

# Volatile organic compounds in feces tied to diet response

March 5 2018

---



(HealthDay)—Fecal levels of volatile organic compounds (VOCs) are

associated with response to dietary intervention in patients with irritable bowel syndrome (IBS), according to a study published in the March issue of *Clinical Gastroenterology and Hepatology*.

Megan Rossi, Ph.D., from King's College London, and colleagues investigated whether fecal levels of VOCs were associated with response to dietary interventions (a diet low in fructans, galacto-oligosaccharides, lactose, fructose, and polyols [low-FODMAP]) in 46 patients with IBS compared to 47 IBS patients on a sham diet. Patients from each group were also given either a multistrain probiotic or a placebo supplement.

The researchers found that more patients responded to the low-FODMAP diet versus the sham diet (80 versus 45 percent), but there was no significant difference in response between patients given the probiotic or the placebo supplement. There was no interaction between the diet and supplement interventions. VOC profiles at baseline contained 15 features that categorized response to the low-FODMAP diet with a mean accuracy of 97 percent, and 10 features that classified response to probiotics with a mean accuracy of 89 percent. Similar predictive powers and accuracies were seen with end-of-treatment models.

"Fecal VOC profiling is a low-cost, noninvasive tool that might be used to predict responses of patients with IBS to low-FODMAP diet and probiotics and identify their mechanisms of action," the authors write.

Two study authors are co-inventors of a mobile application for the low-FODMAP diet.

**More information:** [Abstract/Full Text](#)

Copyright © 2018 [HealthDay](#). All rights reserved.

Citation: Volatile organic compounds in feces tied to diet response (2018, March 5) retrieved 25 April 2024 from

<https://medicalxpress.com/news/2018-03-volatile-compounds-feces-tied-diet.html>

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.