GABA

Code: FE2136 – 60 vegetable capsules

***Gamma*-aminobutyric acid (GABA)** is the key compound used by nerve cells as a defence mechanism for stress. It is bonded to specific receptors on neurons: once these GABA receptors are blocked, neurons open up to allow negatively charged ions to pass through them, reducing the excitability of neurons. Our formula also contains pyridoxal-5'-phosphate, the coenzymated form of **vitamin B6**, which is biologically active and the vital precursor for the synthesis of neurotransmitters.

HEALTH CLAIMS (EU Regulation 432/2012): *Vitamin B6 contributes to the normal functioning of the nervous system and normal psychological function.*

Ingredients: *gamma*-Aminobutyric acid (GABA), anticaking agents (magnesium salts of fatty acids and silicon dioxide), pyridoxal 5'-phosphate (vit. B6), vegetable capsule (glazing agent: hydroxypropylmethylcellulose; humectant: purified water).

Nutritional information:	**1 capsule (726 mg)**
GABA	600 mg
Vitamin B6	1,37 mg (98%*)

*NRV: Nutrient Reference Value in %.

Size and format:

60 vegetable capsules.

Recommended daily dose:

1–4 capsules daily.

Consult a health-care practitioner for use beyond 4 weeks.

Do not exceed the stated recommended daily dose.

Indications and uses:

- Reduces anxiety and induces relaxation.
- Insomnia: it shortens sleep latency and increases total sleep time
- Hypertension: lowers blood pressure.

Cautions:

It is recommended to consult a health-care practitioner prior to use if you are pregnant or breast-feeding.
Do not use with alcohol.

DETAILS:

Gamma-aminobutyric acid (GABA) is the key compound used by nerve cells as a defence mechanism for stress. It is bonded to specific receptors on neurons: once these GABA receptors are blocked, neurons open up to allow negatively charged ions to pass through them, reducing the excitability of neurons, and thus, stress. Our formula also contains pyridoxal-5'-phosphate, the coenzymated form of vitamin B6, which is biologically active and the vital precursor for the synthesis of neurotransmitters.

Gamma-aminobutyric acid (GABA) is the main inhibitory neurotransmitter in the brain, which means that it counteracts excitatory signals and promotes calm. Anti-anxiety drugs such as lorazepam and zopiclone are thought to affect the GABA receptor; however, these drugs cause dependence.

New Roots Herbal's **GABA** is a supplement to promote relaxation and reduce nervous tension without any known side effects.

GABA

Code: FE2136 – 60 vegetable capsules

INGREDIENTS:

GABA: its presence in nerve tissue ensures the balance between neuronal excitation and inhibition, a key requirement for sensory, cognitive and motor functions. It is an inhibitory neurotransmitter that reduces the excitability of the nervous system and increases alpha wave activity within the brain, which results in a relaxed mood [(1)].

In a human study, one hour after oral administration of GABA, alpha waves were significantly increased and beta waves decreased compared to patients treated with water or L-theanine, indicating that GABA not only induces relaxation, but also reduces anxiety. In addition, the same study showed that GABA could enhance immunity in stressful situations [(2)].

GABA significantly shortens sleep latency and increases total sleep time during the non-REM phase [(3)].

Several studies have shown that oral GABA supplementation can reduce blood pressure [(4-6)].

VITAMIN B6: the ester phosphate derivative, pyridoxal-5'-phosphate, is the best absorbed bioactive co-enzyme form and plays a vital role in the function of approximately 100 enzymes that catalyse essential chemical reactions in metabolic processes in the body, including protein and carbohydrate metabolism, neurotransmitter synthesis (serotonin, epinephrine or adrenaline, norepinephrine, GABA, etc.), histamine synthesis, haemoglobin synthesis, gene function and expression [(7,8)].

Vitamin B6 is much needed for neurotransmitter metabolism, since pyridoxal-5'-phosphate is a coenzyme involved in enzymatic reactions leading to the synthesis of several important neurotransmitters such as serotonin, epinephrine (adrenaline), norepinephrine (noradrenaline) and gamma-aminobutyric acid (GABA), playing a vital role in the functioning of the nervous system and contributing to psychological function and mood [(9,10)].

References:

1) Enna, Sam J. "The GABA receptors." The GABA receptors. Humana Press, 2007. 1-21.
2) Abdou, Adham M., et al. "Relaxation and immunity enhancement effects of γ-Aminobutyric acid (GABA) administration in humans." Biofactors 26.3 (2006): 201-208.
3) Yamatsu, Atsushi, et al. "Effect of oral γ-aminobutyric acid (GABA) administration on sleep and its absorption in humans." Food science and biotechnology 25.2 (2016): 547-551.
4) Shimada, Morio, et al. "Anti-hypertensive effect of γ-aminobutyric acid (GABA)-rich Chlorella on high-normal blood pressure and borderline hypertension in placebo-controlled double blind study." Clinical and experimental hypertension 31.4 (2009): 342-354.
5) Inoue, K., et al. "Blood-pressure-lowering effect of a novel fermented milk containing γ-aminobutyric acid (GABA) in mild hypertensives." European journal of clinical nutrition 57.3 (2003): 490.
6) Matusbara, F., et al. "Effects of GABA supplementation on blood pressure and safety in adults with mild hypertension. Jpn." Pharmacol. Ther 30 (2002): 963-972.
7) Mason, J. B. "Vitamins, trace minerals, and other micronutrients." Goldman L, Ausiello D. Cecil Textbook of Medicine 23 (2007): 1626-39.
8) Virk, Ricky S., et al. "Effect of vitamin B-6 supplementation on fuels, catecholamines, and amino acids during exercise in men." Medicine and science in sports and exercise 31.3 (1999): 400-408.
9) Selhub, Jacob, et al. "B vitamins, homocysteine, and neurocognitive function in the elderly." The American journal of clinical nutrition 71.2 (2000): 614S-620S.
10) Williams, Anna-leila, et al. "The role for vitamin B-6 as treatment for depression: a systematic review." Family Practice 22.5 (2005): 532-537.