Special Issue

The Effect of Phenolic Compounds in Human Diseases

Message from the Guest Editor

Polyphenols are a class of natural compounds extensively occurring in the vegetable kingdom and generally consumed in high quantities by human individuals through diet. Epidemiological evidence indicates that a high dietary intake of polyphenols is correlated with a decreased risk of several types of pathologies including cardiovascular disease (CVD), certain tumoral forms, and neurodegeneration. Although the interaction between polyphenols and cells has recently been better elucidated, there is still much work to do before the specific cellular targets and mechanisms of action can be ascertained. Along with this, a deeper understanding of the bioaccessibility and bioavailability of polyphenols in vitro and in vivo have to be determined. While various lines of evidence via biomarker assessments and the use of pharmacological tools in vivo (i.e., specific enzyme inhibitors, receptor agonists or antagonists) have indicated several potential mechanisms of action, a comprehensive proof and conclusive understanding has yet to be established.

Guest Editor

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