THE SYNERGY OF 6 ACTIVE INGREDIENTS FOR A BETTER MENTAL EFFICIENCY
WHY GUNA®-BRAIN

In a society calling for frantic life and working rhythms and needing better and long-term mental performances, both related to school, job and social life, the concepts of Aging, in general, and brain Aging in particular, are becoming more and more important. This new branch of medicine has focused the scientific research on “nootropic” substances: nowadays, we talk more correctly of “BRAIN BOOSTERS”.

These substances are used:

**Strengthen**

- cognitive capacities and overcome periods of particular mental effort:
  - Intensive study
  - Work
  - Emotional stress

**Slow down**

- the physiological processes of brain degeneration and to maintain efficient mental performances
- Control of the following symptoms:
  - Memory loss (mainly short-term memory)
  - Space-time disorientation
  - Difficulty in developing abstract reasoning
  - Objects loss

**Help to recover**

- the previous mental fitness in case of neurological pathologies
- Control of the following symptoms:
  - Memory loss (mainly short-term memory)
  - Space-time disorientation
  - Difficulty in developing abstract reasoning
  - Objects loss

**“NUTRITIONAL SUPPORT”**

- SLOWDOWN IN THE DEVELOPMENT OF DEGENERATIVE NEUROLOGICAL DISORDERS
- RECOVERY OF COGNITIVE FUNCTIONS: TIA (TRANSIT ISCHEMIC ATTACK) OUTCOMES, ALZHEIMER, PARKINSON
WHAT IS GUNA®-BRAIN?

From the most recent scientific research studies, a NEW GENERATION OF EFFECTIVE, SAFE AND HIGH-COMPLIANCE FOOD SUPPLEMENTS has been emerging from the field of “BRAIN BOOSTERS”:

- HINDERS BRAIN AGING
- BOOSTS MEMORY AND COGNITIVE CAPACITIES
- HELPS A QUICK RECOVERY OF MENTAL EFFICIENCY
- IS AN EFFECTIVE FOOD SUPPLEMENT THAT SLOWS DOWN THE DEVELOPMENT OF NEUROLOGICAL PATHOLOGIES
- FIGHTS AGAINST FREE RADICALS IN THE BRAIN AND IN THE BLOOD VESSELS

Guna®-Brain contains N-Acetylcysteine (NAC), Selenium, Manganese, Coenzyme Q10, titrated plant extracts of Green tea and Withania somnifera. It is an innovative and unique formulation where the SYNERGISM AND THE COMPLEMENTARY ACTION of its ingredients are specifically aimed at:

- PREVENTING A PHYSIOLOGICAL COGNITIVE DECAY AT A FIRST OR A MODERATELY ADVANCED STAGE.
- IMPROVING MEMORY, CONCENTRATION AND ATTENTION QUICKLY IN CASE OF INTENSIVE MENTAL ACTIVITY: INTENSIVE STUDY, WORK, MENTAL FATIGUE.
- HELPING RECOVER THE BRAIN FUNCTION IN CASE OF TIA OUTCOMES, BY IMPROVING THE ARTERIAL MICROCIRCULATION.
- PROTECTING FROM THE OXIDATIVE DAMAGE THAT CAUSES THE CNS CELL AGING.
The most advanced and reliable assumptions about the etiopathogenesis of Brain aging refer to different phases:

1. OXIDATIVE PHASE
2. INFLAMMATORY PHASE
3. DEGENERATIVE PHASE
4. FIBROTIC PHASE
5. AMYLOID PHASE

ALL INGREDIENTS OF GUNA®-BRAIN ARE USEFUL AS THEY ACT ON EVERY PHASE OF THE ETIOPATHOGENETIC CASCADE OF BRAIN AGING.
Guna®-Brain is an ideal formulation where all ingredients act perfectly in synergy on the most important mechanisms of the brain function by:

**Slowing down**
- MEMORY LOSS
- ATTENTION DEFICIT
- SPACE-TIME DISORIENTATION
- MOOD SWINGS

**Strengthening**
- MEMORY AND COGNITIVE CAPACITIES, IN CASE OF:
  - INTENSIVE STUDY
  - MENTAL FATIGUE
  - EMOTIONAL STRESS

**Prevention**
- OF DEGENERATIVE NEUROLOGICAL DISORDERS:
  - ALZHEIMER
  - PARKINSON
  - BRAIN ATHEROSCLEROSIS

**Help to recover**
- COGNITIVE FUNCTIONS IN CASE OF TIA (TRANSIT ISCHEMIC ATTACK) OUTCOMES

**Physiology**
- temporary deficit or further needs

**Pathology**
- adjuvant treatment besides specific medical treatment
ACTIVE INGREDIENTS

NAC (N-acetylcysteine)\(^{1-5}\)

Precursor of Glutathione. Together with Selenium, it makes up the glutathione peroxidase enzyme, a powerful intracellular antioxidant; the glutathione peroxidase has an important chelating action for toxic metals as well. NAC acts through two mechanisms:

- **Intracellular “scavenger”** of free radicals together with a slowdown of cellular apoptosis.
- **Vasodilator action** because of the association with nitric oxide causing an improvement of cerebral and peripheral function.

