

## Special Issue

# The Implications of One Carbon and Homocysteine Metabolism in Nutrition and Health

### Message from the Guest Editors

It is now 90 years since homocysteine was first identified as an important amino acid linking methionine and sulfur metabolism, over 26,000 research papers have described its relevance to several inborn errors of metabolism, folate, vitamin B12, vitamin B6, and riboflavin status, as well as to diseases as diverse as cardio- and cerebrovascular disease, dementia, renal disease, thyroid disease, and pregnancy complications to name but a few. There have also been important recent developments in the closely related metabolic cycles involving folate, vitamin B12, and B6. Assays revealed the elevation of blood homocysteine concentration in association with several diseases, drugs, disorders, and lifestyle factors. However, in each case, considerable debate still exists concerning its exact contribution to disease pathogenesis.

This Special Issue welcomes research concerning: homocysteine and related metabolites in cardiovascular and cerebrovascular disease, genetic determinants of hyperhomocysteinemia, its role in pregnancy complications, cognitive deficits, including dementia, and issues and debates concerning its practical assay and relevance in modern routine clinical practice.

---

### Guest Editors

Dr. Andrew McCaddon

Faculty of Social and Life Sciences, Wrexham Glyndwr University, Wales, UK

Prof. Dr. Joshua W. Miller

Department of Nutritional Sciences, Rutgers University, New Brunswick, NJ, USA

---

### Deadline for manuscript submissions

closed (20 November 2021)



## Nutrients

---

an Open Access Journal  
by MDPI

---

Impact Factor 5.0  
CiteScore 9.1  
Indexed in PubMed



[mdpi.com/si/78284](https://mdpi.com/si/78284)

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

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





# Nutrients

an Open Access Journal  
by MDPI

Impact Factor 5.0  
CiteScore 9.1  
Indexed in PubMed



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



## About the Journal

### Message from the Editorial Board

*Nutrients* is an on-line open access journal that was first published in 2009. *Nutrients* adheres to rigorous peer-review and editorial processes and publishes only high quality manuscripts that address important issues related to the impacts of nutrients on human health. The Impact Factor of *Nutrients* has risen rapidly since its establishment and it is now ranked in the first quartile of journals publishing in the field of nutrition and dietetics research.

### 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 (Nutrition and Dietetics)