

Could the gut microbiome be a new therapeutic target for multiple sclerosis?

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An increasing number of clinical studies are pointing to a link between the autoimmune disease multiple sclerosis (MS) and the composition of microbes in the human gut, sparking new research on the gut microbiome as a potential target for MS treatment and prevention. A comprehensive review article examining the proposed role of gut bacteria and the viruses that infect them in the development and progression of MS is published in *Journal of Interferon & Cytokine Research (JICR)*.

In the article "Emerging Concepts on the Gut Microbiome and Multiple Sclerosis," coauthors Justin Glenn and Ellen Mowry, Johns Hopkins University School of Medicine (Baltimore, MD) discuss the mechanisms by which altered levels of bacteria in the [human gut](#)—or the activity of bacteriophage, viruses that attack bacteria, or of bacterial toxins—can affect the immune system and possibly have a role in autoimmune disorders such as MS, in which the body attacks itself. Understanding these mechanisms could lead to the identification of novel drug targets and preventive strategies.

"This informative review presents the facts behind the notion that the nature of the intestinal microbial population may influence the development of autoimmune diseases, such as MS," says *Journal of Interferon & Cytokine Research* Co-Editor-in-Chief Ganes C. Sen, PhD, Department of Immunology, Cleveland Clinic Foundation.

More information: Justin D. Glenn et al, Emerging Concepts on the Gut Microbiome and Multiple Sclerosis, *Journal of Interferon & Cytokine Research* (2016). [DOI: 10.1089/jir.2015.0177](https://doi.org/10.1089/jir.2015.0177)

Provided by Mary Ann Liebert, Inc

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