La Renon

THE NEURON ECONOMICS

Breakthrough approach I Novel Solution

NEURONOMIC

Lactoferrin 100 mg + Disodium Guanosine 5-Monophosphate 10 mg Tablets

NEURONOMIC PLUS

Lactoferrin 100 mg + Disodium Guanosine 5-Monophosphate 10 mg
+ Magnesium 200 mg Tablets

NEURONOMIC

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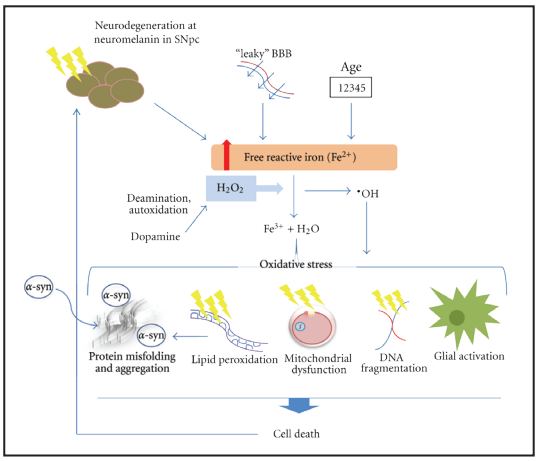
NEURONOMIC PLUS

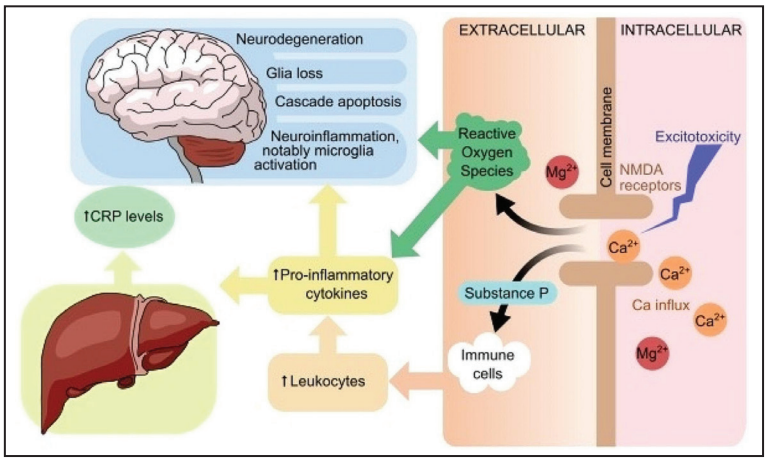
Lactoferrin 100 mg + Disodium Guanosine 5-Monophosphate 10 mg + Magnesium 200 mg Tablets

OVERVIEW

- Iron is vital for brain function, supporting mitochondrial respiration, myelin and neurotransmitter synthesis. Abnormal iron transporter expression leads to accumulation, exacerbating neurotoxicity in conditions like Alzheimer's and Parkinson's disease.[1]
- Conversely, magnesium, a crucial element in the body, regulates various physiological processes. Decreased magnesium levels can cause cell hyperexcitability by overstimulating NMDA receptors, leading to increased neuromediator release and pro-inflammatory cytokine production.[2,3]



Iron-mediated cell death in Neurodegenerative diseases[4]



Low Magnesium linked to Neurodegenerative disease

INNOVATIVE APPROACH TO MANAGE NEURODEGENERATIVE DISORDER

LACTOFERRIN

It offers a novel approach to managing neurodegenerative disorders by restoring iron homeostasis, targeting iron overload, and scavenging reactive oxygen species. As a natural antioxidant, it modulates inflammatory pathways and provides neuroprotection by maintaining mitochondrial calcium balance.

MAGNESIUM

Mg acts as a blockade on NMDA receptor calcium channels, essential for glutaminergic excitatory signaling. Its intake reduces neurodegeneration and protects cerebral health by mitigating inflammation. High cerebral Mg levels decrease oxidative stress, systemic inflammation, and promote synaptic plasticity, countering mechanisms of neurodegeneration.

References:

1. Lancet Neurol 2014; 13: 1045–60
2. International Journal of Endocrinology Volume 2018, Article ID 9041694; 1-17
3. Alateeq, K. et al. Association between dietary magnesium intake, inflammation, and neurodegeneration. Eur J Nutr (2024).
4. International Journal of Cell Biology Volume 2012, Article ID 983245; 1-12

1. A PILOT STUDY ON THE EFFECT OF LACTOFERRIN ON ALZHEIMER'S DISEASE PATHOLOGICAL SEQUELAE: IMPACT OF THE P-AKT/PTEN PATHWAY

Ref: Biomed Pharmacother. 2019 Mar;111:714-723.

