



UK Sugars Intake: Trends in Children

2008 – 2023

Sugars in the Diet

Sugars are a group of simple carbohydrates that serve as a source of energy and deliver many functions in foods and drinks. Sucrose (table sugar) is refined from sugar cane and sugar beet plants, but sugars aren't only found in these plants.

Sugars are produced naturally in all plants, including fruits and vegetables, and are naturally present in dairy products. Sugars may be added to food and drinks during processing and preparation to enhance flavour, improve texture, and extend shelf life (1,2).

Free sugars: sugars added to food or drinks, and sugars found naturally in honey, syrups, and unsweetened fruit and vegetable juices, smoothies and purées. For full definition see (3).

Added sugars: refer to sugars and syrups that are added to foods and drinks during processing and preparation.

Total sugars: consists of all sugars found in foods and drinks – whether they are added, free or naturally occurring.

Authoritative bodies such as the World Health Organization recommend reducing consumption of free sugars based on observed links between excess calories intake and an increased risk of health issues including overweight and obesity, and also on the link between more frequent free sugars intake and an increased risk of dental caries (1).

Measuring Free Sugars Intake in the UK

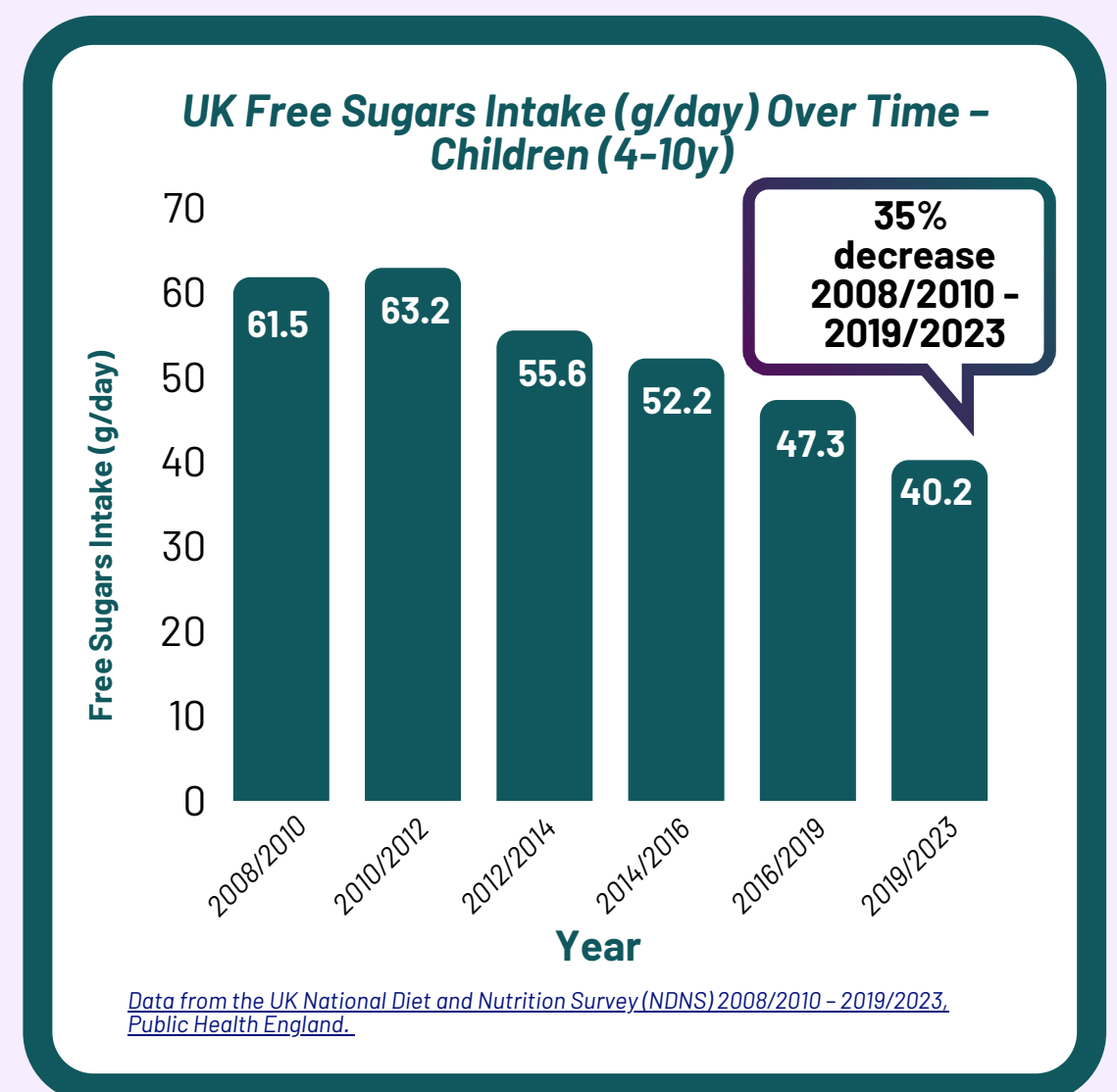
The National Diet and Nutrition Survey (NDNS) is an ongoing, cross-sectional survey designed to collect quantitative data on the food consumption, nutrient intake and nutritional status of the general population living in the UK (4).

