

Uncovering intersectional inequalities in fruit and vegetable consumption in the UK using Understanding Society data

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ABSTRACT

Introduction: Large inequalities in fruit and vegetable consumption persist. Many studies have examined how factors such as socioeconomic status, ethnicity, and gender shape one's fruit and vegetable consumption in isolation. However, it is not fully understood how inequalities intersect in their influence on fruit and vegetable consumption in the UK. Analyzing how people's shared characteristics may impact one's fruit and vegetable consumption through an intersectional framework allows us to better understand the complex realities and double burdens some population groups may face in their food consumption.

Methods: Cross-sectional data from the UK Household Longitudinal Study (UKHLS) Wave 9 (2017-2018) was used, randomly selecting one individual per household (N=17,016). Fruit and vegetable consumption was operationalized as a binary variable, individuals either met the daily WHO fruit and vegetable recommendation (5 portions) or not. An intersectional Multilevel Analysis of Individual Heterogeneity and Discriminatory Accuracy was used to analyze intersectional inequalities in the odds of meeting the recommended fruit and vegetable guidelines. Participants were nested into 48 social strata based on gender, ethnicity, age, and educational level.

Results: 70% of the sample did not meet the recommended amount of daily fruit and vegetable consumption. At risk of low fruit and vegetable consumption were men, people with a low educational level, ethnic majorities, and younger participants. We found no evidence for intersectional effects of gender, ethnicity, age, and educational level on inequalities in FVC. Hence, FVC inequalities may be primarily driven by additive rather than multiplicative effects. Out of the variables examined, educational level had the largest influence on fruit and vegetable consumption.

Conclusions: The lack of evidence for intersectional, multiplicative effects of gender, age, ethnicity and educational level on fruit and vegetable consumption implies that universal interventions may be more effective in the UK context, rather than selective preventive strategies targeted towards intersectionally disadvantaged groups. Since fruit and vegetable consumption is notably low among those with lower educational levels, policies that address access to and availability of fruits and vegetables in neighborhoods in which predominantly people with lower educational levels reside seems warranted.

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