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Poster Presentation

The Role of Marine Compounds in Neuroinflammation

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Abstract

Extensive research in the last decade has defined that most chronic diseases display dysregulation of multiple cell signaling pathways that have been linked to inflammation. Neuroinflammation is reaction of living nervous tissue to injury. It may be initiated in response to neurological disease. Including infection, traumatic brain injury, toxic metabolites and autoimmunity. The natural compounds possessing anti neuroinflammation actions included: dietary fibers, lipids, antioxidants, phytochemicals, and microorganisms. The marine environment contains a wide range of biological and chemical diversity that can be applied to various aspects of food processing, storage, and fortification. Further, numerous marine invertebrates based compounds have biological activities and also interfere with the pathogenesis of diseases. Isolated ingredients from marine invertebrates have been shown to activity of pharmacological and are effective for the discovery of bioactive compounds. Many of these compounds (polyunsaturated fatty acids (PUFAs), sterols, proteins, polysaccharides, antioxidants, and pigments) have biologically or pharmacological activity. Role of these compounds in neuroscience research and development of new therapies targeting the central nervous system will be addressed, with particular focus on neuroinflammation. Marine natural products are chemical multiple-target molecules obtain in animals and plants, and microorganisms.

Keywords: Marine compounds, Neuroinflammation, Neuroscience

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