Special Issue

Antioxidant Strategies and Redox Homeostasis in Parental and Neonatal Nutrition

Message from the Guest Editors

The first years in life represent a developmental period, where different tissues are prone to environmentinduced 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. Parental diet can impact this equilibrium even before fertilization. During development, oxidants are essential 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 of all aspects associated with antioxidant strategies and redox homeostasis in the context of 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

- 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

Deadline for manuscript submissions

closed (31 January 2025)



Antioxidants

an Open Access Journal by MDPI

Impact Factor 6.6 CiteScore 12.4 Indexed in PubMed



mdpi.com/si/187192

Antioxidants
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
antioxidants@mdpi.com

mdpi.com/journal/ antioxidants





Antioxidants

an Open Access Journal by MDPI

Impact Factor 6.6 CiteScore 12.4 Indexed in PubMed



About the Journal

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.

Editor-in-Chief

Prof. Dr. Alessandra Napolitano

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

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, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Chemistry, Medicinal) / CiteScore - Q1 (Food Science)

