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Feeding the future (FEED): An online study investigating contemporary plant-based diets and diets containing meat and fish in UK adults

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There is a growing body of evidence suggesting that diets containing fewer animal-sourced foods (e.g. red and processed meat) may have benefits for human⁽¹⁾ and environmental health⁽²⁾. Such evidence has led to The World Health Organization, the EAT-Lancet commission, and many national dietary advice bodies (e.g. UK Eatwell guide) to recommend reduced consumption of some animal-sourced foods^(2,3). However, there is a paucity of information on the actual current food intakes of low and non-meat eaters, and the drivers and characteristics of the adults consuming these diets. We set up the Feeding the Future (FEED) study, an online survey, to describe contemporary plant-based diets (e.g. flexitarian, vegetarian, and vegan) and diets containing meat and fish in UK adults and the motivations and personal characteristics associated with choosing these diets.

Recruitment began in February 2022 and adults are being recruited via various UK societies and institutions, social media, and word of mouth. Participation in the study requires the completion of a one-off online questionnaire. Data on personal characteristics, dietary motivations, and dietary intakes were collected and compared between the diet groups in preliminary descriptive analyses (ANOVA for continuous measures and Pearson's Chi-square for categorical responses).

Between February 2022 and February 2023, 5,758 participants completed the survey [omnivores (21%), flexitarians (23%), pescatarians (10%), vegetarians (22%), and vegans (24%)]. Preliminary findings showed that compared with omnivores, vegans were younger (48 vs 53 mean years, $p < .001$), had a lower body mass index (27 vs 30 kg/m², $p < .001$), and took more supplements (87% vs 66%, $p < .001$). Over 60% of all participants reported consuming plant-based milk, with a mean daily intake of 40 ml (SD 96) for omnivores, 84 ml (SD 122) for flexitarians, 111 ml (SD 142) for pescatarians, 122 ml (SD 145) for vegetarians, and 230 ml (SD 164) for vegans, $p < .001$. The majority of participants who consumed plant-based milk reported that it was fortified (52%) listing the top nutrients as calcium, vitamin B¹², and vitamin D. The mean daily intake of meat alternatives was 14 g (SD 20) for omnivores, 34 g (SD 34) for flexitarians, 56 g (SD 45) for pescatarians, 67 g (SD 48) for vegetarians, and 82 g (SD 55) for vegans, $p < .001$. Only a small minority of participants who consumed meat alternatives reported that they were fortified (lowest for seitan 5%, highest for soya burgers/sausages 13%), listing vitamin B¹² as the main nutrient added. The top reported reasons for following current diets were taste (omnivores), environmental concerns (all groups except the omnivores), and animal welfare concerns (vegetarians and vegans).

In preliminary analyses, we observed differences in personal characteristics, nutritional intakes, and dietary motivations among adults consuming plant-based diets and diets containing animal-sourced foods.

References

1. Leitzmann C (2014) *Am J of Clin Nutr* **100**, 496S-502S.
2. Willett W, Rockström J, Loken B *et al.* (2019) *The Lancet* **393**, 447–92.
3. Bouvard V, Loomis D, Guyton KZ *et al.* (2015) *The Lancet Oncology* **16**, 1599–1600.