



Antioxidants in Chronic Pain

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Message from the Guest Editor

Oxidative stress is one of the principal mechanisms involved in the development and maintenance of chronic pain. Treatment with antioxidant compounds plays a protective role in neuropathic pain via activating the nuclear factor erythroid derived-2-related factor 2 (Nrf2)/heme oxygenase 1 (HO-1) signaling pathway and/or inhibiting the proinflammatory signals and the plasticity changes provoked by nerve injuries, chemotherapeutic agents or metabolic disorders, such as diabetes. These compounds also inhibit chronic inflammatory pain in many preclinical pain models by restoring the homeostatic equilibrium.

There is a wide variety of antioxidant compounds with different structure and chemical properties whose analgesic properties and mechanism of action during chronic pain have not been identified. This Special Issue on “Antioxidants in Chronic Pain” aims to collect original research papers designed to identify new antioxidant compounds able to efficiently relieve chronic pain, as potential therapeutic targets. We believe that this Special Issue will help toward advancing research on new effective strategies in the treatment of chronic pain.





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Message from the Editor-in-Chief

It has been recognized in medical sciences that in order to prevent adverse effects of "oxidative stress" a balance exists between prooxidants and antioxidants in living systems. Imbalances are found in a variety of diseases and chronic health situations. Our journal *Antioxidants* serves as an authoritative source of information on current topics of research in the area of oxidative stress and antioxidant defense systems. The future is bright for antioxidant research and since 2012, *Antioxidants* has become a key forum for researchers to bring their findings to the forefront.

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