

# Reduced steatosis and weight as a result of specific diets or the dietitian themselves



## To the Editor:

We read with great interest Holmer *et al.*'s randomized trial evaluating the effects of intermittent calorie restriction (5:2 diet) and low-carb high-fat diet (LCHF) on reducing hepatic steatosis in patients with non-alcoholic fatty liver disease (NAFLD).<sup>1</sup> Lifestyle intervention with dietary changes and weight reduction remain the cornerstone of therapy for patients with NAFLD. We commend the authors for their study evaluating two increasingly popular dietary interventions in patients with NAFLD, a critical topic with profound clinical implications for which there is a lack of guidance.

In this 12-week open-label randomized controlled trial, the authors demonstrate reduced hepatic steatosis and significant weight loss with the dietitian-prescribed 5:2 diet and LCHF diet compared to standard of care (SoC) with lifestyle advice from the treating hepatologist. Two major strengths of this study include the minimal selective drop out precluding selection bias and the external validity of the results, which are appropriately generalizable to non-cirrhotic patients with NAFLD in the community who may benefit from lifestyle interventions.

Certain methodologic limitations of the study exist. First off, dietitian-guided weight management is known to have a

dramatic impact on weight loss,<sup>2</sup> and it is unclear whether the observed reduction in weight and steatosis in the intervention arms are a result of the diets themselves or professional guidance from a dietitian. Additionally, the non-blinded nature predisposes to information bias and although physical activity level and dietary intake were tracked, these measures are prone to recall bias with the possibility of under-reporting that may have influenced the results. Lastly, although the 3 arms were randomized, the baseline characteristics demonstrate an imbalance in the SoC arm compared to the 2 intervention arms. The authors provide a sensitivity analysis adjusting for potential measured confounders from Table 1, but this analysis does not consider unmeasured covariates inherent to the imbalanced arm, raising concern regarding residual confounding.

In conclusion, this study demonstrates important findings, but whether the clinical benefit seen is due to dietitian counseling vs. the specific diet is still unclear. Although we acknowledge blinding in this type of study is challenging, a study designed to tease out the effect of dietitian counselling from specific diets is warranted by considering a guideline proposed dietitian-guided dietary intervention for NAFLD as the control arm.<sup>3,4</sup>

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## Conflict of interest

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

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## Authors' contributions

HDT devised the idea of the manuscript, while ML and MC provided critical revision. All authors approved the final version of the manuscript.

## Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jhepr.2021.100365>.

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