Takeaways and child obesity

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Takeaway meals in the UK

- Takeaway meals are very high in calories yet are consumed regularly by some families.

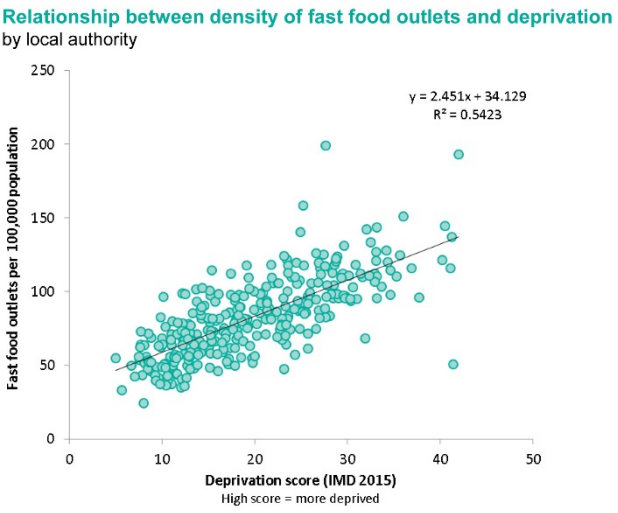
Portion sizes are often very large. For example in Liverpool, three quarters of takeaway meals (excluding side orders and drinks) studied exceeded 1125 calories, with a quarter exceeding the recommended daily intake for a boy aged 9-13 years (1800 calories).[1] Portions sizes of meals surveyed in Sandwell in the West Midlands were substantially higher than portion sizes for equivalent meals in the US (e.g. pizza 365g in Sandwell compared to 102g in the USA, and 355g compared to 120g for fries respectively).[2]

According to the National Diet and Nutrition survey just over 1 in 5 (20%) children eat a takeaway meal *at home* at least once a week.[3] This may be an under-estimate of total takeaway food consumption by children, as it does not include takeaway food consumed outside the home. Takeaway consumption peaks in young adults (ages 19-29) in the UK.[4]

- Number of takeaway outlets continues to increase

In 2017, there were 56,638 takeaway outlets in England, a rise of 8% (4,000 restaurants) in the past three years, according to Ordnance Survey data. Longer term data is available for one region of England, Norfolk, where the number of takeaway outlets per person increased by 44% over an 18 year period (1990-2008).[5] The takeaway industry has reported a 34% increase in nominal expenditure on takeaway food from £7.9 billion in 2009 to £9.9 billion in 2016. Annual growth of 2.6% per annum is forecast over the next five years.[6]

- Takeaways are likely contributing to inequalities in childhood obesity



Takeaway food can represent a very low cost option to the purchaser, especially to children, who are highly price sensitive.[7] There are 2-3 times as many takeaways in the most deprived areas of England compared to the least deprived areas,[8] and children from lower socio-economic groups consume takeaways more frequently than other children.[9] More than half of the children surveyed in Tower Hamlets, one of the more deprived areas of London, purchased food or drinks from takeaway outlets twice or more a week, with one in 10 of them consuming food or drinks from these outlets everyday.[10] Takeaway

consumption is associated with a greater increase in total calorie consumption for children in lower socio-economic groups than children in higher socio-economic groups.[3]

Takeaways and obesity

- Regular consumption of takeaway food is linked to obesity in children and young adults.[9,11–13]

In the CHASE study of children aged 9-10 years in London, Birmingham and Leicester those who regularly consumed takeaways had worse diets, higher body fat and raised blood cholesterol, compared to children who rarely or never did.[9] Children who ate takeaway meals at home at least weekly consume an additional 55-168 calories than those eating these meals rarely.[3] In one American study, young adults who consumed fast-food at least twice per week gained an additional 4.5kg of weight over 15 years of follow-up compared to those consuming this food less than once per week .[13]

- Access to takeaways has been linked to obesity in adults and children from low income families; studies of takeaways near schools have mixed findings

