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Determinants of nutritional imbalance among UK university students: a cross sectional study

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\section*{Background}
Poor dietary habits are associated with numerous preventable chronic diseases and premature deaths. Higher education students are considerably susceptible to adopting unhealthy dietary patterns, leading to an increased prevalence of overweight and obesity. This study identified determinants and barriers to healthy nutrition among UK students.

\section*{Methods}
An online survey among a stratified and random sample [n=468] of university students, comprising socio-demographic items and the Rapid Eating and Activity Assessment for Patients-Short Version scale, two student focus groups, and three staff in-depth interviews were conducted. Stratified by gender $X^2$ tests and multivariate LR analysis at 95% CI identified predictors of unhealthy diet. The qualitative data was thematically analysed.
Results
46% of respondents had unbalanced diets. A negative attitude towards shopping and cooking predicted dietary problems (OR=1.9; 95%CI=1.0-3.6). Among women, problematic nutrition was significantly associated with school of study, and smoking (OR=2.7; 95%CI=1.4–5.1). Black and Muslim women followed poorer diets. Financial problems (OR=0.5; 95%CI=0.2-1.0), low mental wellbeing (OR=3.2; 95%CI=1.4-7.4), and drug use (OR=0.1; 95%CI=0.0-0.7) predicted poor diet among men. The multivariate regression model identified two schools (OR=3.5; 95%CI =1.5–8.2/OR=2.8; 95%CI=1.1–6.9), low mental wellbeing (OR=1.7; 95%CI=1.1–2.7), and drug use (OR=0.4; 95%CI=0.1–0.9) as predictors of unbalanced diet. By qualitative analysis, finances, academic pressure, time availability, and in-campus food offer were identified as university and societal barriers to healthful nutrition.

Conclusion
This study revealed poor diets in almost half of students and identified food choices shaped by environmental as well as personal factors. Universities should promote all aspects of healthy lifestyles. Managing stress exposure, offering inexpensive healthy food, and promoting healthy lifestyles is recommended.

Main Message
An alarming number of students fail to reach dietary recommendations. Universities as hubs of student life should seek for minimising barriers and encourage individuals’ healthy diets.