

Predictors of takeaway food consumption in an adult population in Liverpool

TM. Blackham¹, L. Stevenson², JC. Abayomi³ and IG. Davies¹

¹Research Institute for Sport and Exercise Sciences, School of Sport and Exercise Sciences, Liverpool John Moores University, Liverpool, UK,

²School of Health and Sport Sciences, Liverpool Hope University, Liverpool, UK and

³Applied Health & Social Care, Edge Hill University, Ormskirk, UK.

The consumption of food prepared outside the home has increased in popularity, including takeaway food from small independent establishments⁽¹⁾. The consumption of takeaway food has been associated with weight gain⁽²⁾, insulin resistance and cardio-metabolic risk factors⁽³⁾. An online takeaway food questionnaire was completed by students and staff members aged 18 years and over at Liverpool John Moore's University (n=461, 322 females, 130 males). Statistical analyses were performed using SPSS V27 (Chi-square, independent-t, and Mann-Whitney U tests, $p < 0.05$ was considered statistically significant). Logistic regression was used to estimate odds ratios (OR) with 95% confidence intervals (CI) for variables that influence takeaway food consumption. Body Mass Index (BMI) was split into categories of $<25\text{kg/m}^2$, $25\text{--}29.9\text{kg/m}^2$ and $>30\text{kg/m}^2$. Frequent takeaway consumption (\geq once per month) was associated with age, BMI, marital status, "liking the taste" and "being too busy to cook". Takeaway consumption decreased with increasing age (35–66 years: OR 0.43 (95% CI 0.24, 0.75, $p = 0.003$)). Compared with single/married/partnered respondents, those who were divorced or separated ate takeaway food less frequently (OR 0.36 (95% CI 0.16, 0.82, $p = 0.015$)). Frequent consumers were also 1.8 and 2.2 times more likely to be overweight (OR 1.8 (95% CI 1.1, 3.0, $p = 0.022$)) or obese/very obese (OR 2.2 (95% CI 1.1, 4.4, $p = 0.032$)). Significant predictors of frequent takeaway food consumption were "being too busy to cook" (OR 3.6 (95% CI 1.7, 7.5, $p = 0.001$)) and "liking the taste" (OR 1.9 (95% CI 1.1, 3.5, $p = 0.032$)). Respondents who were "too busy to cook" were significantly younger (34.5 years (29, 45) vs. 41 years (33, 49), $p = 0.003$, Mann-Whitney U) and had a significantly higher BMI (26.3 ± 5.2 vs. $24.9 \pm 4.8 \text{ kg/m}^2$, $p = 0.023$, t-test). Respondents who "did not know how to cook" also had a significantly higher BMI (26.9 (23.8, 29.1) vs. 24.4 (21.5, 27.0) kg/m^2 , $p = 0.036$, Mann-Whitney U). Furthermore, respondents who "did not like to prepare food" were significantly younger (34 years (27, 46) vs. 40 years (31, 48), $p = 0.032$, Mann-Whitney U) and were more likely to be male ($p = 0.044$, Chi-square). In conclusion, our research suggests that takeaway food is more popular with younger consumers (18–34 years) than older consumers and that eating takeaway food once a month or more is associated with higher BMI. These findings show that motivators for consumption such as taste and time constraints as well as barriers such as not knowing how to cook, being too busy to cook and not liking to prepare food should be considered when planning interventions to reduce takeaway consumption.

References

1. Adams J, Goffe L, Brown T, *et al.* (2015) *Int J Behav Nutr Phys Act* **12**, 51
2. Duffey KJ, Gordon-Larsen P, Steffen LM, *et al.* (2009) *J Nutr* **139**(11), 2113–2118
3. Smith KJ, Blizzard L, McNaughton SA, *et al.* (2012) *Eur J Clin Nutr* **66**(5), 577–584