

Sweetness Consumption Trends in the UK

It is a global public health priority to reduce the intake of free sugars¹. However, due to the purported correlation between dietary sweetness and sugars intake, some health organizations suggest minimising dietary sweetness regardless of source; including low calorie sweeteners (LCS).

Health Focus International data² revealed that a reduction in dietary sweetness also aligns with consumer preferences:

65%


of the European consumers surveyed stated that they preferred products that taste less sweet than what they enjoyed in the past².

Study Design

PepsiCo scientists developed a new metric called **Approximate Sugar Equivalent (ASE)**, to systematically capture total dietary sweetness, from total sugars and LCS³.


Products sweetened with LCS were matched to their sugar-sweetened pair (e.g., the matched pair for diet cola was regular cola). Products that underwent reformulation during the study period were also identified.

Example:



Regular

ASE of regular beverage with 11g of sugars = 11 g



Diet

ASE of diet beverage with LCS and comparable sweetness to similar regular beverage with sugars = 11g

Results


The cross sectional study using data from the NDNS 2008/9-2018/19 on 15,655 participants >1.5 years of age, between 2008/9-2018/19 revealed a decline in UK dietary sweetness, by approximately 10%⁴.





Sweetness

-20.7%



-4.4%



The decrease in the total ASE was mostly driven by beverages, including soft drinks, fruit juices (excluding 100% fruit juice), sport drinks and energy drinks.

Overall, low-calorie sweetened products contributed about 13% of the sweetness in the UK diet.

Overall, the study enhances our understanding of dietary trends related to dietary sweetness



- Dietary sweetness has changed in the UK, due to a combination of consumer behaviour, reformulations, policies, public health awareness programmes, and media campaigns, emphasising its multifactorial nature.
- Over this period, UK free sugar consumption declined, likely due to shifting consumer preferences rather than the 2018 sugar levy, as the trend began before major sugar reduction policies took effect.
- Shift of consumer preferences creates an opportunity to offer a broader variety of sweetness levels in products.
- This study establishes the ASE metric in the UK, in addition to the US.

References

1. Guideline: Sugars intake for adults and children. Geneva: World Health Organization; 2015.
2. HealthFocus International 2022 Global Topic Report.
3. Kamil, A., Wilson, A. R., & Rehm, C. D. (2021). Estimated sweetness in US diet among children and adults declined from 2001 to 2018: A serial cross-sectional surveillance study using NHANES 2001–2018. Front Nutr. 8, 1004.
4. Kutepova, I., Kamil, A., Wilson, A.R. and Rehm, C.D. (2025). Declining trends in sweetness of the diet in the United Kingdom: 2008/9 through 2018/19. Front Nutr. 12, 1521501.