The tolerance of erythritol and xylitol based on effective dose methodologies

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TO THE EDITOR: We have read with interest the recently published work by Wölnerhanssen et al. (7) entitled “Gut hormone secretion, gastric emptying, and glycemic responses to erythritol and xylitol in lean and obese subjects”. The authors demonstrated the ability of erythritol and xylitol to induce gut hormone secretion and gastric emptying retardation with no impact on glycemic and insulinemic response for erythritol and only slightly for xylitol.

The researchers used very high doses (75 g for erythritol and 50 g for xylitol) administered within 2 min to achieve these results, and although the rationale to match standard glucose dose is acknowledged, these high doses do not translate for gastrointestinal tolerance assessment, as reported in concluding statements. Furthermore, the authors state that for a single bolus dose of erythritol, doses exceeding 35 g result in undesirable side effects; however, the study referenced (6) demonstrates ~50-g doses to be well tolerated with mild nausea and borborygmi observed and 20 and 35 g with no symptoms, whereas the other three references are reviews (4) or do not include erythritol (2, 3).

Finally, the authors state that erythritol and xylitol are historically extracted from birch. However, xyllose is extracted from birch and further modified to xylitol. Erythritol is produced via fermentation of corn and does not originate in any form from birch (1, 5).

DISCLOSURES
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REFERENCES

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