The latest NDNS data (2020–2023) covered a 4-yr time period, including Covid-19. Data collection methods were updated from 2019 onwards, transitioning from paper-based dietary intake reporting to online reporting via an app.

Free Sugars Intake Trends

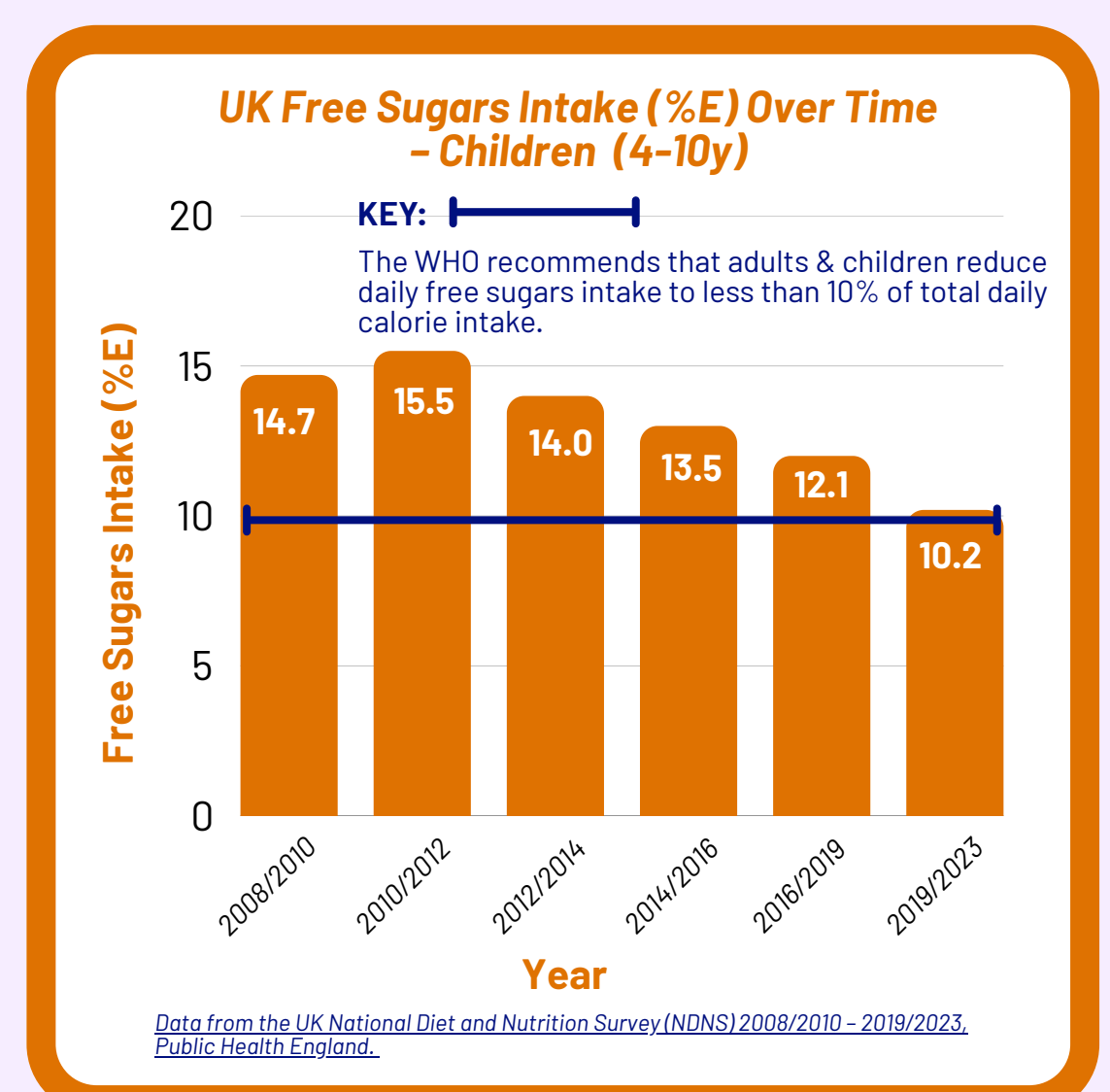
The graphs below display data from NDNS on free sugars intake, measured in grams per day and as a percentage of total energy intake, in UK children.

