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# Unhealthy food availability, prominence and promotion in a representative sample of supermarkets in Flanders (Belgium): a detailed assessment

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## Abstract

**Introduction** The supermarket food environment is a key setting for potential public health interventions. This study assessed food availability, prominence and promotion in a representative sample of supermarkets in Flanders (Belgium).

**Methods** A sample of 55 supermarkets across five chains and 16 Flemish municipalities was selected in 2022, about 64% in the most deprived socioeconomic areas. Healthiness indicators related to food availability (ratio of cumulative linear shelf length for healthy versus unhealthy foods), prominence (proportion of unhealthy foods at check-outs and end-of-aisle endcaps), and promotion (food marketing on food packages) were measured.

**Results** Overall, the average ratio of healthy/unhealthy foods in supermarkets in Flanders was 0.36, meaning that for every 10m of shelf length of unhealthy foods there was 3.6m of healthy foods. There was a large variation in ratio's across supermarket chains. Of all foods available, 97.5% were ultra-processed at the check outs, while 72.2% and 58.5% were ultra-processed at the front and back end-of-aisle end-caps, respectively. Confectionery and sweet biscuits were the food categories with on average the highest number of marketing messages on pack per 10m of shelf length.

**Conclusion** Supermarket in-store food environments in Flanders were found generally unhealthy, with those located in low income areas having unhealthier in-store food environments than supermarkets located in medium and high income areas. Despite commitments of all large supermarket chains in Flanders to promote and create healthier in-store food environments, our findings indicate that currently consumers are incentivized to buy unhealthy rather than healthy food products.

**Keywords** Supermarkets, Food environments, Shelf length

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