This is the published version:


Available from Deakin Research Online:

http://hdl.handle.net/10536/DRO/DU:30019216

Reproduced with the kind permissions of the copyright owner.

Copyright : 2012, HEC Press
Concurrent Session 10: Behavioural Nutrition

Takeaway food consumption, diet quality and abdominal obesity in young adults

KJ Smith¹, SA McNaughton², SL Gall¹, CL Blizzard¹, TD Dwyer³, AJ Venn¹

¹Menzies Research Institute, University of Tasmania, Hobart TAS 7000
²Centre for Physical Activity & Nutrition Research, Deakin University, Burwood VIC 3125
³Murdock Children’s Research Institute, Royal Children’s Hospital, Parkville VIC 3052

Background - Takeaway food consumption is associated with a higher BMI and poorer diet quality in the USA but little is known about the association in Australians.

Objective - To examine if takeaway food consumption is associated with abdominal obesity and poorer diet quality in young Australian adults.

Design - A national sample of 1,277 men and 1,585 women aged 26-36 completed a self-administered questionnaire on demographic and lifestyle factors, a 127 item food frequency questionnaire, and usual frequency of fruit, vegetable and takeaway food consumption. Dietary intake was compared with the dietary recommendations of the Australian Guide to Healthy Eating. A pedometer was worn for seven days. Waist circumference was measured and moderate abdominal obesity was defined as ≥94 cm for men and ≥80 cm for women. Prevalence ratios (PR) were calculated using log binomial regression with eating takeaway food once a week or less as the reference group.

Outcomes - Consumption of takeaway food twice a week or more was reported by more men (37.9%) than women (17.7%). Participants eating takeaway food at least twice a week were less likely to meet the guidelines for vegetables (P<0.05 men and women), fruit (P<0.001 men and women), dairy (P<0.01 men and women), extra foods (P=0.001 men and women), breads and cereals (P<0.05 men only), lean meats and alternatives (P<0.05 women only) and overall met significantly fewer dietary guidelines (P<0.001 men and women) than participants eating takeaway less than twice per week. After adjusting for confounding variables (age, physical activity, TV viewing, and employment status) consuming takeaway food twice a week or more was associated with a 31% higher prevalence of moderate abdominal obesity in men (PR 1.31; 95% CI: 1.07, 1.61) and a 25% higher prevalence in women (PR 1.25; 95% CI: 1.04, 1.50).

Conclusion - Eating takeaway food twice a week or more was associated with poorer diet quality and a higher prevalence of moderate abdominal obesity in both young men and young women.

The effects of social facilitation and norms on fast food consumption in a naturalistic environment

E Brindal¹,²,³, P Mohr¹, C Wilson¹, G Wittert²,³

¹CSIRO, Human Nutrition, Adelaide, Australia
²University of Adelaide, Adelaide, Australia
³NOBLE, Adelaide, Australia

Background – Previous research has suggested that eating in the presence of others increases the time spent eating and consequently the amount eaten: an effect labeled social facilitation. The high energy density of many fast food items means that increasing its consumption may have potentially hazardous effects on an individual.

Objective – This study aimed to examine the effects on fast food consumption of factors, including group size and time spent eating, previously found to increase intake in social facilitation studies.

Design – One McDonald’s restaurant in Adelaide was observed during weekdays for three months. Dine-in patrons (147 males, 75 females) were randomly selected for observation in the naturalistic environment. Their estimated age (in deciles), sex, activities, social context, menu items ordered and eaten, and time spent at the table were recorded.

Outcomes – Those who ate in groups spent significantly more time eating than those alone. There was no difference in the estimated amount of kilojoules consumed. Lone diners ate for significantly longer when reading but also did not eat more. Sex and group composition (mixed versus same-sex) significantly influenced intake. In same-sex groups, men and women ate similar amounts. In mixed-sex groups, males consumed almost twice the kilojoules of females.

Conclusion – This research suggests that in a fast food restaurant, eating in company can prolong the time spent eating without increasing the amount of kilojoules eaten. This aforementioned observation may be partly the result of the fast food environment and its pre-packaged meals. In a social interaction, the sex composition of a group was associated with differences in the amount consumed. This offers support for minimal eating norms that suggest women will eat less when in male company to meet gender role expectations.