



Antioxidant and Prooxidant Properties of Flavonoids

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Message from the Guest Editor

Dear Colleagues,

The beneficial effects of flavonoids have been documented predominantly in the context of oxidative-stress-related diseases, such as cancer, cardiovascular diseases, and neurological disorders. Antioxidant properties of flavonoids are related primarily to the number and positions of hydroxyl groups and to their redox active metal chelating capacity. However, flavonoids cannot exclusively be considered to be antioxidants. Under certain conditions, such as a high concentration and in the presence of redox metals, flavonoids may exhibit pro-oxidant behavior. Paradoxically, the pro-oxidant activity of flavonoids may be beneficial since it may induce the pooling of antioxidant enzymes and, thus, exhibit preventive effects on various health problems.

The aim of this Special Issue is to discuss the antioxidant and pro-oxidant properties of flavonoids, their interaction with redox metals, and their role in the prevention of a variety of disease states.

Prof. Dr. Marian Valko
Guest Editor





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