

Reply to: “Reduced steatosis and weight as a result of specific diets or the dietitian themselves”



To the Editor:

We appreciate the comments raised by Dr. Trivedi and colleagues¹ on our study.²

We agree that part of the treatment effect seen in our study could be associated with the guidance from a dietitian. This matter is also extensively discussed in the manuscript. We highlight that the primary aim of our trial was to compare the treatment effects of a high-fat low-carb diet (LCHF) with that of intermittent calorie restriction (5:2) while the standard of care (SoC) group served as a control group not receiving active treatment to allow for additional comparisons to the current clinical situation. Importantly, the 2 active arms were, in contrast to SoC, calorie restricted, which likely also significantly affects the results.

Despite our best efforts and the use of a block randomization method, there was a certain imbalance in the baseline characteristics between the SoC-group and the 2 active treatment arms, which can occur in randomized controlled trials of a limited size. However, regarding this discrepancy and any unmeasured confounding, such discrepancies are per definition a result of chance and do not imply systematic bias. Importantly, the main finding of this study, *i.e.* the highly similar treatment effect observed

between the LCHF and the 5:2-diet which both received equal dietitian lead guidance, was not affected by this slight imbalance at baseline.

We recognize the risk of recall bias when collecting self-reported data on energy intake and physical activity. To minimize the risk of significant bias we used 2 parallel methods for reporting energy intake. We also measured serum composition of fatty acids, which in our opinion confirmed that adherence to the assigned diets was high as it showed significant differences between the groups that derived from the different composition of macronutrients.

We further acknowledge that it is challenging to perform randomized controlled trials for dietary treatment. Eating habits and behavior around meals and food are affected by both physiological and psychological mechanisms that are difficult to fully measure and control. Though blinding is certainly ideal, it is difficult to apply to dietary interventions. We conclude that a dietitian-supported and calorie-restricted dietary intervention with the 5:2 or LCHF diets leads to short-term improvements in body weight and liver fat compared to current SoC, supporting the conclusion that dietary treatments can be individualized to match personal preferences.

Financial support

The authors received no financial support to produce this manuscript.

Conflict of interest

The authors declare no conflicts of interest that pertain to this work.

Please refer to the accompanying ICMJE disclosure forms for further details.

Authors' contributions

All authors contributed equally to this work.

Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jhepr.2021.100366>.

References

- [1] Trivedi HD, Lai M, Curry M. Reduced steatosis and weight as a result of specific diets or the dietitian themselves. JHEP Rep 2021.
- [2] Holmer M, Lindqvist C, Petersson S, Moshtaghi-Svensson J, Tillander V, Brismar TB, et al. Treatment of NAFLD with intermittent calorie restriction

or low-carb high-fat diet – a randomised controlled trial. JHEP Rep 2021;3(3):100256.

Magnus Holmer^{1,2,*}
Catarina Lindqvist³
Hannes Hagström^{1,2,4}
Per Stål^{1,2}

¹Division of Hepatology, Department of Upper GI, Karolinska University Hospital, Stockholm, Sweden;

²Unit of Gastroenterology and Hepatology, Department of Medicine Huddinge, Karolinska Institutet, Stockholm, Sweden;

³Medical Unit Clinical Nutrition, Department of Medicine Huddinge, Karolinska Institutet Hospital, Stockholm, Sweden;

⁴Clinical Epidemiology Unit, Department of Medicine, Solna, Karolinska Institutet, Stockholm, Sweden

* Corresponding author. Address: C1:77, Division of Hepatology, Karolinska University Hospital, 141 86 Stockholm, Sweden; Tel.: +46 (0) 8 58582878, fax: +46 (0) 8 5858 2335.

E-mail address: magnus.holmer@ki.se (M. Holmer).

Received 3 September 2021; accepted 8 September 2021; available online 21 September 2021



ELSEVIER



The Home of Hepatology