Neuro Comfort

DESCRIPTION

Specific nutrients such coenzyme Q-10, magnesium, and B vitamins are associated with functioning of neurological pathways. **Neuro Comfort** is a formula designed by Neurological Specialists based on ingredient research to support normal brain neuron sensitivity, cerebral vessel relaxation, and healthy mitochondrial function, all of which may lead to overall head comfort. †

FUNCTIONS

A common neurological sensitivity that can often be associated with discomfort, nausea, emesis, photophobia, and visual sensory changes, is linked to a number of genes, including those involved in regulating the vascular system. Of particular importance is the methylenetetrahydrofolate reductase (MTHFR) gene and the role it plays in neurological pathways. Gene expression is modulated through epigenetic mechanisms, which involve methionine.

Another important factor is homocysteine because high plasma levels of homocysteine appear to have negative effects on the vasculature, impairing the functional abilities of endothelial and smooth muscle cells. It has been suggested that homocysteine (Hcy) and the 5'-10'-methylenetetrahydrofolate reductase (MTHFR) C677T variant are implicated in the development of brain hypersensitivity and reactivity. Genetic factors such as the MTHFR C677T polymorphism and other polymorphisms in folate-related genes are associated with high homocysteine levels. Studies suggest that patients with brain hyper-reactivity have higher homocysteine levels and complex epigenetic interaction among folate-related genes that may contribute to increasing this vascular sensitivity.

The primary route by which homocysteine is re-methylated to methionine requires folate in the form of methyltetrahydrofolate as a methyl donor and vitamin B-12 (methylcobalamin) as a coenzyme. Methyltetrahydrofolate, or L-methylfolate, can be used directly by the body and cross the blood-brain barrier, without the need for folic acid conversion via the enzyme 5,10-methylenetetrahydrofolate reductase (MTHFR). Therefore, supplementing with the methylated B vitamins L-methylfolate (5-MTHF) and methylcobalamin may contribute to healthy homocysteine levels and proper methylation support by influencing the methionine-homocysteine cycle.†

Magnesium plays an important role in mitochondrial energy production, cell-to-cell communication, skeletal and smooth muscle relaxation, and neurotransmitter production and regulation. Significantly lowered serum, intracellular, cerebrospinal fluid and salivary magnesium have been seen in individuals with increased cerebral hypersensitivity and reactivity. Magnesium deficiency can lead to many physiological changes, including cerebral artery spasm and increased release of stimulating mediators. A double blind, randomized, placebo-controlled trial found that a high dose of oral magnesium consumed daily for 12 weeks, significantly supported head comfort and lessened the frequency and duration of stimuli to the brain. Therefore, magnesium supplementation may support cerebral vessel function and relaxation.† The magnesium glycinate chelate offered in Neuro Comfort is a well-tolerated form of magnesium that is bioavailable to the body.

When brain energy metabolism is found to be suboptimal, the brain becomes hyper-responsive to many stimuli. This metabolic abnormality of mitochondrial oxidative metabolism has led to the research and suggestion of riboflavin and coenzyme Q-10 as supporting nutrients. Coenzyme Q-10 (ubiquinone) is an important rate-limiting cofactor in the mitochondrial electron transport chain. Since cellular activities are dependent upon energy, Co Q-10 is crucial for the efficient functioning of nearly every cell. Riboflavin is an essential coenzyme in energy production. It is a component of the coenzymes FAD and FMN, which are intermediates in many redox reactions. Based on human clinical trials, it has been proposed that a dose of 400 mg of riboflavin assists in promoting cellular mitochondrial oxygen metabolism, thereby supporting healthy cerebral reactivity and stimulation.†

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INDICATIONS

Neuro Comfort is indicated as a dietary supplement for individuals who desire nutrients to support the brain's sensitivity to stimuli and provide cerebral comfort and vessel relaxation.

FORMULA (#202021-60X)

Other ingredients: Hydroxypropyl methylcellulose (capsule), cellulose, vegetable stearate and silica

SUGGESTED USE

Adults take 2 capsules daily with food or as directed by your healthcare professional.

SIDE EFFECTS

No adverse effects have been reported.

STORAGE

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

REFERENCES

Lea R, Colson N, Quinlan S, Macmillan J, Griffiths L. Pharmacogenet Genomics. 2009 Jun;19(6):422-8. Stuart S CH, Lea R et al The Role of the MTHFR Gene in Migraine. *Headache Currents: Genetics and Headache*. 2012;March

Sun-Edelstein C MA. Clinical J of Pain. 2009;25(5):446-452.

Sun-Edelstein C MA. Expert Rev Neuother. 2009;3(Mar; 9):369-379. [Magnesium].

Boehnke C RU, Flach U, Et al. European J of Neurology. 2004;11:475-477. [Riboflavin].

Schoenen J, Jacquy J, Lenaerts M. Neurology. 1998 Feb;50(2):466-70. [Riboflavin].

Markley HG. Headache. 2012 Oct;52 Suppl 2:81. [Coenzyme Q10 and riboflavin].

Rozen TD, Oshinsky ML, Gebeline CA, Bradley KC, Young WB, Shechter AL, Silberstein SD. Cephalalgia.

2002 Mar;22(2):137-41. [Coenzyme Q10].

Hershey AD. Headache. 2007 Jan;47(1):73-80. [Coenzyme Q10].

For more information on Neuro Comfort, 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.