# **NeoBrainine®**

**Nutraceutical** 

For normal mental performance and normal functioning of the nervous system



# What is NeoBrainine?

NeoBrainine<sup>®</sup> is a nutraceutical that promotes brain health and contains citicoline, niacin, and pantothenic acid.

**Citicoline**, also known as cytidine diphosphate-choline (CDP-choline) or cytidine 5'-diphosphocholine, is composed of ribose, pyrophosphate, cytosine, and choline. It is present in every cell in the human body, is a source of the essential nutrient choline, and is a critical intermediate in the biosynthetic pathway of structural phospholipids in cell membranes, particularly phosphatidylcholine.

Citicoline is a "brain nutrient" because it increases levels of several neurotransmitters, such as acetylcholine, dopamine, and norepinephrine. It helps maintain neuronal cell membrane integrity and increases energy production in the frontal cortex.

Niacin or vitamin  $B_3$  in the recommended daily amount contributes to (i) normal functioning of the nervous system; (ii) normal psychological function; (iii) normal energy metabolism; (iv) the maintenance of normal skin and mucous membranes; and (v) a reduction of tiredness and fatigue.

Pantothenic acid or vitamin B₅ in the recommended daily amount contributes to (i) normal mental performance, (ii) normal synthesis and metabolism of steroid hormones, vitamin D, and some neurotransmitters; (iii) a reduction of tiredness and fatigue; (iv) normal energy metabolism.

# Composition

COMPOSITION	(per 2 capsules)
CITICOLINE*	500 mg
NIACINE (niacinamide)**	16 mg
PANTOTHENIC ACID (calcium D-pantothenate)**	6 mg
* Non-GMO.	
** 100% of Nutrient Reference Values (NRV).	
NET WEIGHT : 35 g.	

# Ebiotec

## **Data Sheet**

BRAND NAME NeoBrainine®

MANUFACTURER EuroEspes Biotechnology S.A. (EBIOTEC).

NATIONAL CODE (Spain) 203655.0

#### ORIGIN

Citicoline is obtained via a microbial fermentation process. Citicoline is vegetarian and allergen-free.

**COMMERCIAL PRESENTATION** Bottle with 100 vegetable capsules.

RECOMMENDED DOSE 2 capsules/day

#### COMPOSITION PER 2 CAPSULES

500 mg of CITICOLINE powder, NICOTINAMIDE, and PANTOTHENIC ACID in vegetable capsules.

#### INGREDIENTS

Citicoline 91%, anti-caking agent E460i 5% (microcrystalline cellulose), nicotinamide (niacin) 3%, D-calcium pantothenate (pantothenic acid) 1%, anti-caking agent E551 0.01% (silicon dioxide).



Note: For health professionals only

The information contained in this data sheet is directed to health professionals.

# Bibliography

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Álvarez XA, Sampedro C, Cacabelos R. 1999. Antiapoptotic effects of CDP-choline in a combined (Ab4/hypoperfusion) animal model of hippocampal neurodegeneration. Ann Psychiatry, 7:147-156.

# Indications

**Citicoline** is a potent brain-health nutrient and nootropic. Citicoline supplementation in humans is beneficial for brain health. Citicoline: (i) is neuroprotective; (ii) maintains the normal production of neurotransmitters (acetylcholine, dopamine, noradrenaline) and regulates neuronal signaling; (iii) increases blood flow and brain metabolism; (iv) stimulates energy production in the brain; (v) reduces oxidative stress; and (v) preserves neuronal integrity through cell membrane-phospholipid biosynthesis.

Niacin or vitamin B<sub>3</sub>. In the body, the primary roles of niacin are to participate in the conversion of food into energy and in DNA replication and repair. It is a critical modulator of neuronal growth and survival. Evidence from the scientific literature shows that niacin is neuroprotective, particularly against neurodegenerative diseases (Alzheimer's, Parkinson's, and Huntington's) and in other neuropathological conditions (ischemic and traumatic injuries, headache, and psychiatric disorders).

**Pantothenic acid or vitamin B**<sub>5</sub>. The principal functions of pantothenic acid in the body are the conversion of food into energy, fat metabolism, the synthesis of cholesterol, steroid hormones, neurotransmitters, and hemoglobin. Pantothenic acid also helps the liver detoxify various metabolites and is further involved in brain processes such as concentration, learning, memory, and reasoning.

# Dosage

2 capsules/day containing 250 mg citicoline, 8 mg nicotinamide (100% NRV with 2 capsules), 3 mg pantothenic acid (100% NRV with 2 capsules).

# **Precautions**

Citicoline is generally well-tolerated and nontoxic.

It is not intended for use by children.

In case of pregnancy or breastfeeding, consult your doctor.

Not for use by persons allergic to any of its ingredients.

Do not exceed the recommended daily dose.

Food supplements should not be used as a substitute for a balanced diet.

Store in a cool dry place.

## WHAT IS A NUTRACEUTICAL?

Nutraceuticals are products derived from natural sources whose nutritional and functional characteristics provide benefits to help improve health and therefore reduce the risk of suffering diseases; they may be combined with other active ingredients or exogenous nutrients such as vitamins, minerals, antioxidants, fatty acids, etc.; however, this type of products, which cover a wide range of possibilities, should be taken as part of a healthy, balanced diet and never as a replacement for it.

General Health Register Nº: 26.06671/C

#### MANUFACTURED BY:

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#### OUR OWN MANUFACTURING PROCESSES:

NeoBarinine® is a nutritional supplement belonging to the marine line of nutraceuticals developed and manufactured by EuroEspes Biotechnology S.A. (Ebiotec).

The nutraceutical bioproducts manufactured by EuroEspes Biotechnology are not limited to a particular nutrient (e.g. omega 3) or to a set of minerals and vitamins, or a specific protein complex, but because of their structure they contain a set of healthy substances that will help in many aspects of life for the maintenance of good health. Origin: A single species. The raw material comes from sustainable fishing, which is not the case of some omega 3 that comes from endangered species or species that maintain the balance of the trophic chain of oceans and seas. Our products are 100% natural and in the manufacturing process no synthetic chemical industrial processes are used (free of additives, etc).



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