UK Free Sugars Intake Trends



Free sugars intake decreased by 34.6% (21.3 g/day) in UK children aged 4–10 years old between 2008/2010 and 2019/2023 (4).

UK Free Sugars Intake as a Percentage of Total Energy



Free sugars intake as a percentage of total energy intake decreased by 30.6% (4.5%E) among UK children aged 4–10 years old between 2008/2010 and 2019/2023 (4).

Obesity Prevalence in England: Trends in Children

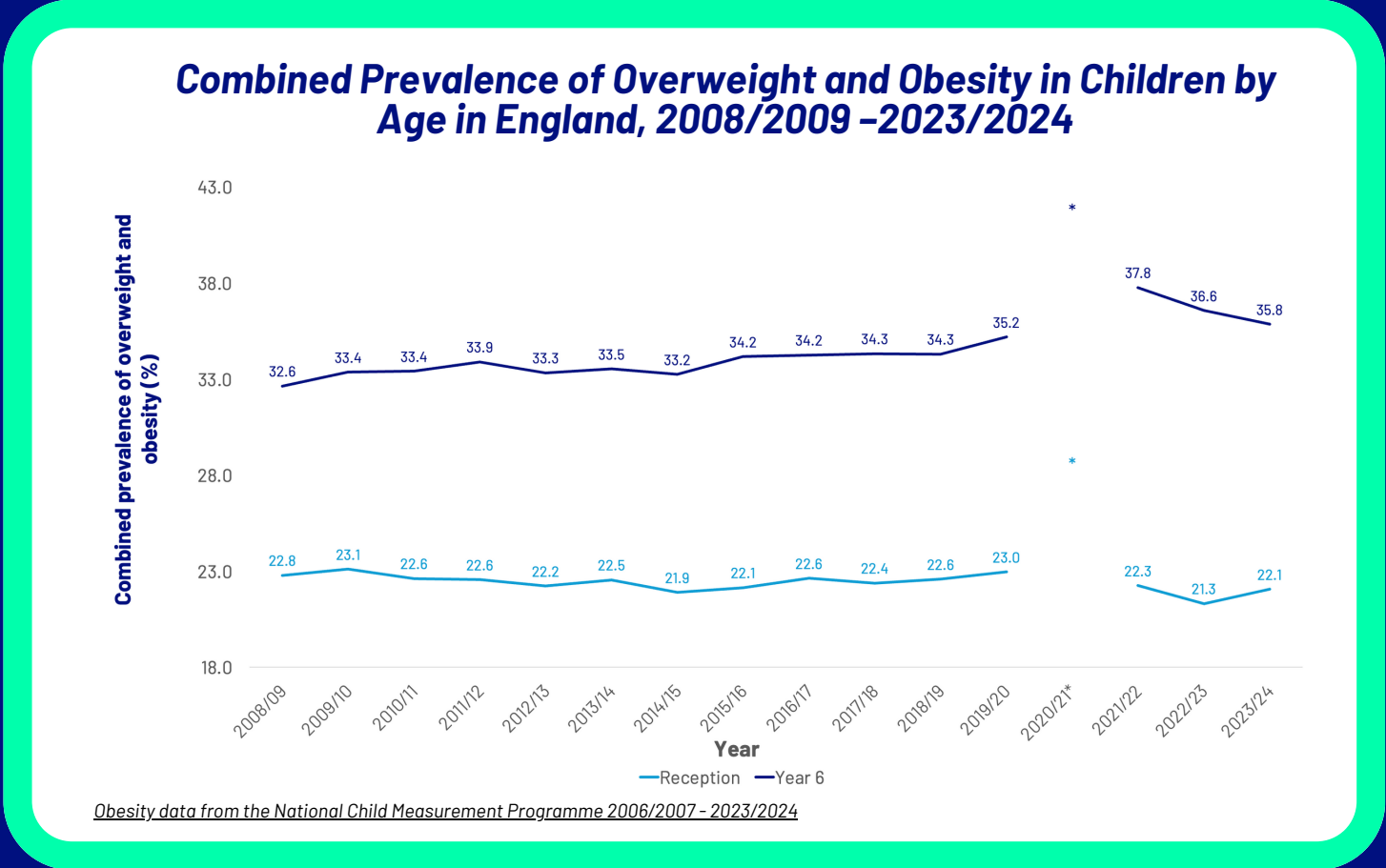
Obesity

Obesity is a build-up of excessive body fat, that can lead to an increased risk of developing diseases, such as cardiovascular disease, type 2 diabetes mellitus, and some cancers.

The development of obesity is complex, and no factor is solely responsible. It is the consequence of a wide variety of factors including those related to individual biology, social interactions, eating, physical activity and the environment we live in (5).

Defining overweight and obesity in children is more complex than in adults, as children grow and develop at different rates depending on their age and sex. To determine whether a child has a healthy height and weight relative to their age and sex, a standardised value called a z-score is used. The z-score shows how far, and in what direction, a child's measurement deviates from the average for their age and sex (6).

The graph to the right shows data from the National Child Measurement Programme, the primary source for monitoring overweight and obesity in the UK population (7). Measurements are taken in Reception (4-5 year olds) and Year 6 (10-11 year olds).

