



A product audit of plant-based meat alternatives available in the UK and Ireland in 2021 and 2023: Changes over time

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Plant-based meat alternatives (PBMA) are relatively new additions to UK and Irish supermarkets⁽¹⁾. With an increasingly competitive market and continued investment in innovation, technology, ingredients and marketing⁽²⁾, this study aims to investigate the changes in PBMA available in the UK and Ireland over the last two years.

An online audit of PBMA available in Tesco and Sainsbury's was conducted during February - April 2021; the audit was repeated between November - January 2023. PBMA were defined as products which aimed to imitate meat. On-pack information was extracted and organised into four interrelated Excel databases. Data for the two different timepoints were compared using descriptive statistics and independent t-tests to identify changes in products over time.

An 8% decrease in the number of PBMA available in 2023 compared to 2021 was observed (n = 351 products in 2021 and n = 324 products in 2023). Over a third of products available in 2021 were available in 2023 without having undergone any changes (36%, n = 116), whilst 38% (n = 133) of the products available in both years had undergone changes to: ingredients (62%), nutritional content (53%), sub-ingredients (44%), nutrition claims (44%), product description (42%), marketing statement (30%), serving size (19%), packaging materials/recyclability (15%), country of origin (8%), other claims (8%) and weight (7%). Almost a third of products available in 2021 had been taken off the market (29%, n = 102) and 75 new products had been added (23%). Products were grouped into 20 categories. Meat-free chicken, sausages and burgers were the largest product categories in both years, accounting for 50% of products in 2021 and 53% of products in 2023. The number of products in the burgers and sausages categories had decreased in 2023 by 10% and 7% respectively and the number of products in the chicken category had increased by 6%. There were no significant differences (P > 0.05) in mean energy (kcal) and nutrient content per 100 g for products in these categories between 2021 and 2023. An increase in the number of products was also observed for the tofu, lamb, legume-based dishes and pork style dishes (8%, 20%, 25% and 25% respectively), with these categories together accounting for 5% of products in 2021 and 9% of products in 2023. For all other categories either no change or a decrease in the number of products was observed.

There was a slight decrease in the number of PBMA available in 2023 compared to 2021 with growth in only 5/20 categories. Most innovation was in the reformulation of already existing products. The focus on the reformulation and refinement of these products has the potential to have a beneficial effect for consumers from an allergen and nutritional perspective.

References

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