Record Nr. UNINA9910778569603321 Titolo Micronutrients and brain health / / edited by Lester Packer. [et al.] Boca Raton, Fla.:,: CRC Press,, 2010 Pubbl/distr/stampa **ISBN** 0-429-14678-7 1-282-29425-3 9786612294259 1-4200-7352-4 Descrizione fisica 1 online resource (462 p.) Collana Oxidative stress and disease:: 26 Altri autori (Persone) **PackerLester** Disciplina 612.8/2 Soggetti Brain - Metabolism Trace elements in nutrition **Nutrition** Neuroprotective agents Oxidative stress Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Front cover; Contents; Series Preface; Preface; The Editors; Contributors: Chapter 1. Neuroprotection after Cardiac Arrest by Avoiding Acute Hyperoxia and by Antioxidant Genomic Postconditioning; Chapter 2. The Neuroprotective Role of Micronutrients in Parkinson's Disease; Chapter 3. Phytoestrogens and Brain Health; Chapter 4. Food Antioxidants and Alzheimer's Disease; Chapter 5. Micronutrient Antioxidants, Cognition, and Neuropathology: A Longitudinal Study in the Canine Model of Human Aging Chapter 6. Excitatory Amino Acids, S-Nitrosylation, and Protein Misfolding in Neurodegenerative Disease: Protection by Memantine and NitroMemantine at NMDA-Gated ChannelsChapter 7. Cognitive and Behavioral Consequences of Iron Deficiency in Women of Reproductive Age; Chapter 8. Micronutrient Needs of the Developing Brain: Priorities and Assessment; Chapter 9. Therapeutics of Alzheimer's Disease Based on Metal Bioavailability; Chapter 10. Lipoic Acid as a Novel Treatment for Mild Cognitive Impairment and Early-Stage Alzheimer's Disease

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Sommario/riassunto

Under the direction of leading experts in oxidative stress, this book addresses cutting-edge areas of research regarding micronutrients and the brain. It discusses identification of brain-specific micronutrients that support function and molecular mechanisms underlying neuroprotectant activity. The book covers age-related metabolic pathways, mitochondrial nutrients, and neurodegeneration. Additional chapters cover flavonoids, cell signaling, and neuronal functions, as well as the role of choline, amino acids, metals, and other micronutrients in brain health and function. The text places a particular emphasis on lipoic acid, which is shown to be a therapeutic agent in neuropathologies.--Publisher's description.