CrossMark

Irish Section Conference 2022, 15–17 June 2022, Impact of nutrition science to human health: past perspectives and future directions

Reformulation of breakfast cereals and toddler foods marketed in Ireland: a snapshot of 2021 versus 2017

G.M. McGovern^{1,2}, O.A. Curtis-Davis^{1,3}, O.C. Lyons^{1,2}, O. Antropova¹ and M.A.T. Flynn^{1,2}

¹Food Safety Authority of Ireland, Dublin, Republic of Ireland,

²Northern Ireland Centre for Food and Health, University of Ulster, Coleraine, Northern Ireland and ³Technological University Dublin, Dublin, Ireland.

A 2017 survey of breakfast cereals reported wide variation in nutritional content where some products were equivalent to crumbled biscuits⁽¹⁾. In 2018, a similar survey of toddler (1-3 years) foods assessed 43% as inappropriate due fat and sugar content or a comparable composition to sweets, crisps and biscuits⁽²⁾. The aim of this study is to assess food reformulation by examining breakfast cereals and toddler foods on the Irish market in 2021 compared with previous surveys. Information collected on breakfast cereals and toddler foods in 2021, 2018 and 2017 included product brand/name, nutrition information, portion size and nutrition and health claims. In 2021, data was collected from grocery outlets representing 69% of market share in Ireland, while in previous surveys data was collected from all grocery outlets in Dublin. At both timepoints, breakfast cereals were categorised into 5 groups; oats, compressed biscuit, flake/puffed, muesli and granola, and assessed as a healthy choice (HC) if the nutritional composition per portion met all of the following criteria: total fat ≤ 3 g, saturated fat ≤ 1.5 g, sugar ≤ 6 g, and fibre ≥ 3 g. At both timepoints, toddler foods were categorised into 2 groups: meals and snacks. Toddler foods with no added fat, sugar or salt were deemed appropriate, while all remaining foods, including biscuit and crisp type products, were deemed inappropriate. Data collected in 2021 were compared with that collected in previous surveys using appropriate statistical tests on log transformed data in SPSS (version 25). In 2021, n366 breakfast cereals and n78 toddler foods were collected compared with n453 and n126, respectively, in previous surveys. The proportions of compressed biscuit flake/puffed and muesli breakfast cereals in 2021 versus 2017 were significantly different (compressed biscuit n20 (5%) vs n45 (10%), P = 0.019; flake/puffed n165 (45%) vs n154 (34%), P = 0.001; muesli n36 (10%) vs n69 (15%), P = 0.022), while the proportions of all others were comparable. There was no difference in overall nutritional composition of breakfast cereals or in the proportion meeting HC criteria in 2021 compared with 2017; however, the proportions bearing nutrition claims increased (P < 0.001) while those bearing health claims decreased (P < 0.001). Reformulation was most evident in the compressed biscuit category where calories, fat, sugar, and salt decreased while fibre increased significantly compared with 2017. There was no difference in proportions of appropriate toddler foods in 2021 compared with 2018; however, significant decreases in saturated fat and salt were found. In meals, there were significant increases in fibre and, in snacks, decreases in saturated fat in 2021. In conclusion, while no significant reformulation is evident in overall composition of breakfast cereals and toddler foods in 2021, some significant improvements in nutritional composition are apparent within certain categories.

References

1. White-Flynn TT, Kemp BJ, Cronin BE, et al. (2017) Proc Nutr Soc 76(OCE3), E98.

2. Taleghani S, Geraghty CJ, O'Mahony S, et al. (2018) Proc Nutr Soc 77 (OCE3), E86.

https://doi.org/10.1017/S0029665122001203 Published online by Cambridge University Press