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Dear Editor,

We read with interest the randomized clinical trial "The effect of bread with and without cumin on glycemic index, glycemic load and glycemic response in healthy people," which reports that cumin wheat bread lowers glycaemic index (GI) and glycaemic load (GL) compared with ordinary bread in 20 healthy adults, despite broadly similar 120-minute capillary glucose profiles (Khodaie *et al.*, 2025). The evaluation of culturally familiar breads as potential tools to improve postprandial glycaemia is clinically relevant.

The first issue concerns glycaemic testing and carbohydrate dosing. Although the methods used show that 100 g of each bread provided 50 g of carbohydrate, the reported composition suggests materially different carbohydrate contents per 100 g for the two breads, which would directly influence both incremental area under the curve (iAUC) and GL. Current GI methodology stipulates that test portions should deliver a fixed amount of available carbohydrate typically 50 g to allow valid comparisons with a glucose reference and across foods, and defines GL as the product of GI and available carbohydrate per serving (Brouns *et al.*, 2008). In parallel, low-GI/GL dietary patterns have shown modest but clinically meaningful improvements in glycaemic control and cardiometabolic risk factors in diabetes, underscoring the importance of distinguishing ingredient-specific effects from simple carbohydrate dilution (Chiavaroli *et al.*, 2021).

A second issue relates to study design and GI calculation. Only the glucose reference drink was repeated on three occasions, whereas each bread was consumed once in a parallel-group comparison. Standard protocols recommend that both reference and test foods be consumed by each participant on separate days, with GI derived from within-subject iAUC ratios to minimise inter- and intra-individual variability (Brouns *et al.*, 2008). Clarification of the exact calculation steps, alongside presentation of per-participant GI values and variability (for example, coefficients of variation for iAUC), would allow readers to judge the robustness of the reported GI contrast, particularly in the context of non-significant time-point glucose differences.

Context from other bread interventions may assist interpretation. A recent randomized trial of pearl-millet starch–germ bread demonstrated substantial GI reductions accompanied by lower postprandial glucose in healthy and pre-diabetic adults, using clearly specified compositional changes and a standardised protocol (Vidhyalakshmi *et al.*, 2024). By contrast, a crossover study of sourdough breads differing in formulation and baking time observed only small, non-significant GI differences and no association with appetite sensations despite marked textural variation (Temkov *et al.*, 2024).

Addressing the issues of carbohydrate dose per portion, adherence to established GI methodology, and transparency of GI/GL calculations would, in authors' view, strengthen the interpretation of this trial and better inform clinicians considering cumin bread within comprehensive dietary strategies for cardiometabolic risk reduction.

Sincerely

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