzoic acid are important nutrients related to B vitamins. Choline serves as a methyl donor for homocysteine metabolism following conversion to betaine, as a structural component of cellular membranes as phosphatidylcholine, and as a neurotransmitter as acetylcholine. Inositol aids in the cellular response to hormonal signals, serves as a source of arachidonic acid, and is active in cellular membranes as phosphatidylinositol. Finally, para-aminobenzoic acid has antioxidant properties. †

## **INDICATIONS**

Stress-B-Plus<sup>™</sup> may be useful for individuals who want to supplement their diets with a complete array of B vitamins and related nutrients.

### **FORMULA (#7452)**

Each Tablet Contains	
Thiamine (Vitamin B-1)	55 mg
Riboflavin (Vitamin B-2)	55 mg
Niacinamide	200 mg
Vitamin B-6 (as Pyridoxine HCI)	55 mg
Folic Acid	400 mcg
Vitamin B-12	100 mcg
Biotin	
Pantothenic Acid	55 mg
(as Calcium Pantothenate)	_

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#### PRODUCT DATA

# Stress-B-Plus<sup>™</sup>

PABA (para-Aminobenzoic Acid)	55 mg
Inositol	55 mg
Choline	26 mg
(from 55 mg of Choline Bitartrate)	-

### SUGGESTED USE

Adults take one tablet daily or as directed by a healthcare professional.

#### 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.

## REFERENCES

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# Stress-B-Plus<sup>™</sup>

## For more information 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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