



Natural Bioactives and Molecular Pathways of Inflammation

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Message from the Guest Editors

Inflammation is a response of the organism to the breakdown of tissue homeostasis. Increased inflammation is associated with vascular permeability and leukocyte migration, which will try to eliminate pathogenic organisms through the release of reactive oxygen species, reactive nitrogen species, and proteases. Additionally, neutrophils release inflammatory mediators, including chemokines, attracting macrophages to the site of the injury and increase the inflammatory response. These macrophages produce a whole cascade of inflammatory mediators, such as prostaglandins, leukotrienes, and cytokines. All these inflammatory mediators activate periphery nerves and secondary dorsal horn neurons in the spinal cord, which ultimately transmit pain signals to the brain.

The use of bioactive natural compounds of animal or vegetal origin to treat inflammation is increasing worldwide, thanks to their limited side effects. The objective of this Special Issue is to study, at a molecular level, the mechanisms of action of bioactive natural compounds to reduce pathological complications associated with acute and chronic inflammatory diseases.





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Message from the Editor-in-Chief

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