

# Abstract

Curr Opin Clin Nutr Metab Care. 2010 Nov;13(6):685-9.

## Role of zinc in the development and treatment of mood disorders.

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**PURPOSE OF REVIEW:** The present review is a critical examination of the most recent published work on the role of zinc in the development and treatment of mood disorders.

**RECENT FINDINGS:** Clinical studies and experimental work using animal models have both revealed a link between zinc status and neuropsychological disorders such as depression and anxiety. Not only has zinc deficiency been shown to induce depression-like and anxiety-like behaviors, supplementation has been used as a treatment for major depression. Zinc administration improves the efficacy of antidepressant drugs in depressed patients and may have a particular role to play in treatment-resistant patients. Recent investigations into the molecular mechanisms responsible for these observations suggest a role for zinc in the regulation of neurotransmitter systems, antioxidant mechanisms, neurotrophic factors, and neuronal precursor cells.

**SUMMARY:** The data reviewed here not only indicate a role for zinc deficiency in the development of mood disorders, but also show that zinc may also be important in their treatment. Given the prevalence of zinc deficiency in human populations, this work has the potential to influence strategies to prevent and treat these disorders.

PMID: 20689416

