

# Are the daily diets for 2–5-year-olds shown by YouTube vloggers meeting dietary recommendations?

Meghna Mundkur - Oxford Brookes University - 2022

## 1. Introduction

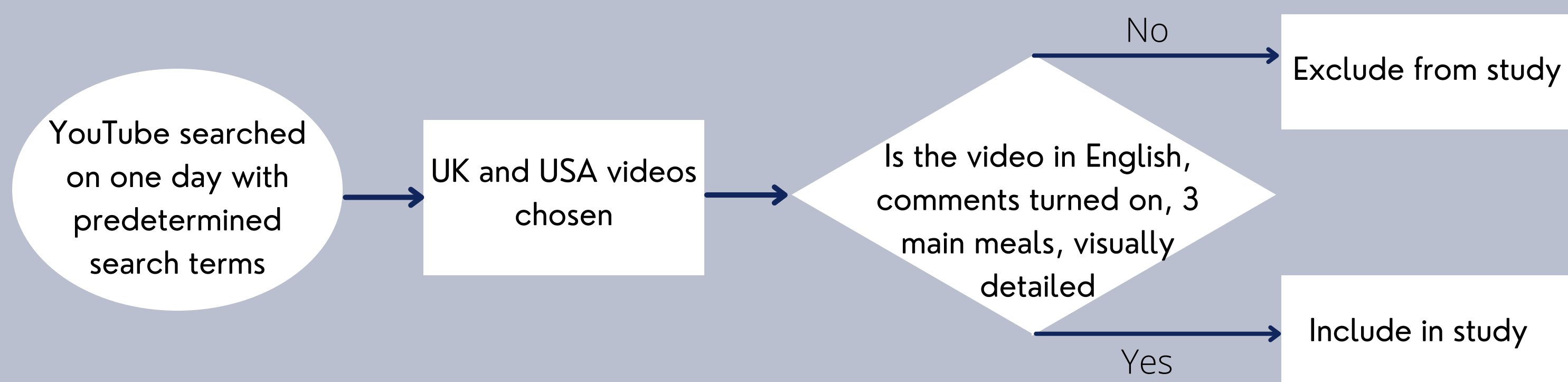
Early childhood is a time of rapid growth, development, and activity. To ensure optimal nutrition at this stage, dietary guidelines were formulated. Dietary patterns established at this stage tend to carry on into adulthood, with 80% of children with obesity being obese as adults. Social media is increasingly being used for health and nutritional advice with parents turning to them for lunch, dinner, and snack ideas for their children. YouTube videos uploaded by “mummy vloggers” are being viewed for ideas of what to feed their children.

## 2. Aims

To analyse the daily diets of 2-5-year-olds as shown by YouTube vloggers to see if it meets with the UK and USA's dietary guidelines for calories, added sugars, saturated fats, sodium, zinc, iron and vitamins A, C and D.

## 3. Methods

Search terms used- what my kids eat in a day, what my toddler eats in a day, what my preschooler eats in a day



## 4. Results

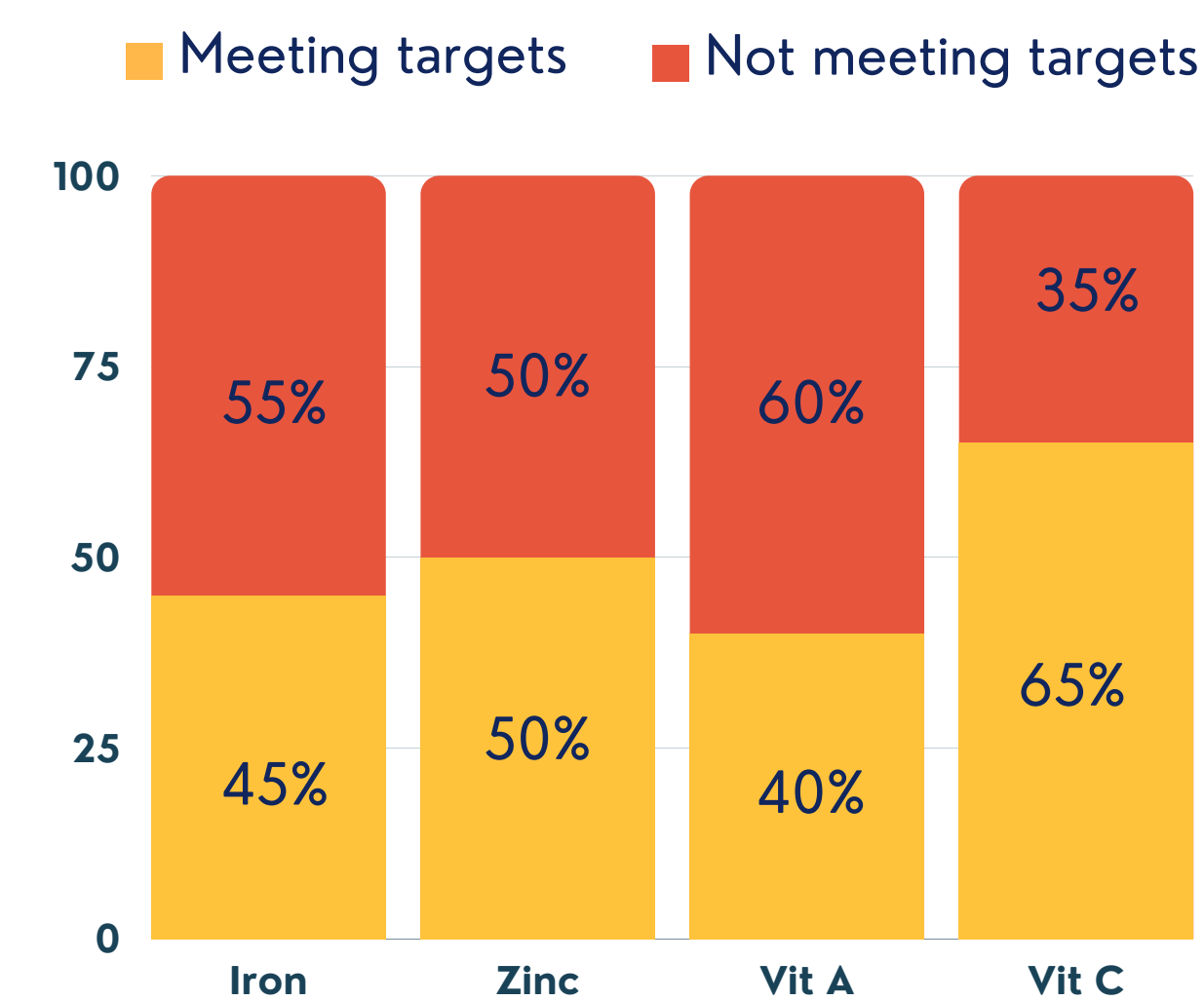
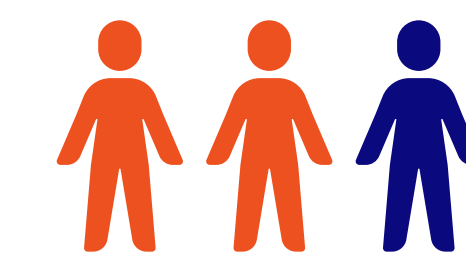


