Predictors of takeaway food consumption in an adult population in Liverpool

Toni Blackham^{1,} Leo Stevenson², Julie Abayomi³, Ian Davies¹



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

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

T.M.Blackham@ljmu.ac.uk

³Applied Health & Social Care, Edge Hill University.



INTRODUCTION



The popularity of fast food and takeaway food has increased in recent years, with previous research in Liverpool showing 22% of adults eat takeaway food once or more a week⁽¹⁾. Consumption of takeaway food is associated with:

- higher intakes of energy, fat, saturated fatty acids, trans fatty acids, salt and sugar⁽²⁾
- \triangleright poorer diet quality⁽³⁾, weight gain^(3,5) and increased waist circumference^(3,4)

WHY IS THIS IMPORTANT?

The mortality rate from cardiovascular disease for under 75's in Liverpool is greater than the average for England⁽⁶⁾, which may be associated with a takeaway food dietary pattern.



AIM



Investigate the consumption of takeaway food purchased from small, independent takeaway outlets in Liverpool.

OBJECTIVE

Determine predictors of takeaway consumption

METHOD

- Online takeaway food questionnaire LJMU students and staff members (n = 461; 29% male, 71% female; age 18–66 years).
- Statistical analyses using SPSS V27. Chi-square, Independent-t, and Mann-Whitney U tests (p < 0.05 statistically significant).
- Logistic regression to estimate odds ratios (OR) with 95% confidence intervals (CI) for variables that influence takeaway food consumption.
- Body Mass Index (BMI) was calculated using self-reported height and weight and split into categories of < 25, 25–29.99 and > 30 kg/m².

RESULTS & DISCUSSION

Logistic regression showed age, BMI and marital status were significant predictors of frequency of takeaway food consumption.

- Odds of eating takeaway food decreased by 0.05 with every year increase in age.
- Participants who were divorced/separated were 40% less likely to eat takeaway food.

Frequent consumers (≥ once per month):

- twice as likely to be overweight (OR 1.8) or obese/very obese (OR 2.2)
- liked the taste of takeaway food (OR = 1.9)
- too busy to cook (OR = 3.6)

Furthermore, respondents who were too busy to cook were:

- significantly younger 34.5 years (29, 45)
 compared with 41 years (33, 49)
- significantly heavier 26.3 kg/m² (SD 5.2) compared with 24.9 kg/m² (SD 4.8)

Variable	Category	OR	95% CI
Age	-	0.95	0.9-1.0
	18-34	Ref	
	35-46	0.4	0.3-0.8
	47-66	0.4	0.2-0.8
ВМІ	-	1.1	1.0-1.2
	Underweight/ Healthy weight	Ref	
	Overweight	1.8	1.1-3.0
	Obese/ Very obese	2.2	1.1-4.5
Marital Status	_	2.4	1.4-4.2
	Single	Ref	
	Divorced/ separated	0.4	0.2-0.8
I am usually too busy to cook		3.6	1.7-7.5
I like the taste		1.9	1.1-3.5

CONCLUSION

This research suggests that takeaway food is more popular with younger consumers (18–34 years) than older consumers (35-66 years) and that eating takeaway food once a month or more is associated with higher BMI.

In addition, motivators for eating takeaway food, such as taste and time constraints should be considered when planning interventions to reduce takeaway consumption.

REFERENCES

- 1. Blackham T. et al. (2016) P Nutr Soc, 75 (OCE3) E91
- 2. Jaworowska A, Blackham T, Stevenson L et al (2012) Appetite 59, 517-522
- 3. Smith, KJ, McNaughton, SA, Gall, SL, et al (2009) Int J Behav Nutr Phys Act, 6(29)
- 4. Duffey KJ, Gordon-Larsen P, Steffen LM et al. (2009) J Nutr, 139(11), 2113-2118
- 5. Smith KJ, Gall, SL, McNaughton, SA et al. (2017) BMC Public Health 17:54
- 6. Public Health England (2020) Local Authority Health Profile 2019, Liverpool.

 This poster has been designed using resources from Flaticon.com https://www.flaticon.com/free-icons created by Freepik