

Invited Commentaries

Commentary: sugar intolerances in functional gastrointestinal disorders

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doi:10.1111/apt.12343

The role of hydrogen breath testing in patients with functional gastrointestinal disorders (FGIDs) is under increasing question.¹ The report by Wilder-Smith *et al.* helps to clarify the role of breath testing in this population – or does it? The study makes four conclusions.²

First, the prevalence of fructose and lactose malabsorption across different FGID subtypes is similar. This confirms findings previously reported in this journal.³

Secondly, there is a disconnect between intolerance and malabsorption. Symptom response, but not fructose and lactose malabsorption, predicted baseline symptoms. The conclusion was that fructose and lactose malabsorption was not a 'main driver' of the symptoms. There are reasons why this might occur. Fructose may induce symptoms by distending the small intestine via its osmotic effect,⁴ even though it might be completely absorbed before reaching the colon, as shown by the use of manitol.⁵ Symptoms can be related to the placebo effect, as recently reported.⁶ This is supported by the intolerant group having a high prevalence of many nongastrointestinal symptoms. In addition, the symptom induction might just have been part of the fluctuating symptoms of the underlying FGID.

Thirdly, effective symptom relief was achieved with standardised dietary modification, based on the breath testing results. This conclusion was troublesome, as those without malabsorption or intolerance were not treated

with the diet. Moreover, the diet appeared to restrict fructans, which are not absorbed, and polyols, which are poorly absorbed, and are known to induce gastrointestinal symptoms regardless of fructose breath testing outcomes in irritable bowel syndrome.

Finally, methane production is not restricted to the constipation-predominant phenotype. This was unequivocally shown, and supports our own clinical observations.

This study unfortunately does not clarify the role of breath testing, including documentation of symptom induction, in clinical decision-making regarding patients with FGIDs.

ACKNOWLEDGEMENT

Declaration of personal and funding interests: None.

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