Study design: Open label, randomized, controlled pilot study.

No. of patients: 50 patients with an average MMSE of 19.15 ± 1.5

Group 1, AD patients without LF

Group 2, LF for three months

Results:

- AD patients showed decreased serum acetylcholine, serotonin, antioxidant and anti-inflammatory markers, and decreased expression of Akt in peripheral blood lymphocytes (PBL), as well as PI3K, and p-Akt levels in PBL lysate.
- Post-LF treatment shows the enhancing cognitive function assessed by the Mini-Mental State Examination (MMSE) and Alzheimer's Disease Assessment Scale-Cognitive Subscale 11-item (ADAS-COG 11) questionnaires.

THE COGNITIVE SCORES (MMSE AND ADAS COG 11) OF THE GROUPS.

Variable	Healthy control	AD	AD + LF	P value
MMSE score	28.4 ± 1.4	19.2 ± 1.7*	21.2 ± 1.8 #	< 0.0001
ADAS-COG 11	3.99 ± 2.68	20.4 ± 8.9	15.8 ± 7.9 #	< 0.0001

Conclusion :
The result provide protective mechanism of LF against AD through its ability to alleviate the AD pathological cascade and cognitive decline by modulating the p-Akt/PTEN pathway, thus affecting key inflammatory and oxidative stress players involved in AD.

2. ASSOCIATION BETWEEN MAGNESIUM INTAKE AND COGNITION IN US OLDER ADULTS: NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY (NHANES) 2011 TO 2014

Ref: Alzheimer's Dement (N Y). 2022 Feb 1;8(1):e12250.

Participants: 2508 (Based on the National Health and Nutrition Survey (NHANES) between 2011 and 2014)

Method: Linear regression models were used to examine the association of total magnesium intake with cognition.

Highlights:

- High magnesium intake was independently associated with better cognition.
- Among participants with sufficient serum vitamin D (≥50 nmol/L), high magnesium intake was positively associated with better cognition.

Conclusion :
High intake of magnesium is associated with better cognitive function in the US elderly population.

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NEURONOMIC PLUS

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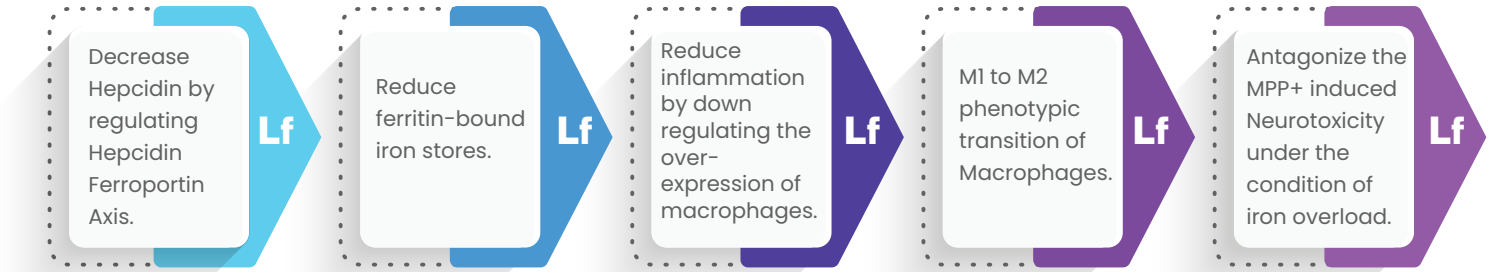
DESCRIPTION

- Lactoferrin and magnesium synergize to combat neurodegenerative disorders.
- Lactoferrin regulates brain iron levels, reducing oxidative stress and inflammation, while magnesium further diminishes oxidative damage, inflammation, and enhances synaptic plasticity.
- **Together, they enhance therapeutic outcomes against neurodegeneration.**

INDICATION

It is indicated for the management of Neurodegenerative disorders which occur due to disturbances in iron homeostasis.

MECHANISM OF ACTION



Disodium Guanosine 5-Monophosphate: Improve Ferroportin stabilization.

Magnesium: Supports normal functions of neurons through protecting neurons from degeneration by NMDA induced excitotoxicity.

DOSAGE AND ADMINISTRATION

- **Neuronomic** - Twice a day before meals or as suggested by a Healthcare Professional.
- **Neuronomic plus** - Once a day before meals or as suggested by a Healthcare Professional.

STORAGE

Store in a cool & dark place at a temperature not exceeding 25°C.

PRESENTATION

Available as a strip of 10 tablets.

Scan to know more

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