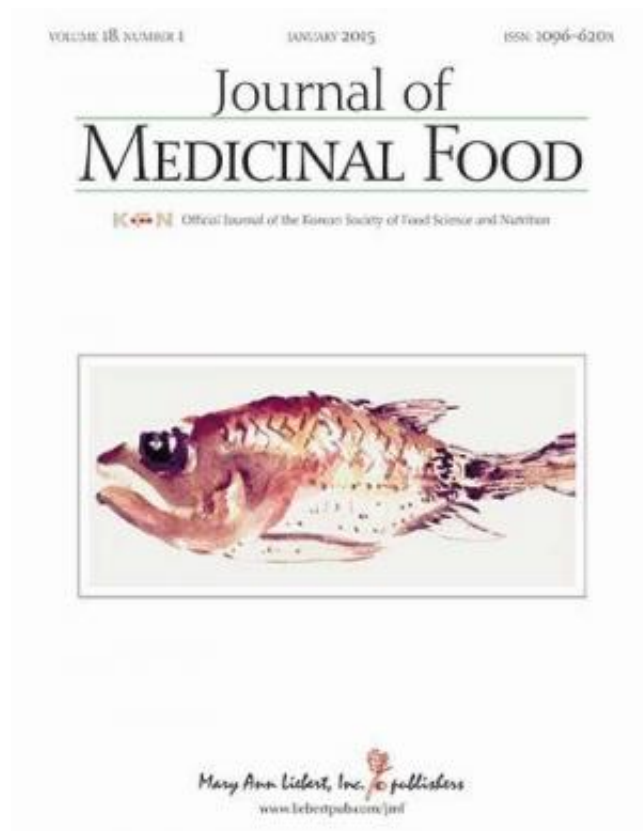


You are what you eat: How gut bacteria affect brain health

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Credit: Mary Ann Liebert, Inc., publishers

The hundred trillion bacteria living in an adult human—mostly in the intestines, making up the gut microbiome—have a significant impact on behavior and brain health. The many ways gut bacteria can impact normal brain activity and development, affect sleep and stress responses,

play a role in a variety of diseases, and be modified through diet for therapeutic use are described in a comprehensive Review article in *Journal of Medicinal Food*.

In "[The Gut Microbiome and the Brain](#)", Leo Galland, Foundation for Integrated Medicine (New York, NY), presents the most up-to-date understanding of the relationship between the proteins produced by [intestinal bacteria](#) and the human central nervous system. The author explores the various mechanisms through which the microbiome can influence the brain: by stimulating and over-stimulating the immune system, producing neurotoxic agents, releasing hormones or neurotransmitters identical to those made by the human body, or through direct neuronal stimulation that sends signals to the brain.

"The microbiome has become a hot topic in many branches of medicine, from immune and inflammatory diseases, such as Crohn's and IBD to cardiovascular diseases," says Co-Editor-in-Chief Sampath Parthasarathy, MBA, PhD, Florida Hospital Chair in Cardiovascular Sciences, University of Central Florida, Orlando. "Scientists are not only aware of the 'good' and the 'bad' microbes in the gut but are becoming increasingly aware of how they could alter the metabolism beyond gut."

More information: The paper is available free on the [Journal of Medicinal Food](#) website until February 21, 2015.

Provided by Mary Ann Liebert, Inc

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