

## Special Issue

# Advances in Early Nutrition and Neurodevelopment of Preterm Infants

### Message from the Guest Editors

Preterm birth affects infant neurodevelopment due to altered critical brain growth in the third trimester. Historically, nutritional strategies focused primarily on survival and weight gain. However, in recent decades, the focus has shifted towards optimising growth quality, brain development, and long-term cognitive function. The aim of this Special Issue is to present recent progress in early nutritional interventions for preterm infants, as well as their impact on brain development. We are seeking contributions that address innovative approaches, such as the composition of parenteral nutrition, micronutrients, human milk fortification, early enteral nutrition, and the use of probiotics and microbiome-targeted strategies. Studies employing neuroimaging, biomarkers or longitudinal developmental follow-up are particularly welcome. We invite submissions of original research articles, clinical trials, reviews and expert commentaries on the subject of early nutrition and neurodevelopment in preterm infants. We welcome multidisciplinary work from the fields of neonatology, nutrition, neuroscience, and developmental paediatrics.

---

### Guest Editors

Dr. Jean-Baptiste Muller  
Dr. Anne Frondas  
Dr. Laure Simon

---

### Deadline for manuscript submissions

closed (10 March 2026)



## Children

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.1  
CiteScore 3.8  
Indexed in PubMed



[mdpi.com/si/254471](https://mdpi.com/si/254471)

*Children*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[children@mdpi.com](mailto:children@mdpi.com)

[mdpi.com/journal/  
children](https://mdpi.com/journal/children)





# Children

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.1  
CiteScore 3.8  
Indexed in PubMed



[mdpi.com/journal/  
children](https://mdpi.com/journal/children)



## About the Journal

### Message from the Editor-in-Chief

You are invited to contribute a research article or comprehensive review for consideration and publication in *Children* (ISSN 2227-9067). *Children* is an open access journal—research articles, reviews, and other content are published online immediately after acceptance. The scientific community and the general public have unlimited free access to the content as soon as it is published. The journal focuses on sharing clinical, epidemiological, and translational science relevant to children's health. We would be pleased to welcome you as one of our authors.

---

### Editor-in-Chief

Prof. Dr. Paul R. Carney

Departments of Child Health and Neurology, University of Missouri, 400 Keene Street, Columbia, MO 65211, 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, PMC, Embase, and other databases.

#### Journal Rank:

JCR - Q2 (Pediatrics) / CiteScore - Q2 (Pediatrics, Perinatology and Child Health)