The role of independent fast food outlets in obesogenic environments: a case study of East London in the UK (word count 8,437 including abstract and figs but not references and acknowledgements)

Abstract
In the battle to curb rising levels of obesity the focus has moved from individual interventions towards addressing factors within the 'obesogenic environment.' Fast food outlets are argued to be an increasingly important aspect of this environment and recent UK government policy has suggested that local authorities should use their planning powers to restrict the opening of new fast food outlets in local neighbourhoods. This policy has a particular impact on the growing number of independent fast food outlets that characterise deprived inner city areas. Focusing on a case study of the London Borough of Tower Hamlets and its independent fast food sector this paper explores the range of local variables, and in particular the crucial mix of socio-economic and cultural factors, which have influenced its development. The role played by fast food outlets in providing local employment and a culturally acceptable social space for the local Muslim community, through the provision of halal food in an alcohol-free environment, is particularly highlighted. In uncovering these particular local sensitivities the paper aims to contribute to debates regarding the nature of 'obesogenic environments' and demonstrate that local level research is essential for enabling better understanding for developing policy interventions.

1. Introduction

There has been a marked shift in policy concerned with obesity in recent years from a focus on individual treatments towards a greater emphasis on public health interventions (Delpeuch et al., 2009). In the UK this change in focus is illustrated by the 2004 House of Commons Health Committee report on Obesity (2004) which concluded that,

> "While we accept that individuals have the right and responsibility to make choices about their own health and lifestyle, we accept the importance of health education in enabling them to do so, we believe that to tackle obesity successfully education must be supported by a wider range of measures designed to remove the key barriers to choosing a healthy diet"(HoC,2004, page 54).

The Government's Foresight Programme was subsequently asked to identify the nature of these barriers, and their report, *Tackling Obesities: Future Choices,* highlighted the importance of the total 'obesogenic environment'(GOS, 2007), defined as the 'sum of the influences that the surroundings, opportunities or conditions of life have on promoting obesity in individuals and populations' (Swinburn et al, 1999). The term embraces the entire range of social, cultural and environmental conditions that influence an individual's ability to adopt a healthy lifestyle. These might include factors within the environment which shape the availability and consumption of particular foods or the levels of physical activity undertaken, as well as a range of social variables. People exist in a number of different environments including physical, social, and cultural micro environments such as school home and workplaces, and they are also influenced by macro level environments such as education and health systems, and related government policy (ibid, 1999). Exactly how these different factors and environments interact and contribute to obesity is still poorly understood (Jones et al. 2007; Townshend and Lake, 2009) and some have argued that environmental effects are relatively small in comparison to genetic influences (Wardle et al., 2008). Despite this continuing debate about the relative influence of different causal factors, 'obesogenic environments' are widely accepted as a driving force behind the escalating levels of obesity (Lake and Townshend, 2006), and the concept has gained considerable prominence in both the research and policy communities (Jones et al., 2007).

The increasing availability and consumption of food outside the home, and in particular fast food, is thought to be one of the key factors within the obesogenic environment contributing to rising levels of obesity. Fast food tends to be more energy dense and has a higher fat content than

meals prepared at home (Prentice and Jebb, 2003), and the frequency with which it is consumed has been shown to be linked to increased body weight and obesity (Pereira et al., 2005). Consumption of fast food has been growing as lifestyle trends in the UK (rising incomes, longer working hours, more working mothers, time-poor/cash rich parents) tend to support a 'convenience food culture'(Ofcom, 2006). In the UK one in six meals is now consumed outside the home (DEFRA, 2009), fuelling an increase in fast food outlets (*The Independent*, 2009). Not surprisingly therefore, the Foresight Report identified "Controlling the availability of/exposure to obesogenic foods and drinks" as one the top five policy responses likely to have the greatest impact on levels of obesity. (GOS, 2007, page 109).

Until recently the multi-national fast food chains, such as McDonalds, have received most of the blame for popularising fast food (Schlosser, 2001; Spurlock, 2004), and have been a key target of government initiatives designed to encourage healthier fast food options. Whilst the major chains dominate in terms of market share, the fast food sector as a whole is characterised by a greater number of small independent businesses. In many areas these independent outlets form a significant proportion of the local food offering and are growing in number, and by 2008 accounted for 46.8% of the market (Local Data Company, 2009). The proliferation of fast food outlets in local neighbourhoods, particularly in close proximity to schools, has led to calls to curb their expansion (School Food Trust, 2008). In 2008 the government's *Healthy Weight Healthy Lives* strategy drew attention to the large number of fast food outlets operating in local neighbourhoods noting that,

> "One of the challenges that we face in promoting healthy eating is the availability of foods high in fat, salt and sugar in local neighbourhoods, including the prevalence of fast food restaurants and takeaways in some communities" (Cross-Government Obesity Unit, 2008a).

