

Special Issue

The Role of Phytochemicals in Aging and Aging-Related Diseases

Message from the Guest Editors

Aging is an inevitable process influenced by genetic, lifestyle, and environmental factors. Among the variegated class of anti-aging molecules, phytochemicals and their metabolites have been suggested to improve aging and aging-related diseases. They comprise a large family of plant-derived metabolites with highly diverse chemical structures that are not directly involved in the growth and development of plants but are synthesized to increase their survival fitness. A growing body of evidence suggests that phytochemicals can not only act as simple antioxidant agents that neutralize free radicals, but that they can also modulate one or more cellular pathways associated with lifespan, aging, and disease prevention. Indeed, these bioactive molecules exert anti-aging effects via different mechanisms, such as the inhibition of cell senescence and mitochondrial dysfunction and the reduction of telomere shortening, epigenetic alterations, and genomic instability. Finally, their excellent safety profile and large structural diversity make phytochemicals particularly attractive for drug discovery processes.

Guest Editors

Prof. Dr. Giovanni Scapagnini

Dr. Sergio Davinelli

Dr. Alessandro Medoro

Deadline for manuscript submissions

closed (15 August 2025)



Pharmaceuticals

an Open Access Journal
by MDPI

Impact Factor 4.8
CiteScore 7.7
Indexed in PubMed



mdpi.com/si/167204

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

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





Pharmaceuticals

an Open Access Journal
by MDPI

Impact Factor 4.8
CiteScore 7.7
Indexed in PubMed



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



About the Journal

Message from the Editor-in-Chief

Because of your expertise in the field of drug sciences, I kindly invite you to consider publishing your current work, in the form of a research article or a review, in the open access electronic journal *Pharmaceuticals*.

Pharmaceuticals is characterized by an active editorial board and a dynamic editorial staff. Manuscripts are peer-reviewed and a final decision is provided to authors within 4–6 weeks after submission. Papers are published on the web immediately after acceptance. For details on the submission process or any other matter, please do not hesitate to contact us.

We hope to handle your contribution to *Pharmaceuticals* soon.

Editor-in-Chief

Prof. Dr. Amélia Pilar Rauter

Departamento de Química e Bioquímica (DQB) e Centro de Química Estrutural (CQE), Institute of Molecular Sciences, Faculdade de Ciências, Universidade de Lisboa, Lisboa, Portugal

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, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Pharmacology and Pharmacy) / CiteScore - Q1 (Pharmaceutical Science)