Several studies have shown that a Selenium deficit speeds up cognitive impairment, whereas supplementing Selenium improves the brain function in predisposed subjects.

Selenium\(^{6}\)

Selenium is an essential trace element for the glutathione peroxidase enzyme. It protects cells from environmental damages and pollution. It takes part in the metabolism of thyroid hormones (in particular TSH and T3. Their concentration diminishes during degenerative-cognitive or post-micro-ischemic processes).

Various studies have shown that a Selenium deficit speeds up cognitive impairment, whereas supplementing Selenium improves the brain function in predisposed subjects.

MANGANESE\(^{7}\)

Manganese is an essential mineral which carries out an antioxidant action. It plays an important role in the superoxide dismutase (SOD) enzymatic system. Moreover, it is essential for brain activity both in the control of neurotransmitters and in the neuron use of glucose. A correct balance of the central nervous system depends on a good level of Manganese. A Manganese deficit reduces the dopamine levels.

COENZYME-Q\(_{10}\)\(^{7}\)

It protects tissues and cells from hypoxia which occurs due to aging and cerebral ischemia. Q\(_{10}\) synthesis begins to decrease gradually from 35-40 years of age: even different chronic pathologies and a long-term use of synthetic drugs (such as statins) can negatively influence Coenzyme Q\(_{10}\) synthesis.

A wide list of publications show the beneficial effects of Coenzyme Q\(_{10}\) against the onset of brain aging.

WITHANIA SOMNIFERA (ASHWAGANDHA)\(^{8-13}\)

This plant is considered as one of the most powerful natural adaptogens; the biological and pharmacological effects of the root phytocomplex must be ascribed to “whitanolides”, i.e., steroidal molecules with a variety of pharmacological properties that help:

- improve neuronal tropism to regenerate axon and dendritic endings
- protect the hippocampal structures, i.e., the seats of memory, through an antioxidant action
- modulate the acetylcholinesterase enzyme involving an increase of the synaptic impulse

CAMELLIA SINENSIS (GREEN TEA)\(^{14}\)

The green tea (Camellia sinensis) extract contained in Guna\(^{8}\)-Brain is particularly rich in tannins, alkaloids, saponins, vitamins, minerals and trace elements carrying out:

- an antioxidant action
- an anti-inflammatory action
- an hypocholesterolemic action
- a support action to the cardio-circulatory function

BIBLIOGRAPHY

GUNA®-BRAIN - Most common combinations as an adjuvant treatment to specific medical treatments

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We recommend you to take the tablets with half a glass of water on an empty stomach.

In case of:
- intensive mental fatigue
- intensive study
- intensive work
- emotional stress

Adults: 2 tablets per day
Children under 12 years of age: 1 tablet per day

In case of:
- cognitive impairment
- TIA outcomes
- Alzheimer’s disease
- Parkinson’s disease

2 or more tablets per day as directed by your healthcare professional.

Guna®-Brain

Food Supplement

**Key Word:** Guna®-Brain, the synergic action of 6 active ingredients for a better mental efficiency

**Ingredients**

Inactive fillers: Microcrystalline cellulose, Calcium diphosphate; N-acetylcysteine, Green tea (Camellia sinensis, leaves) dry extract titrated 98% polyphenols (40% EGCG), Withania somnifera root dry extract titrated 5% withanolides; anti-agglomerating agents: cross-linked Sodium carboxymethyl cellulose, Magnesium stearate from vegetable sources, Silicon dioxide, Stearic acid from vegetable sources; Coenzyme Q10; Coating agent: Hydroxypropylmethylcellulose; Manganese carbonate; Stabilizer: Polyvinyl polypyrrolidone; Seleno-methionine; Colouring agents: Titanium dioxide, Copper chlorophyllin.

**Average content per tablet**

- Coenzyme Q10: 20 mg
- Selenium: 50 mcg
- Manganese: 5 mg
- N-acetylcysteine: 250 mg
- Green tea dry extract: 100 mg
- Withania somnifera dry extract: 100 mg

**SLOWS DOWN PHYSIOLOGICAL BRAIN AGEING**

**PROMOTES MEMORY AND COGNITIVE CAPACITIES**

**Warnings**

Keep the product in cool and dry place and protected from light. The expiry date refers to the product correctly stored in an unopened state. Do not exceed the recommended daily dose. Keep out of reach of children. Food supplements should not be used as a substitute for a varied and balanced diet and a healthy lifestyle.

Do not use if you are pregnant or breast-feeding. If you take psychoactive drugs please seek medical advice.

**Packaging**

30 tablets. Net weight 25.2 g.