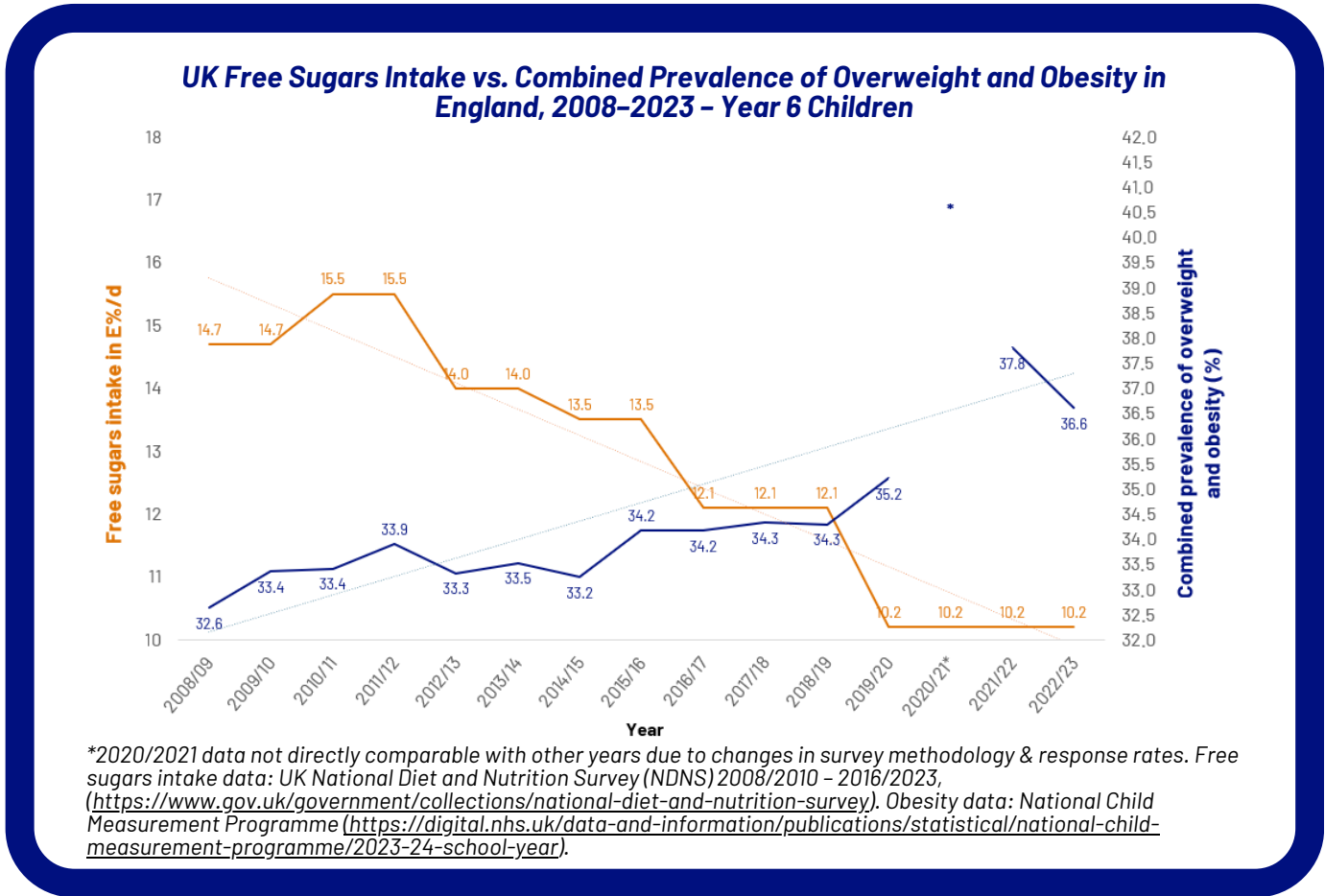
