

Summer Meeting, 10–12 July 2018, Getting energy balance right

## Socio-demographic and lifestyle correlates of takeaway food consumption in UK adults

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Low-quality and nutrient-poor takeaway, take-out and fast foods have increased in popularity over the past 40 years and have been implicated as contributors to obesity and non-communicable disease<sup>(1)</sup>. There has been much debate regarding the determinants of takeaway food consumption, however, it is evident that the cause is multi-faceted with societal, environmental, socioeconomic, demographic, financial and behavioural factors being associated<sup>(2)</sup>. Thus, the aim of the present study was to investigate the relationship between takeaway food consumption and several socio-demographic and lifestyle variables simultaneously.

A cross-sectional observational study of 1724 adults (aged 18–64 years) was conducted from August 2016 – October 2017 in Merseyside, UK. Consumption of 212 habitual and takeaway foods was measured using a food frequency questionnaire and socio-demographic (including age, education level, ethnicity etc.) and lifestyle factors (physical activity, cigarette smoking and alcohol consumption etc.) were self-reported. All data were analysed using descriptive statistics; data was non-normal therefore, the relationship between takeaway food intake and socio-demographic and lifestyle factors was examined using Spearman's rho.

The majority (46 %) of self-reported consumers consumed takeaway food 1–3 times per month. Nonetheless, over one third (37 %) consumed takeaway food at least once per week (10 % reporting consumption 2–4 times per week and 1 % consuming takeaway food 5 times per week or more). Having more children in the household, a physically active occupation, participating in moderate and vigorous physical activity, frequent smoking, increased alcohol consumption, poorer health status, and increased BMI were positively correlated with takeaway food consumption ( $P < 0.005$ ) (Table 1). Increased age and a higher education level were negatively correlated with takeaway food consumption ( $<0.0005$ ) (Table 1).

Table 1. Spearman's rho correlations for takeaway food consumption and socio-demographic/lifestyle factors

Socio-demographic/ lifestyle factors	Correlation coefficient (R)	Sig. (2-tailed)	n
Age Group	-0.27	0.000	1724
Adults in household	0.06	0.010	1724
Children in household	0.09	0.000	1724
Education level	-0.16	0.000	1724
Health Status (Very good to Very poor)	0.24	0.000	1724
Smoking frequency	0.11	0.000	1724
Alcohol (drinks/ week)	0.07	0.005	1720
Body Mass Index	0.08	0.001	1693
Daily occupational activity	0.09	0.000	1724
Low physical activity (min/ day)	0.03	0.208	1724
Moderate and vigorous physical activity (min/ day)	0.09	0.000	1724

To conclude, the socio-demographic and lifestyle factors as shown above correlate to varying degrees with takeaway food consumption which agrees with previous research<sup>(3,4)</sup>. These findings could help inform policy and interventions to target the impacts of takeaway food on obesity and related non-communicable disease, by better understanding how takeaway food consumption links to other factors in adult lives.

1. Kant AK, Whitley MI & Graubard BI. (2015) *Int J Obes* **39**, 820–827.
2. Janssen HG, Davies IG, Richardson LD *et al.* (2017) *Nutr Res Rev* **2017**, 1–19.
3. Lachat C, Nago E, Verstraeten R *et al.* (2012) *Obes Rev* **13**, 329–346.
4. Adams J, Goffe L, Brown T *et al.* (2015) *Int J Behav Nutr Phys Act* **12**, 51.