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[TOP](#) > [Available Issues](#) > [Table of Contents](#) > [Abstract](#)

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Trace elements and neuropsychiatric disorders

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Abstract:

The trace elements play important roles in the human brain. The knowledge on the trace elements and neuropsychiatric disorders were comprehensively reviewed. These include iron, zinc, copper, iodine, lithium, aluminum, manganese, lead and mercury. Some metals have toxic actions on nerve cells and neurobehavioral functioning. The toxic actions could be expressed either as developmental effects or as an increased risk of neurodegenerative diseases in old age. Redox metals, which were iron, copper, and zinc in the brain, play many important roles in maintenance of cellular function.

Key words: trace elements, neuropsychiatric disorders, iron, zinc, copper, Wilson's disease, manganese



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