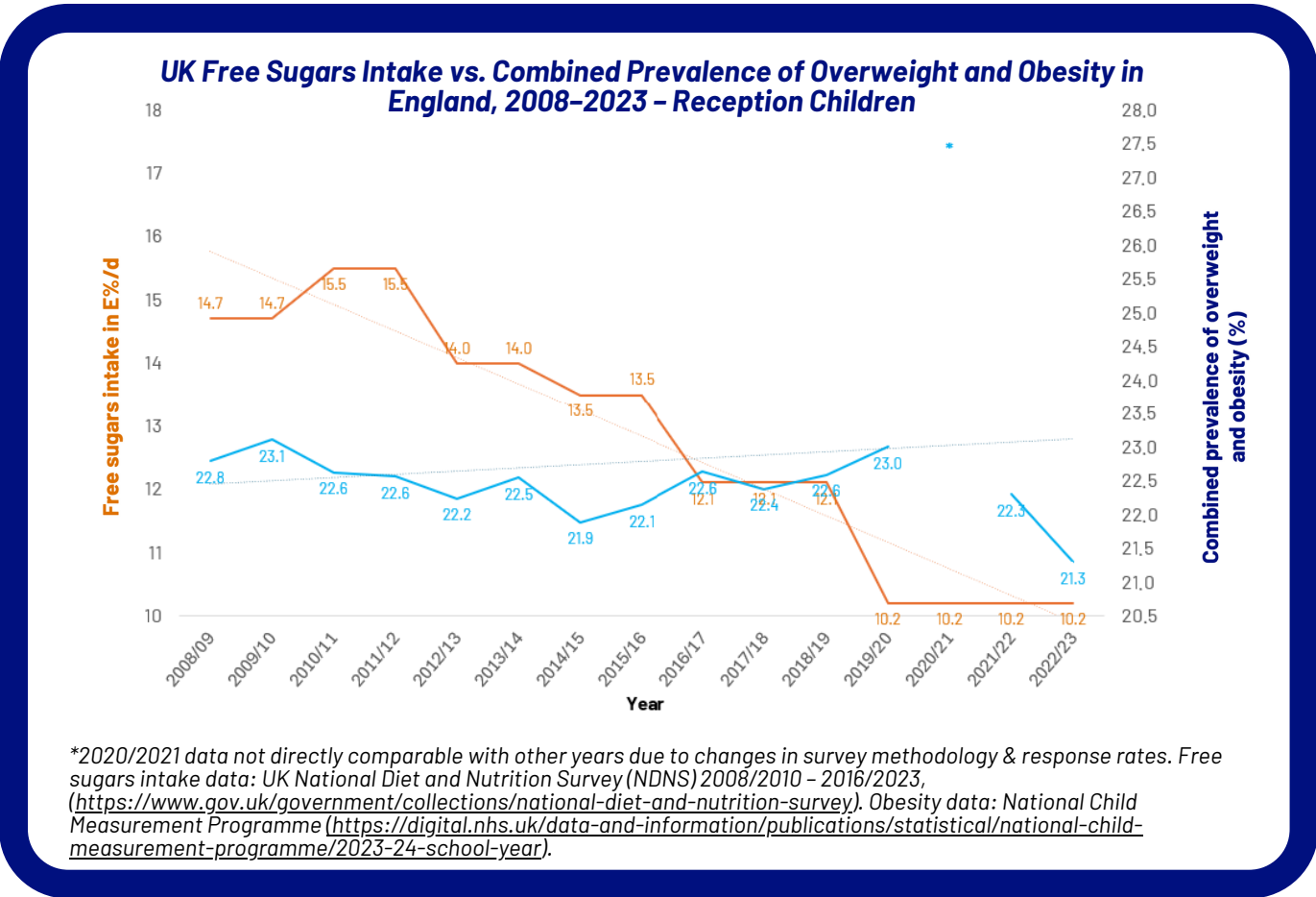


