Title: Behavioural and cognitive changes in young adults towards food and nutrition after exposure to digital food communication: a mixed-methods systematic review

Preference: Oral presentation

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Background: Young adults (18-25) face significant risk for weight gain, and transitioning to a higher body mass index category when compared to other adult groups. As active internet users, they encounter food-related content across digital platforms, yet little is known about their behavioural and cognitive responses to this compound exposure.

Purpose: This mixed-methods systematic review evaluates and synthesises how exposure to digital food communication influences young people's behavioural and cognitive responses to food and nutrition.

Method: We evaluate consumption and food purchase as behavioural responses; intentions to consume and/or purchase, and attitudes towards food and nutrition as cognitive responses. We used a three-pronged method for analysis. Meta-analyses combined findings from randomised trials for behavioural and cognitive responses, while observational studies were summarised narratively. The thematic synthesis approach informed qualitative synthesis, and a cross-study matrix was used to synthesise qualitative themes and quantitative findings.

Results: Of the 6132 studies identified, 47 are included in the systematic review, representing 9741 young adults in 17 countries. Our meta-analyses show positive relationships between exposure and behavioural and cognitive responses. Difficulty deciphering what represents good nutrition, critical distinctions when engaging with content viewed as helpful vs misleading and balancing intentions vs actual behaviours were barriers to the effectiveness of digital food communication. Using a cross-study synthesis matrix, we developed ten recommendations to improve digital dietary interventions and assessed their implementation by experimental studies in the review.

Conclusion: Our results illustrate the need to approach digital food communication as a digital determinant of dietary health for young adults, shaping behaviours and cognition.

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