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# BIOLOGICALLY ACTIVE COMPLEX FOR MULTIFACTORIAL SUPPORT OF THE CENTRAL NERVOUS SYSTEM: NEW COMPOSITION, EFFICACY

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### ABSTRACT

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#### **Keywords:**

Biologically active food supplement; Supplement formula; Central nervous system; Functional properties; Efficacy. A new tablet form of biologically active food supplement for the multifactorial support of the central nervous system has been developed. It is named Supplement The supplement production technology prevents ingredients oxidative processes due to insignificant moisture content and exclusion of the active oxygen exposure. The biologically active complex facilitates memory retention and information retrieval, accelerates thinking process, and boosts the level of the overall energy potential by improving the central nervous system activity. A balanced combination of active substances (schisandra chinensis, ginkgo biloba) and sedative herbal components (valeriana, motherwort) allows achieving "fine tuning" effect when the above mentioned components act in the best way. These ingredients improve nerve tissue trophism, brain vessels tone, venous outflow and prevent hypertension. Essential and dispensable amino acids in the complex, such as tryptophan, glycine, tyrosine and glutamic acid, make it possible to control neuromediators synthesis and the molecular basis of memory, optimize carbohydrate-fat metabolism, accelerate the process of impulse transmission along the nerve fiber, while avoiding overexcitement. Most of the amino acids in the food supplement have antidepressant effect. Paraaminobenzoic acid reduces mental and physical fatigue and prevents hypoxia in the central nervous system. Another complex ingredient, Inositol, is one of the main nutrient components of the nerve tissue which contributes to its structure restoration. Group B vitamins help replenish energy and ensure its maximum use by the nerve tissue. The paper provides regulated indicators of the nutritional value of a specialized medical product that determine its functional properties. Efficacy was confirmed by clinical trials on a group of patients with angioneurosis. The authors demonstrated hygienic security of the developed product, its shelf life and storage conditions. They also conducted its production testing.