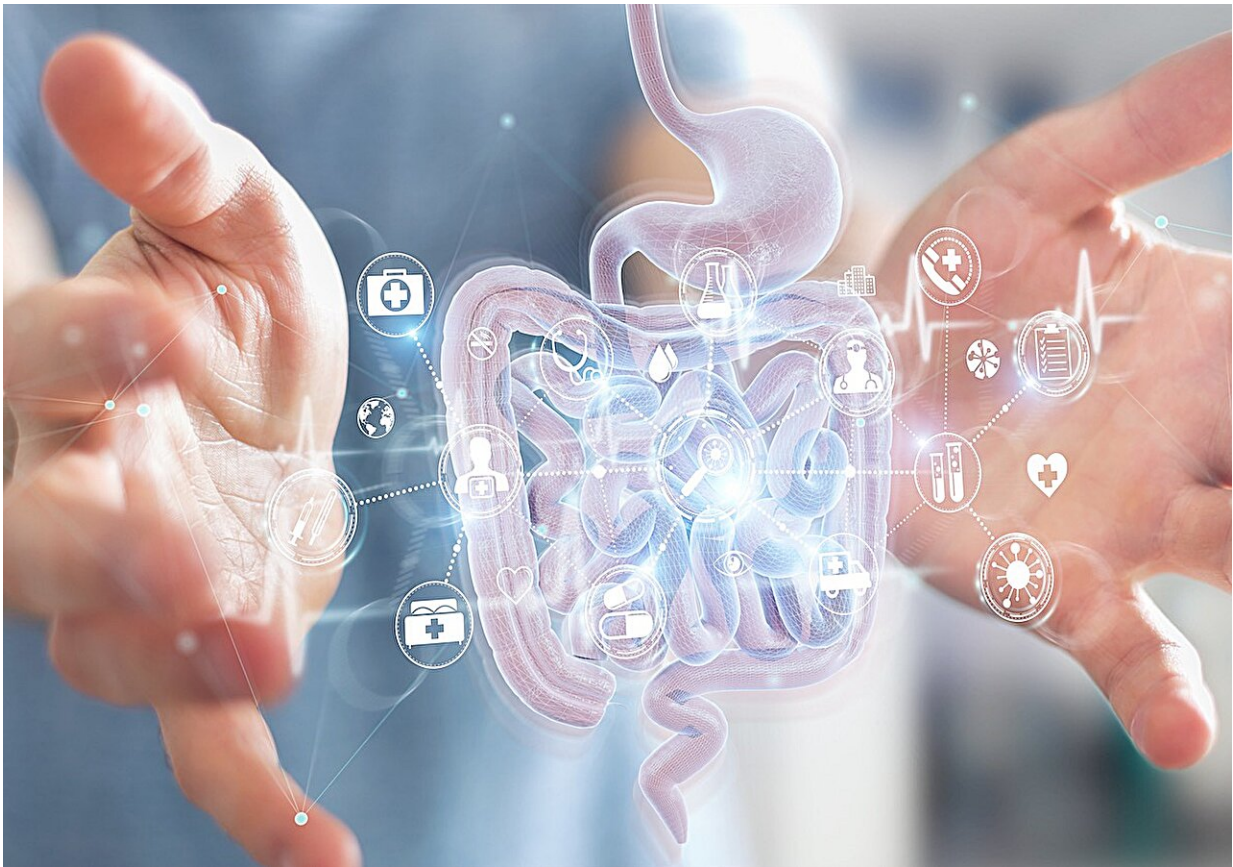


# Gut bugs could play role in chronic constipation

September 4 2024, by Dennis Thompson

---



Credit: HealthDay

An overgrowth of gut microorganisms that produce methane could be a cause of severe constipation in many people, a new review finds.

These gut bugs belong to a class of microbe called archaea, and when they flourish too well in a person's gut they cause a condition called intestinal methanogen overgrowth (IMO), researchers explained.

People with IMO are twice as likely to have [constipation](#) as those with a healthy gut, researchers found.

"Our study found that patients with IMO are more likely to have constipation, particularly severe constipation, and less likely to have unyielding diarrhea," said senior researcher Dr. Ali Rezaie, medical director of the Cedars-Sinai GI Motility Program.

The [human gut](#) is colonized with trillions of [microscopic organisms](#), including bacteria, viruses, fungi and archaea. These organisms typically help humans by performing services important to health, such as helping digest food and manage immune reactions.

However, harmful microbes can crowd out the helpful ones and create [health problems](#). One example is *C. difficile*, a bacteria that can cause terrible diarrhea if it colonizes the gut.

For this review, researchers looked at archaea, a type of microorganism distinct from either bacteria or fungi, and how they might cause GI problems.

Constipation is one of the most common gut problems in the United States, researchers said in background notes. About 16% of adults have constipation and the numbers nearly double for people over 60.

Constipation typically has been chalked up to causes like a lack of fiber or medication side effects, but researchers suspected that gut microbe makeup might also play a role in the condition.

The research team pooled data from 19 studies that assessed symptoms of patients with IMO, including 11 conducted in the United States and eight in other countries. All together, the studies included nearly 1,300 people with IMO and compared them to more than 3,200 healthy controls.

IMO can be detected through a simple breath test, Rezaie said.

"When there is an excessive amount of archaea in your gut, they produce more [methane](#), and some of that methane makes its way to your bloodstream, then to your lungs, and you breathe it out, where it can be measured as a [diagnostic test](#)," Rezaie explained in a Cedars Sinai release. "Essentially, people who have excessive amounts of methane have a lot of GI symptoms, including constipation, flatulence, bloating and diarrhea."

About 47% of people with IMO suffered from severe constipation, compared with 38% of controls, the pooled data revealed. They also were more likely to suffer severe constipation.

On the other hand, they were less likely than controls to suffer from diarrhea, 37% versus 52%.

The review was published recently in the journal [Clinical Gastroenterology and Hepatology](#).

The cure for IMO-induced constipation likely involves a combination of antibiotics and a specialized diet intended to boost [healthy gut](#) microbes, researchers said. The most commonly used treatment, laxatives, can temporarily relieve constipation but won't address the root cause of the problem.

However, it's important to first diagnose archaea overgrowth by giving

patients a breath test, researchers said.

"The goal is to move toward developing specific therapies and personalized treatment for a subgroup of people who experience constipation due to IMO," Rezaie said.

"We can start by using breath tests to identify excessive methane production, which can be the first step to detecting [archaea](#) overgrowth and could ultimately lead to developing more targeted therapies," Rezaie added. "It's a big step to move away from the common reflex use of laxatives."

**More information:** The Cleveland Clinic has more on the [gut microbiome](#).

Sepideh Mehravar et al, Symptom profile of patients with intestinal methanogen overgrowth: A systematic review and meta-analysis, *Clinical Gastroenterology and Hepatology* (2024). [DOI: 10.1016/j.cgh.2024.07.020](#)

Copyright © 2024 [HealthDay](#). All rights reserved.

Citation: Gut bugs could play role in chronic constipation (2024, September 4) retrieved 5 September 2024 from <https://medicalxpress.com/news/2024-09-gut-bugs-play-role-chronic.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------