# **Special Issue**

# Nutrients and Brain across the Lifespan

# Message from the Guest Editors

Diet exerts a crucial role in shaping cognitive capacity and brain evolution. The mechanisms that are involved in the transfer of energy from foods to neurons are likely to be fundamental in the control of brain function and can affect synaptic plasticity, which could explain how metabolic disorders influence mental functions. Another important factor affecting brain functions is microbiota, which has an important role in bidirectional interactions between the gut and the central nervous system by regulating brain chemistry and influencing neuroendocrine systems associated with stress response, anxiety, and memory function. Thus, diet is important in the pathogenesis, course, and effectiveness of wellbeing and treatment of mental disorders. The aim of this Special Issue is to identify the effects of both internal signals that are associated with feeding and micronutrients on cell metabolism, synaptic plasticity, and mental function and to publish state-of-the art contributions discussing the roles that nutritional compounds play in the development, maintenance, and aging of the brain.

# Guest Editors

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## Deadline for manuscript submissions

closed (31 March 2020)



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# About the Journal

# Message from the Editorial Board

*Nutrients* is an on-line open access journal that was first published in 2009. *Nutrients* adheres to rigorous peerreview and editorial processes and publishes only high quality manuscripts that address important issues related to the impacts of nutrients on human health. The Impact Factor of *Nutrients* has risen rapidly since its establishment and it is now ranked in the first quartile of journals publishing in the field of nutrition and dietetics research.

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