



## Maternal Nutrition and Its Effect on Offspring Growth

Guest Editor:

### **Dr. Giorgia Sebastiani**

Department of Neonatology,  
Hospital Clínic-Maternitat,  
Institut Clínic de Ginecologia,  
Obstetrícia i Neonatologia  
(ICGON), Spain BCNatal |  
Barcelona Center for Maternal  
Fetal and Neonatal Medicine,  
Barcelona, Spain

Deadline for manuscript  
submissions:

**15 September 2024**

### **Message from the Guest Editor**

For this Special Issue of *Nutrients*, we would like to bring together papers focusing on the topic of the influence of maternal nutrition and fetal health and growth. Normal fetal growth depends on the genetic background, endocrine milieu, and an appropriate supply of oxygen and nutrients. According to the theory of “early life programming”, environmental factors and lifestyle during pregnancy determine the risk of developing chronic diseases later in life and also influence lifelong health in offspring. Moreover, different nutrients are able to influence and modify the epigenetic pattern in the mother and the fetus during pregnancy, which is the most sensitive period for epigenetic changes that will persist in adult life.

Maternal diet during pregnancy may also influence the development of the infant gut microbiome. Therefore, the microbiome modulates the inflammatory mechanisms related to physiological and pathological processes that are involved in perinatal progress, and it may influence the susceptibility to infections and diseases.





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 and Dietetics) / CiteScore - Q1 (Food Science)

## Contact Us

---

*Nutrients* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

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

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