

# Health & Nutrition Sciences

## Sweetness Consumption Trends in the US

There is a need to measure sweetness of the diet to help us further understand the relationship between sweetness and nutrition and health.

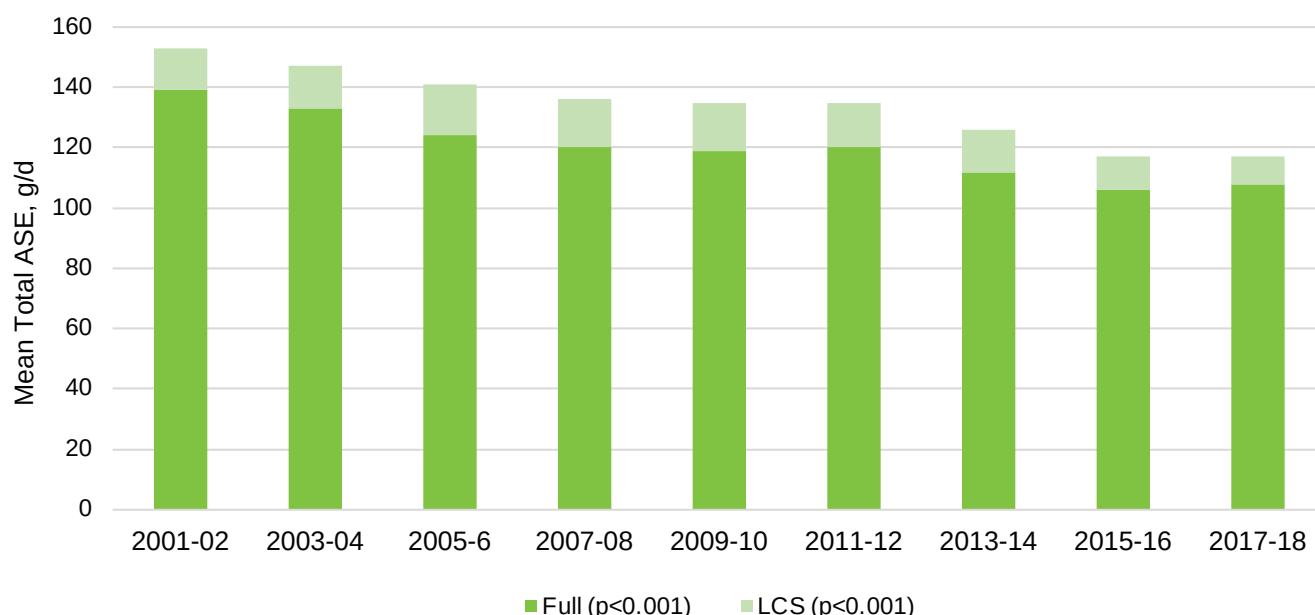
### New Research on Dietary Sweetness

There is no consensus method to estimate the total sweetness of the diet.<sup>1</sup> To fill this gap, scientists at PepsiCo developed a practical approach for estimating dietary sweetness.<sup>2</sup>

A new metric called Approximate Sugar Equivalents (ASE) was developed that captures sweetness from total sugars plus low-calorie sweeteners (LCS). The researchers used data from NHANES 2001–2018 to examine trends in the sweetness of the US diet.




In more than 74,000 participants over 16 years (from 2001–02 to 2017–18), the approximate sweetness of the US diet declined by 23%. Significant declines were observed from both total sugars and LCS.




The values in the parentheses are the p-value for trend.

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The decrease in sweetness was observed among both adults and children/adolescents, with stronger declines in the younger population.




The decrease in sweetness was from beverages (-37%) and tabletop sweeteners (-24%). No major changes were observed for sweetness from foods.

## Dietary Sweetness Consumption Is Associated with Socio-demographic Patterns



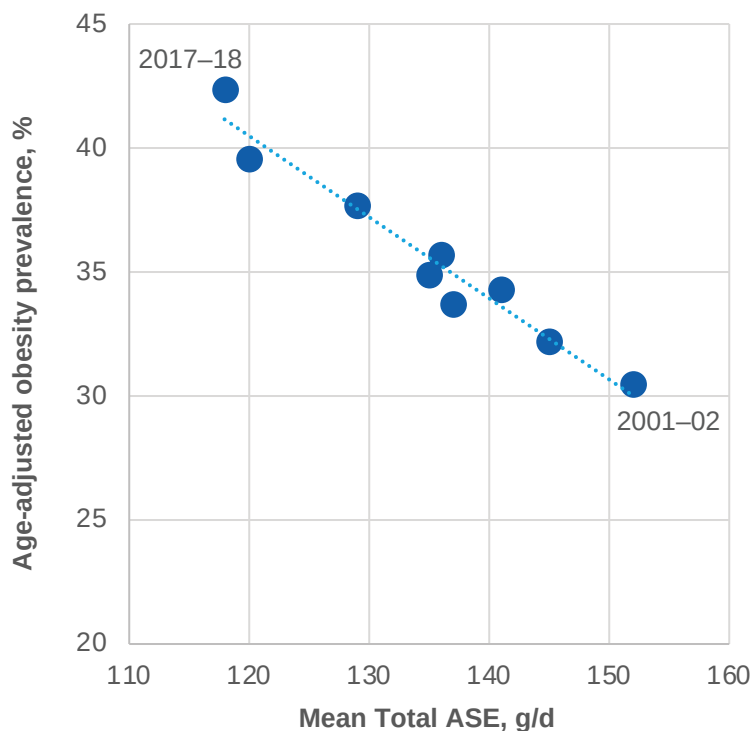
Women tend to consume more sweetness from LCS, while men consume more sweetness from total sugars.



People with less education and lower income consume more sweetness from total sugars. Individuals with more education and higher income consume more sweetness from LCS.

### Take-home Messages

1. Sweetness in the US diet has decreased, suggesting that interventions to reduce dietary sweetness may not be urgent.
2. There is room to replace sugars with LCS in the typical diet, lowering calories without increasing sweetness — only about 10.5% of total sweetness comes from LCS.
3. Levels of adult obesity have increased while at the same time levels of sweetness in the diet have declined (as shown in the graph to the right). This is an area deserving greater research attention.<sup>3</sup>



#### References:

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