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2. TRACE ELEMENT IMBALANCES IN NEURODEGENERATIVE DISEASES

2.1. Aluminum Iron Copper and Zinc in Alzheimer's Disease

; 2.2. Factors Affecting the Final Results ;

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2.4. Aluminum Iron Copper and Zinc in Western Pacific Parkinsonism-Dementia 2.5.

Aluminum Iron Copper and Zinc in Amyotrophic Lateral Sclerosis

; 3. FINAL REMARKS ; Chapter 3. The Olfactory Pathway as a Route of Entry of Metals into the Brain

; 1. INTRODUCTION

2. ANATOMY OF THE OLFACTORY SYSTEM

Sommario/riassunto

Numerous studies have established a clear connection between neuronal oxidative stress and several neurodegenerative diseases, with consequential damages to lipids, proteins, nucleic acids, etc. In addition, several modifications indicative of oxidative stress have been described in association with neurons, neurofibrillary tangles and senile plaques in Alzheimer's disease, including advanced glycation end products and free carbonyl oxidation. Oxidative damage and antioxidant responses are now well characterized, but sources of damaging free radicals are yet to be fully understood. Evidences