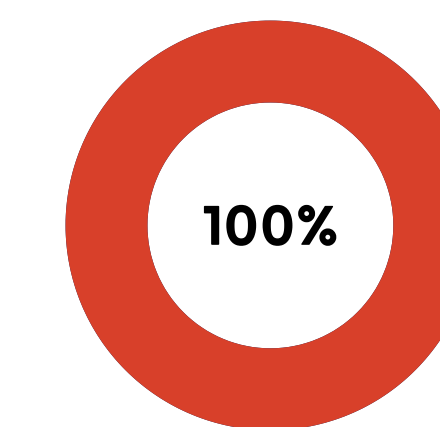
Fig 1: Percentage of participants not meeting dietary guidelines



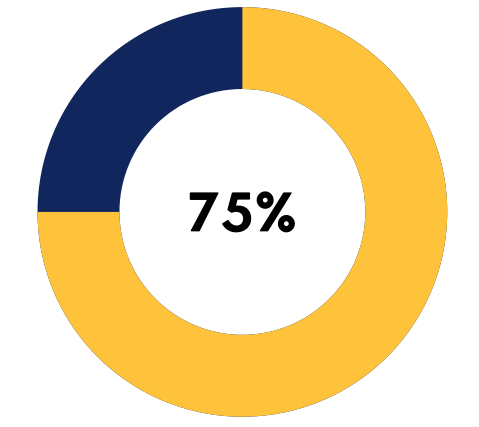
2 out of 3 children over-consuming free sugars



4 out of 5 children over-consuming sodium



Children not meeting Vitamin D recommendations



Children over consuming saturated fat



Children exceeding calorie recommendations

## 5. Discussion

- 9 nutrients (including calories) were analysed. 5 differed from recommendations demonstrating unhealthy/imbalanced eating.
- Energy intake (calories) exceeds dietary recommendations for both UK and USA. Portion sizes are reported to be the largest contributor to excessive calories in young children.
- Added sugar, sodium and saturated fat intake was high and represents intakes of general population.
- Excess free sugar consumption is associated with reduced intakes of important nutrients like zinc, magnesium, calcium, and vitamin B12.
- Increased intakes of calories, sugar, saturated fat, and sodium can cause high blood pressure, cardiovascular disease, type 2 diabetes, early mortality, and obesity in later life.
- Vitamin D intake is set at 10 mcg and 15 mcg for the UK and USA. None of the children in this study meet the recommendations, reflecting the intakes of the general population. 10 mcg vitamin D supplements are recommended all year round for children under 4 and 10mcg during autumn and winter for ages 5 and above.
- Most of the children in this study meet intakes of zinc, iron, vitamins A and C.

## 6. Conclusion

YouTube vloggers are inadvertently promoting excess intakes of energy, sugars, sodium, free sugars and sodium for young children. They are all proponents of obesity and its related diseases, thus increasing the burden on the healthcare system. Regulations about who can dispense health, and nutritional information on social media could be beneficial. Alternatively, policymakers could collaborate with social media influencers to ensure they are imparting the right information as they have large followings and are more likely to reach target audiences than public health messages alone.

## 7. References

- Dietary Guidelines for Americans, 2020-2025. Make Every Bite Count With the Dietary Guidelines Available at: [https://www.dietaryguidelines.gov/sites/default/files/2020-12/Dietary\\_Guidelines\\_for\\_Americans\\_2020-2025.pdf](https://www.dietaryguidelines.gov/sites/default/files/2020-12/Dietary_Guidelines_for_Americans_2020-2025.pdf)
- Public Health England (2016) 'Government recommendations for energy and nutrients for males and females aged 1 –18 years and 19+ years.'. Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/618167/government\\_dietary\\_recommendations.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/618167/government_dietary_recommendations.pdf).
- Sahoo, K. et al. (2015) 'Childhood obesity: causes and consequences', Journal of family medicine and primary care, 4(2), pp. 187-192. doi: 10.4103/2249-4863.154628.