

Abstract

# Trends in Sweetness of the Diet in the United Kingdom: 2008/9 through 2018/19 <sup>†</sup>

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**Abstract:** Reducing sugars consumption is an important public health priority. Because reducing one's sugar intake is challenging, some organizations have suggested reducing the consumption of all sweet-tasting foods and beverages, regardless of the source of the sweet taste (i.e., caloric or low/no calorie sweeteners (LCSs)), due to the assumed correlation between dietary sweetness and sugars intake. Descriptive data summarizing patterns and trends in the overall sweetness of the diet may help inform dietary recommendations. For this cross-sectional study, dietary information was collected from 15,655 participants aged  $\geq 1.5$  year, as part of the National Diet and Nutrition Survey Rolling Programme (NDNS RP) over the course of four consecutive days between 2008/09 and 2018/19. Products that were sweetened with LCS were matched to their sugar-sweetened equivalents (e.g., a regular beverage with sugars and a diet beverage with LCS). The amount of sweetness in an individual's diet was quantified in terms of grams of ASE (approximate sugar equivalent) per day. During the study period, the ASE of the diet declined by approximately 10%. The estimated ASE of the diet per 2000 calories was 96.7 g/d for children and 113.8 g/d for adults. Approximately one-fifth of the total ASE was from LCSs. There was evidence of a non-linear trend over time, with ASE levels remaining relatively stable between 2008/09 and 2014/15, and then declining. The amount of ASE coming from LCS sources increased, going from 8g/d to 12.6 g/d. The overall change in total sugars and ASE was more apparent for beverages compared to foods (ASE values decreased by 20.7% for beverages vs. 4.4% for foods), but both decreased significantly. In the UK, there has been a shift in both the overall sweetness of the diet, as well as the total amount of sugars consumed. This is partly attributable to the reformulation of products, as well as changes in preferences among consumers. According to the findings of this study, the sweetness levels in the diets of the UK population are declining over time.

**Keywords:** sweetness; sweeteners; cross-sectional studies; trends; United Kingdom; the National Diet and Nutrition Survey



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