HHS Public Access

Author manuscript

Aliment Pharmacol Ther. Author manuscript; available in PMC 2016 September 01.

Published in final edited form as:

Aliment Pharmacol Ther. 2015 September ; 42(6): 776. doi:10.1111/apt.13336.

Editorial: predicting response to a low FODMAP diet in children – authors' reply

B. P. Chumpitazi[*] and **R. J. Shulman**[*,†]

[*]Department of Pediatrics, Baylor College of Medicine, Houston, TX, USA

[†]Children's Nutrition Research Center, Houston, TX, USA

Sirs, We thank Drs. Hill and Gibson for their insightful editorial[1] on our double-blind randomised, crossover study evaluating the low FODMAP dietary intervention in children with irritable bowel syndrome (IBS).[2] Childhood IBS has been known to occur for several decades, in part based on studies in adults reporting symptoms beginning in childhood.[3]

Our study was undertaken prior to the publication of the Halmos *et al.* study[4] and, as we noted in our discussion, we agree that we probably would have seen a larger effect size between the low FODMAP and typical American childhood diet with a longer (i.e. 7 day) intervention. Both our previously published pilot 1-week open label study of the low FODMAP diet in children with IBS[5] and our current study identified a cohort of Responders (those who had a ≥50% reduction in abdominal pain frequency from baseline), suggesting that the low FODMAP diet may work better for certain children with IBS.

We agree that additional studies are required to evaluate the predictors of success and nutritional adequacy of the low FODMAP diet. Additionally, only certain components (e.g. fructans) may be responsible for symptoms in a particular patient with IBS. With long-term trials, evaluation of gut microbiome composition and, perhaps more importantly the microbiome's metabolic byproducts, may help further elucidate the mechanism of the low FODMAP diet and its potential biological implications.

We also agree that having biomarkers of low FODMAP and other dietary intervention efficacy is important. As our study suggests, this may include baseline (prior to starting the dietary intervention) faecal microbiota composition and metabolic potential and help lead to personalised interventions for those with IBS.

ACKNOWLEDGEMENT

The authors' declarations of personal and financial interests are unchanged from those in the original article.[2]

REFERENCES

1. Hill P, Gibson PR. Letter: predicting response to a low FODMAP diet in children. Aliment Pharmacol Ther. 2015; 42:775–6. [PubMed: 26278561]

chumpita@bcm.edu

2. Chumpitazi BP, Cope JL, Hollister EB, et al. Randomised clinical trial: gut microbiome biomarkers are associated with clinical response to a low FODMAP diet in children with the irritable bowel syndrome. Aliment Pharmacol Ther. 2015; 42:418–27. [PubMed: 26104013]
3. Chitkara DK, Talley NJ, Schleck C, et al. Recollection of childhood abdominal pain in adults with functional gastrointestinal disorders. Scand J Gastroenterol. 2009; 44:301–7. [PubMed: 19016078]
4. Halmos EP, Power VA, Shepherd SJ, et al. A diet low in FODMAPs reduces symptoms of irritable bowel syndrome. Gastroenterology. 2014; 146:67–75. [PubMed: 24076059]
5. Chumpitazi BP, Hollister EB, Oezguen N, et al. Gut microbiota influences low fermentable substrate diet efficacy in children with irritable bowel syndrome. Gut Microbes. 2014; 5:165–75. [PubMed: 24637601]