

EPA Statement in response to study concerning erythritol published in Nature Medicine

EPA, the European Association of Polyol Producers responds to the new study by Witkowski, M., Nemet, I., Alamri, H. et al. concerning erythritol and cardiovascular health,¹ pointing out the confirmed safety of erythritol.

A new study “The artificial sweetener erythritol and cardiovascular event risk” by Witkowski, M., Nemet, I., Alamri, H. et al. published on 27th February in Nature Medicine suggests that erythritol is associated with an increased risk of blood clot formation, heart attack and stroke. EPA would like to stress that while the study utilized various methodologies, the findings of the study do not establish causality and should not be extrapolated to the general public, as the participants included in the metabolomic analyses were already at increased risk for adverse cardiovascular events. In addition, the authors note that the study has several limitations that may have affected the results, such as not including the overall diet in their models.

As regards the other methods used, it should be noted that the used in-vitro methods cannot mimic the complex physiological environment of the human body which include absorption, metabolism, and excretion, and where erythritol is also endogenously produced by the pentose phosphate pathway.

Finally, in most of the products on the market is erythritol used in combination with other sweeteners, and they usually contain erythritol in a small amount. The intervention study where the included individuals were instructed to consume 300 ml of liquid containing 30 g of erythritol within 2 minutes does not reflect a typical serving size and consumption.²

Erythritol is a polyol (sugar alcohol) with sweet taste that is similar to sucrose. It occurs naturally in many foods such as pears, melons, grapes, mushrooms, wine, soy sauce and cheese. Erythritol is well-tolerated, does not affect blood serum glucose or insulin levels and does not cause tooth decay. The safety of erythritol as a food ingredient under conditions of its intended use is substantiated by a number of human and animal safety studies, including short- and long-term feeding, multi-generation reproduction and teratology studies. Erythritol, is an approved food additive in the EU, as well as in other countries around the globe including Canada, Brazil, Mexico, Australia, and is considered Generally Recognized As Safe (GRAS) by the US Food and Drug Administration (FDA).

For additional safety information please visit the EPA website <https://polyols-eu.org/legislation/food/>

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¹ Witkowski, M., Nemet, I., Alamri, H. *et al.* The artificial sweetener erythritol and cardiovascular event risk. *Nat Med* (2023). <https://doi.org/10.1038/s41591-023-02223-9>

² In the EU erythritol is authorised in flavoured beverages at 16000 mg/l (1,6 g/ 100ml) as a flavour enhancer in energy-reduced or with no added sugars beverages only ([Commission Regulation \(EU\) 2015/1832 amending Annex II to Regulation \(EC\) 1333/2008 as regards the use of Erythritol \(E968\) as a flavour enhancer in energy-reduced or with no added sugars flavoured drinks](#))