



Probiotics and Microbiota-Derived Molecules for Inflammation, Neuroinflammation and Mood Disorders: Volume II

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

Many studies support the existence of a relationship between the ecosystem of microorganisms that populate the gut and health status. The microbiota plays a crucial role in stress, anxiety, learning and memory, addiction, sexual behaviour, social interaction and depression, as well as in neuroinflammation and neurodegeneration.

The microbiota–gut–brain axis is an integrated system of tissues and organs communicating through a complex multidirectional manner via neural, endocrine, circulatory pathways in order to preserve homeostasis.

Dietary ingestion of probiotics and prebiotics affects the gut microbiota composition and reveals the key role played by specific metabolites also in brain health. Microbiota-derived peptides participate in regulating the gut–brain axis.

Some effects and mechanisms of probiotics can be similar to those of drugs and may provide suggestions for future interventions. Manipulation of the microbiota can represent a promising therapeutic strategy for mood disorders.

Prof. Dr. Giovanna Traina

Guest Editor





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Message from the Editor-in-Chief

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