Mindfulness-based stress reduction, in the format employed in our study, is already widely available, and our findings support utilisation of MBSR as an additional resource for persons with IBS.

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Treatment of bloating and distension - role of probiotics

Sirs, We read the review by Schmulson and Chang with interest.[1] The authors have concluded that there is some evidence that the probiotics *Bifidobacterium infantis* 35624 and *Bifidobacterium lactis* DN-173 010 may be of benefit in the management of the bloating associated with irritable bowel syndrome (IBS). These findings are in keeping with a recent systematic review on the efficacy of probiotics in IBS,[2] as well as the position statement by the American College of Gastroenterology[3] on the management of this condition.

The review by Schmulson and Chang, although comprehensive, failed to include an important study published in 2009[4] by our group, which investigated the role of the probiotic *Bifidobacterium lactis* DN-173 010 on abdominal bloating in female patients with IBS and constipation (IBS-C). This study reported the results of a randomised, placebo controlled, double-blind, 4-week intervention assessing the effect of this probiotic on an objectively measured change in abdominal girth (distension) using abdominal inductance plethysmography,[5] along with the symptom of bloating as well as gastrointestinal transit in a homogenous group of female patients with IBS-C.

The findings showed that in those patients receiving the active yoghurt, a significant reduction in abdominal distension was observed, which correlated with the improvement in bloating as well as the acceleration of both small and large bowel transit in this group of individuals. These findings add to converging evidence supporting the beneficial effect of this probiotic on bloating and abdominal distension, and have led to the suggestion that it might be an option in the management of bloating, distension and flatulence in IBS patients in the UK.[6]

We acknowledge that our trial was conducted on a small sample size (n = 34) and consequently these results need to be confirmed in a larger study. A further investigation in a larger number of patients (n = 72) is ongoing (clinicaltrial.gov identifier: NCT01097993), and results should be available next year.

It is now well-established that the effects of probiotics are strain- or mixture-dependent and not generalisable. In this context, it is important to emphasise that the fermented milk product containing *Bifidobacterium lactis* DN-173 010 used in our study cannot be considered as a single organism product, but rather as a probiotic mixture containing additional yoghurt starters strains namely, *Streptococcus thermophilus*, *Lactobacillus bulgaricus* and *Lactococcus cremoris*.

Schmulson and Chang rightly suggest that the majority of therapeutic intervention studies in IBS are hampered by heterogeneity of the study population, inconsistent use of defined criteria and the subjectivity of outcome measures. Using objective and validated parameters, we believe that our study[4] has addressed some of these shortcomings.

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Treatment of bloating and distension – role of probiotics: authors' reply

Sirs, We thank Drs Agrawal and Whorwell for their interest and comments on our review article on the treatment of functional abdominal bloating and distension.[1, 2] We acknowledge that our extensive literature search did not identify their published study on the effect of *Bifidobacterium lactis* DN-173 010 on bloating, abdominal inductance plethysmography (AIP) as a measure of distension, and gastrointestinal (GI) transit in patients with irritable bowel syndrome with constipation (IBS-C).[3]