



an Open Access Journal by MDPI

Redox Homeostasis in Parental and Neonatal Nutrition

Guest Editors:

Dr. Cristiane Matté

1. Associate Professor,
Biochemistry Department,
Instituto de Ciências Básicas da
Saúde-ICBS, Federal University of
Rio Grande do Sul, Ramiro
Barcelos St. 2600, Porto Alegre
90035-003, RS, Brazil
2. Graduate Program in
Biological Sciences:
Biochemistry, ICBS, Federal
University of Rio Grande do Sul,
Ramiro Barcelos St. 2600, Porto
Alegre 90035-003, RS, Brazil

Prof. Dr. Thomas Prates Ong

1. Department of Food and
Experimental Nutrition, Faculty
of Pharmaceutical Sciences,
University of São Paulo, São
Paulo 05508-000, Brazil
2. Food Research Center (FoRC)—
Food Research Center, University
of São Paulo, São Paulo 05508-
000, Brazil

Message from the Guest Editors

The first years in life represent a critical developmental period, where different tissues are prone to environment-induced deregulation due to their high plasticity. According to the Developmental Origins of Health and Disease concept, early adverse conditions can induce biochemical and physiological changes in the offspring, affecting the risk of disease development. Parental diet and neonatal nutrition play crucial roles in maintaining redox homeostasis. In fact, parental diet can impact this equilibrium even before fertilization. During development, oxidants are essential in order to stimulate signaling pathways related to cell growth and differentiation. However, a finely tuned system must be maintained to avoid an excessive production of oxidants, leading to oxidative stress. After birth, breast milk is the best option, providing antioxidants. Once solid food is introduced, the parental choices become decisive for maintaining redox balance in the developing individual.

This Special Issue welcomes original research papers and reviews that aim to enhance our comprehension on all aspects associated with redox homeostasis in the context of parental and neonatal nutrition.

Deadline for manuscript
submissions:

20 June 2024



mdpi.com/si/187192

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

**Prof. Dr. Alessandra
Napolitano**

Department of Chemical
Sciences, University of Naples
"Federico II", Via Cintia 4, I-80126
Naples, Italy

Message from the Editor-in-Chief

It has been recognized in medical sciences that in order to prevent adverse effects of "oxidative stress" a balance exists between prooxidants and antioxidants in living systems. Imbalances are found in a variety of diseases and chronic health situations. Our journal *Antioxidants* serves as an authoritative source of information on current topics of research in the area of oxidative stress and antioxidant defense systems. The future is bright for antioxidant research and since 2012, *Antioxidants* has become a key forum for researchers to bring their findings to the forefront.

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](#), [FSTA](#), [PubAg](#), [CAPus](#) / [SciFinder](#), and [other databases](#).

Journal Rank: JCR - Q1 (*Food Science & Technology*) / CiteScore - Q1 (*Food Science*)

Contact Us

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

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

mdpi.com/journal/antioxidants
antioxidants@mdpi.com
[X@antioxidants_OA](#)