In the Fenland study in Cambridgeshire, adults with the highest exposure to takeaway restaurants consumed an additional 40g of takeaway-type food a week (equivalent to half a small serving of chips, and had a greater BMI (on average 1.21 units) than those with the least exposure.[14] Similar results have been observed elsewhere.[15]

Findings for children with respect to takeaways near school have been mixed,[16] which may partly reflect limitations with the study designs. Nevertheless, recent UK research has linked consumption of a healthy diet to attending a school where takeaway outlets are relatively far away rather than close by,[17] or where the balance of food retailing near the school is mixed, and not skewed towards fast food.[18] In Canada, more frequent fast food consumption, specifically at lunch, was associated with having a higher level of fast food access around school.[19]

- Takeaways are particularly associated with obesity, whereas restaurants and supermarkets are not

Whilst other meals eaten out of the home (e.g. in restaurants) may be 'unhealthy' the offer in these setting tends to be more varied (i.e. with more healthy choices) and the portion sizes less extreme. In one UK study (of adults) only frequent use of takeaways (not cafes and not restaurants) was associated with obesity.[20] Access to supermarkets has been shown to be protective of obesity in adults.[21,22] Whilst consumption of food from other food outlets (e.g. newsagents or petrol stations selling snacks and confectionary) is also likely to contribute to an unhealthy dietary pattern, particularly for older school children,[23] these outlets have not been well studied.

Evaluation of approaches tried to minimise the impact of takeaway food on health

Calorie Labelling: Limited or no impact on calories purchased, in takeaways.

Menu (including calorie) labelling has been implemented in New York City and King County, Washington (USA). Studies of takeaway outlets in these jurisdictions consistently show it has had little or no impact on calories purchased.[24,25] The introduction of menu labelling legislation in New South Wales, Australia did not lead to reduced calorie contents across five major fast-food chains,[26] although there is a suggestion that similar forthcoming legislation in the US may be associated with a small reduction in calorie content.

There are some studies suggesting labelling may be effective in restaurant, as opposed to takeaway, settings.[27,28] Labelling as a strategy, if effective, would risk widening health inequalities, as the more educated and health-conscious would be more liable to respond.[29]

'Signposting' healthier choices: more likely to be effective but not implemented at scale

Studies in single restaurants have shown that signposting or highlighting healthy choices can shift purchases towards healthier items.[24] Successful approaches include changing the prevalence, prominence or default options on the menu to support healthy choices, clear marking of healthy options, or by inviting customers to downsize their portion size does effect the size of meals ordered.[30–32]

Healthier takeaway food: much tried but difficult to achieve

Many local authorities (e.g. Kirklees, Redcar & Cleveland, some London boroughs) have tried to work with existing takeaways to improve the healthfulness of their offer (e.g. healthier frying practices, smaller portions).[24,33,34] Much of this work has either not been evaluated or has not measured hard outcomes, i.e. changes in restaurant practice or food consumed.[33] Working with independent takeaways (which collectively dominant the market) is challenging in the current operating environment with a focus on profitability.[34–36]

There have been attempts (e.g. Box Chicken) in Newham to build from scratch a healthy takeaway business. Whilst the food offer to children from this pilot was well received it did not develop further, in part due to long-term financial viability.[37]

Planning restrictions: increasingly used in the UK but limited evaluation of their impact

As many as 164 (of 325) English local authorities have some form of planning direction in place addressing takeaways (e.g. local plans, supplementary planning documents). Approaches used include: exclusion zones around schools, restrictions in areas with high levels of childhood obesity, restrictions centred on areas with high existing density of takeaways and financial levies imposed on new takeaway business owners.

Barking and Dagenham, the first local authority to implement planning restrictions on new takeaways, report a 15% decrease in takeaways since 2010.[38] However, there have been no robust independent evaluations of the impact of these planning interventions on takeaway outlet numbers, or changes in diet. Therefore, it is not possible to say which type of planning intervention is most effective in achieving improvements in health.

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