

Title: Authors' reply

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We thank Dr Zoe Harcombe for her interest in our article. Dr Harcombe voiced a thoughtful concern regarding the likeness of our EAT-Lancet score to the Eat-Lancet diet ¹, and hence its ability to evaluate the diet's association with major health outcomes.

The EAT-Lancet diet outlines target ranges for intakes of specific food groups to achieve good human and planetary health. The ranges specified allow for a caloric intake of 2500 kcal/day, with a focus on plant-based food sources that are low in saturated fats, refined grains, and added sugars, and that can be adapted to suit dietary needs in different cultures and geographical areas. Accordingly, the recommended ranges for tubers or starchy vegetables, dairy foods, high protein sources (e.g. meat, eggs), saturated oils, and added sugars incorporate a possible intake of zero grams per day. As described in our letter ², we created an EAT-Lancet score based on the 14 key recommendations of the EAT-Lancet diet, where participants were assigned a point for meeting each of the recommendations. We used a binary score that used the EAT-Lancet diet's lowest and highest recommended intakes to assess whether participants met each of the recommendations (i.e. above the minimum intake and/or below the maximum intake).

Dr Harcombe raised the point that it is theoretically possible for participants to score highly on the EAT-Lancet score by consuming a diet that consists only of a small amount of the foods that receive a point for consuming less than the recommended intake for that food item. However, this extreme scenario is very unlikely in our dataset of reported average dietary intakes over 12 months in generally healthy people in the UK, and we excluded all participants with apparently unreliable dietary data (e.g. those with estimated caloric intakes below 500 kcal/day for women and 800 kcal/day for men). Moreover, we found that energy intakes did not differ substantially by fourths of the EAT-Lancet score (difference <300 kcal/day), and the analyses we reported were all adjusted for energy intake, thus effectively comparing participants with different EAT-Lancet scores at the same level of energy intake.

We would welcome additional analyses that evaluate the role of the EAT-Lancet diet in health, including studies of the performance of the EAT-Lancet diet score and its association with health in other, large cohorts.

Declaration of interests: The authors declare that they have no conflict of interest.

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