

The role of micronutrients in Parkinson's disease

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It has been widely demonstrated that the brain can be influenced by the compounds present in the foods (as essential fatty acids, including omega-3 polyunsaturated fatty acids, but also essential amino-acids, vitamins and minerals). It has been postulated that food can have an impact on brain structure and its functioning. Parkinson's disease (PD) is one of the most widespread neurodegenerative diseases. Even though the etiopathogenetic mechanisms are still unknown, it has been postulated that either genetic or environmental factors contribute to the development of PD. The role of nutrition and foods on the onset and evolution of PD are getting a lot of attention and several studies are mainly focused on symptoms management, even more efforts should be directed toward prevention of the PD. Several researchers are focusing their attention on the role of micronutrients in PD. There is a certain awareness that Vitamin E intake has an impact in decreasing PD risk. But also other micronutrients as vitamin C and D they are considered protective micronutrients against this pathology. Instead, the role of microelements such as zinc, copper and manganese is still the subject of several studies as it is still to be defined whether they have a negative or positive impact on PD.

Biography

Gaia Rocchitta has completed her graduation in chemistry in 1999 with a thesis about polyphenols in red wines, then she completed her PhD in Neuroscience at School of Medicine of Sassari University (Italy) in 2004. She was a Postdoctoral fellow at School of Chemistry and Chemical Biology, University College, Dublin (Ireland) in 2006, working on the development of amperometric biosensors for in vivo monitoring of neurochemical compounds. She currently is a tenured researcher and lecturer in Pharmacology and Nutraceutical at School of Medicine of Sassari University (Italy). Dr Rocchitta has been a tutor for numerous PhD projects mainly focused on the development of analytical devices for the monitoring of neurochemicals in vivo, but also of nutraceuticals in agrifood matrices. Moreover, she has published about 60 papers in peer-reviewed journals of international relevance.