

Special Issue

Pathophysiology of Choline and Choline Transporters

Message from the Guest Editor

Choline is an organic cation that is essential for the normal function of all cells. Choline deficiency affects the expression of genes involved in cell proliferation, differentiation, and apoptosis, and it is associated with liver dysfunction and cancer. Therefore, the study of choline transport and the characteristics of choline transporters are of central importance to understand the mechanisms that underlie membrane integrity and cell signaling. The choline transport system has been categorized into three transporter families. They include (I) polyspecific organic cation transporters (OCTs) with low affinity for choline, (II) high-affinity choline transporter 1 (CHT1), and (III) choline transporter-like proteins (CTLs). They are expressed in different organisms and cell types, and this implies its importance for choline transport for a broader purpose, such as acetylcholine and phospholipid synthesis.

This Special Issue focuses on the latest research on the pathophysiology of choline deficiency and its relationship to various diseases, and on the role of choline transporters in the pathophysiology and development of drugs as therapeutic targets.

Guest Editor

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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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