



*nutrients*



an Open Access Journal by MDPI

## Nutrients and Brain across the Lifespan

Guest Editors:

**Dr. Paolo Brambilla**

Department of Medical-Surgical  
Physiopathology and  
Transplantation, University of  
Milan, 20122 Milan, Italy

**Prof. Dr. Carlo Agostoni**

Department of Clinical Sciences  
and Community Health (DISCCO),  
University of Milan, 20122 Milan,  
Italy

Deadline for manuscript  
submissions:

**closed (31 March 2020)**

### Message from the Guest Editors

Dear Colleagues,

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 neuro-endocrine 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.

Prof. Dr. Paolo Brambilla

Prof. Dr. Carlo Agostoni

*Guest Editors*



[mdpi.com/si/28493](https://mdpi.com/si/28493)

**Special** *Issue*



an Open Access Journal by MDPI

## Editors-in-Chief

### **Prof. Dr. Lluís Serra-Majem**

1. Centro de Investigación Biomédica en Red Fisiopatología de la Obesidad y la Nutrición (CIBEROBN), Institute of Health Carlos III, 28029 Madrid, Spain
2. Research Institute of Biomedical and Health Sciences (IUIBS), University of Las Palmas de Gran Canaria, 35001 Las Palmas, Spain
3. Preventive Medicine Service, Centro Hospitalario Universitario Insular Materno Infantil (CHUIMI), Canarian Health Service, 35016 Las Palmas, Spain

### **Prof. Dr. Maria Luz Fernandez**

Department of Nutritional Sciences, University of Connecticut, Storrs, CT 06269, USA

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Embase, PubAg, AGRIS, and other databases.

**Journal Rank:** JCR - Q1 (*Nutrition & Dietetics*) / CiteScore - Q1 (*Nutrition and Dietetics*)

## Contact Us

---

*Nutrients* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
www.mdpi.com

mdpi.com/journal/nutrients  
nutrients@mdpi.com  
X@Nutrients\_MDPI