*The 2020/2021 data are not directly comparable with other years due to changes in survey methodology and response rates, and as such have been excluded from the graph to maintain accuracy and consistency.

The combined prevalence of overweight and obesity in UK Reception children decreased by 1.5% between 2008/09 and 2022/23 (from 22.8% to 22.1%). In UK Year 6 children, it increased by 4.0% (from 32.6% to 34.6%) over the same period.

Sugars Intake & Obesity Prevalence

The graphs below illustrates the correlation between the trend in free sugars intake, as a percentage of total energy intake, and the trend in obesity (including overweight) in children in England/UK over time.



As shown above, free sugars intakes as a percentage of total energy has decreased, yet trends in overweight and obesity prevalence remain complex. Among reception-aged children, the prevalence remained relatively stable, while for year 6 children, there was a modest upward trend (4%) between 2008/09 – 2021/22. Although these are correlation data, it highlights the complexity of obesity development, indicating that no single factor is solely responsible. As such, policies focusing on reducing sugars intake alone, to prevent obesity, may not be effective. Organisations such as the British Nutrition Foundation reiterate this point, emphasising that energy balance and body weight are affected by many different factors at an individual and societal level (1). A whole systems approach recognises this complexity and involves addressing factors in a holistic manner.

References:

1. British Nutrition Foundation. Sugar and nutrition. 2023. <https://www.nutrition.org.uk/nutritional-information/sugar/> (see “For Professionals” tab)
2. World Sugar Research Organisation. Sugars definitions. <https://wsro.org/sugars-diet/sugars-definitions>
3. Swan et al. A definition of free sugars for the UK. Public Health Nutrition. 21(9), 1636–1638 doi:10.1017/S136898001800085X
4. Public Health England. National Diet and Nutrition Surveys. 2008/2010 – 2019/2023. <https://www.gov.uk/government/collections/national-diet-and-nutrition-survey>
5. World Health Organization. Obesity and overweight. 2024. <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>
6. NHS Digital. Validation of National Child Measurement Programme data: Annex A. 2021. <https://digital.nhs.uk/services/national-child-measurement-programme/it-system/validation-of-national-child-measurement-programme-data/annex-a>
7. NHS Digital. National Child Measurement Programme, England. 2024. National Child Measurement Programme, England, 2023/24 School Year. Table 2: Prevalence and number of children by BMI category and NCMP collection year, 2006/07 – 2023/24. <https://digital.nhs.uk/data-and-information/publications/statistical/national-child-measurement-programme/2023-24-school-year>