

The Role of Magnesium in Neurological Disorders

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<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6024559/>

Abstract

Magnesium is well known for its diverse actions within the human body. From a neurological standpoint, magnesium plays an essential role in nerve transmission and neuromuscular conduction. It also functions in a protective role against excessive excitation that can lead to neuronal cell death (excitotoxicity), and has been implicated in multiple neurological disorders. Due to these important functions within the nervous system, magnesium is a mineral of intense interest for the potential prevention and treatment of neurological disorders. Current literature is reviewed for migraine, chronic pain, epilepsy, Alzheimer's, Parkinson's, and stroke, as well as the commonly comorbid conditions of anxiety and depression. Previous reviews and meta-analyses are used to set the scene for magnesium research across neurological conditions, while current research is reviewed in greater detail to update the literature and demonstrate the progress (or lack thereof) in the field. There is strong data to suggest a role for magnesium in migraine and depression, and emerging data to suggest a protective effect of magnesium for chronic pain, anxiety, and stroke. More research is needed on magnesium as an adjunct treatment in epilepsy, and to further clarify its role in Alzheimer's and Parkinson's. Overall, the mechanistic attributes of magnesium in neurological diseases connote the macromineral as a potential target for neurological disease prevention and treatment.

Ver:

) **The Effect of Magnesium Deficiency on Neurological Disorders: A Narrative Review Article**

<https://pubmed.ncbi.nlm.nih.gov/31223564/>

) **Central Nervous System Magnesium Deficiency**

<https://jamanetwork.com/journals/jamainternalmedicine/article-abstract/614797>

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