

# Impact on children and young people of traffic light labels and calories on menus: a qualitative study

R. Conway<sup>1</sup>, T. Denning<sup>1</sup>, I. Derks<sup>1</sup>, F. Solmi<sup>1</sup>, D. Nicholls<sup>2</sup>, A. Steptoe<sup>1</sup> and C. Llewellyn<sup>1</sup>

<sup>1</sup>University College London, London, UK and <sup>2</sup>Imperial College London, London, UK

## Abstract

**Cite this article:** Conway R, Denning T, Derks I, Solmi F, Nicholls D, Steptoe A, and Llewellyn C (2025). Impact on children and young people of traffic light labels and calories on menus: a qualitative study. *Proceedings of the Nutrition Society* **84**(OCE3): E230. doi: [10.1017/S0029665125100992](https://doi.org/10.1017/S0029665125100992)

More than one third of children (10-11 years) are estimated to be overweight or living with obesity <sup>(1)</sup>. A range of public health policies are in place that are intended to assist consumers to make healthier food choices. Point of sale policies include the government-approved voluntary scheme for front of pack Traffic Light Labels (TLL) and the requirement for large out-of-home food outlets to display energy information (calories on menus). There is concern that policies focusing on individual responsibility for calorie restriction may inadvertently increase preoccupation with food and weight. Such policies could therefore lead to increases in disordered eating behaviours and cognitions, particularly among vulnerable groups, such as children and young people (CYP) <sup>(2)</sup>.

The aim of this study was to explore the relative benefits and harms of TLL and calories on menus for CYP, as part of their overall environment.

Focus group discussions were conducted in primary and secondary schools in the southeast of England with children in Years 5-8 (aged 9-13 years). Interviews explored (i) choosing snacks from a range displayed; (ii) choosing items from menus with or without calorie information; (iii) perceptions of the overall food environment including social media and advertising. Interviews were transcribed and analysed using NVivo with framework analysis. Themes were developed deductively and sub-themes inductively.

Focus groups (n=16) took place with CYP (n=80) between December 2023 and June 2024. Sub-themes for theme 1 'TLL' were: (1.1) 'only red and green make sense' and (1.2) 'TLL aren't for us'. Participants recalled seeing TLL and viewed them as possibly useful for adults or people on special diets but generally not for them. Instead, CYP prioritised visual appeal, marketing, familiarity and taste when choosing food products. Sub-themes for theme 2 'calories on menus' were: (2.1) 'calories might mean health'; (2.2) 'I just choose what I like' and (2.3) 'it could make people feel bad'. Older participants in particular spoke about potential feelings of guilt or upset in response to seeing calorie information and some spoke about compensatory behaviours. Sub-themes for theme 3 'the wider environment' were: (3.1) 'TikTok shows ways to become perfect'; (3.2) 'McDonald's adverts pop up all the time' and (3.3) 'my mum is against sugar'. CYP described being exposed to engaging media and marketing, which prompted immediate desires for food and influenced their food choices. Social media content was also seen as sometimes presenting unhealthy eating behaviours and promoting unrealistic body ideals.

TLL and calories on menus presented limited benefits for CYP and potentially some negative impacts. CYP recognised their wider environment, particularly social media exposure as driving food choices and negatively impacting cognitions relating to eating and body image.

**Acknowledgments:** This research is funded by the National Institute for Health and Care Research, as part of the Obesity Policy Research Unit.

## References

1. NHS Digital (2024) National Child Measurement Programme, England 2022/23 school year. Available from: <https://digital.nhs.uk/data-and-information/publications/statistical/national-child-measurement-programme/2022-23-school-year/age>
2. Solmi F, Sharp H, Gage SH et al. (2021) JAMA Pediatr 175(3):267-75.