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## Understanding the drivers of healthier, more sustainable dietary behaviours: The role of food security

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Economic crises such as the cost-of-living crisis and the COVID-19 pandemic have caused a significant reduction in people's 'real' disposable incomes, with poorer households being disproportionately affected<sup>(1)</sup>. One notable consequence of this is the experience of food insecurity. Food insecurity is defined as not having consistent access to foods that are nutritious in quality and quantity. Indeed, food insecurity is reliably associated with poor diet<sup>(2)</sup>, likely because of the higher cost of foods required to adhere to government guidelines. There has been a call to support changes in eating habits so that they are healthier and more sustainable for the environment, particularly as the UK food system is not sustainable in its current form<sup>(3)</sup>. However, it is unknown whether such dietary changes are plausible for those experiencing lower food security given the higher prices of these foods.

Using Food and You 2 Wave 4 data<sup>(4)</sup>, a secondary data analysis was conducted to identify whether there are differences between food security levels on dietary behaviours in favour of health and sustainability. Participants were adults (aged 16+ years) residing in England, Wales, or Northern Ireland (N = 5584). Data were analysed using logistic regressions with high food security as the reference group. Food security was measured using the USDA-10 and participants were categorized into four levels: high, marginal, low, very low. Dietary behaviours were assessed using questions with the choice of dichotomous answers (yes [I do this]/no [I do not do this]). Data were weighted and odds ratios (OR) were adjusted for age, sex, and household size.

The adjusted model indicated that those with low food security were more likely to have increased their fruit and vegetable intake in the last 12 months compared to high food security (OR 1.40; 95%CI 1.13–1.73, p = .002), and were less likely to be willing to reduce their processed food intake in the next 12 months compared to high food security (0.80; 0.65-0.99, p = .042). Those with very low food security were more likely to have increased fruit and vegetable intake in the past 12 months compared to high food security (1.45; 1.13-1.86, p = .004), and were less likely to have reduced their meat, poultry, and fish intake in the last 12 months compared to high food security (0.73; 0.55–0.95, p = .021).

These findings suggest that food security levels are associated with healthier, more sustainable dietary behaviours. Research is needed to identify ways to support those with lower food security to change their dietary behaviours, particularly reducing intake of processed food and meat, poultry, and fish.

## References

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