It recommended that local authorities should," use existing planning powers to control more carefully the number and location of fast food outlets in their local areas." (ibid, page18). This policy is now being actively considered by a number of local authorities with two in London having developed specific supplementary planning guidance, (L B Waltham Forest, 2008; L B Barking and Dagenham, 2009). However such policies are rarely based on a detailed assessment of the local area and its communities. This paper aims to demonstrate the importance of such an analysis. The paper draws on a case study of the independent fast food sector in the London Borough of Tower Hamlets designed to develop a more detailed understanding of the nature of the local fast food environment, and to identify the factors within the local neighbourhood that might be contributing to the proliferation of fast food outlets and fast food consumption. Previous research which has explored potential neighbourhood determinants of obesity has been largely quantitative in nature and has sought to determine a statistically significant relationship between just one or two risk factors (typically deprivation and the concentration of outlets) rather than develop a comprehensive model which incorporates the range of influential variables (Black and Macinko, 2008). By adopting a more qualitative approach this study aims to highlight the wider range of issues involved, including, in particular, the influence of local cultural and religious values on provision and consumption patterns. In so doing it illustrates the importance of micro-level analysis as a means of understanding the local sensitivities which may affect a particular fast food environment. Given this detailed local analysis the paper sets out to question the extent to which planning proposals designed to curb the proliferation of fast food outlets are likely to contribute to a reduction in the risk of obesity in areas such as Tower Hamlets.

Tower Hamlets provides an ideal setting for such a study. It is home to some of the most deprived communities, with the highest levels of childhood obesity in the UK (NHS Tower Hamlets, 2008), and reportedly has one of the greatest densities of fast food outlets in the country (School Food Trust, 2008). Tower Hamlet's role as one of the host boroughs for the 2012 Olympics adds additional impetus to the focus on encouraging healthier lifestyles. These factors contributed to the borough receiving £4m in November 2008 under the Department of Heath's new 'Healthy Towns' initiative. This funding, awarded to 9 areas in England, is to support initiatives, designed to "test and evaluate different approaches to making regular physical activity and healthy food choices easier for local communities"(Cross-Government Obesity Unit, 2008b). In Tower Hamlets part of this

grant is being used to fund the introduction of a healthy food award scheme for those fast food outlets able to demonstrate that they provide a range of healthy foods. This paper draws on research commissioned by the Tower Hamlets Primary Care Trust (THPCT) in 2009 to inform the development of this scheme

The paper is structured as follows: The first section explores the debates around food environments in deprived urban areas. The second section sets the context by providing some background information on Tower Hamlets and its demographic and socio-economic characteristics. It then moves on to discuss the study and its findings. These highlight the crucial interplay of socio-economic and cultural issues which have influenced the development of the local fast food environment and which need to be clearly understood when developing initiatives designed to tackle obesity. In so doing the paper suggests that the current policy focus on tackling the physical aspects of the obesogenic environment tends to neglect many of the underlying causes and economic inequalities which tend to lead to obesity in the first place.

2. Food environments in deprived urban areas

A key factor which has shaped the policy debate is the tendency for obesity to be more prevalent within poorer communities. The link between obesity and deprivation was most recently highlighted in the Marmot (2010) *Strategic Review of Health Inequalities in England Post 2010* which noted that, "Obesity is associated with social and economic deprivation across all age ranges and is becoming increasingly common" (Marmot, 2010, page 59).

In attempting to understand what it is about the environments in which poorer communities live that may make them more obesogenic, attention has been drawn to the nature of the neighbourhood food environment. A number of studies have explored the potential link between deprivation, health, and access to healthy food (see Lake and Townshend, 2006, and White, 2007) for a review of the evidence), and in the 1990s the concept of 'food deserts' became a popular policy concept to describe areas (usually found in poorer communities) which lacked access to healthy food (DoH, 1996).   Initial evidence seemed to confirm the existence of food deserts and suggested that consumption of fruit and vegetables increased amongst those with the poorest diets when access to healthier food improved, in particular through the provision of a new supermarket within easy walking distance (Wrigley et al, 2003). Recent US research tends to support this finding. (Moore et al 2008; Rose and Richards 2004; Zenk et al, 2005) For example Moore et al (2008) in a study of multi-ethnic populations found that in neighbourhoods with poor access to supermarkets people were less likely to have healthier diets. In the UK and New Zealand the evidence seems less clear cut with better access to supermarkets not being found to be significantly related to increased fruit and vegetable consumption (Cummins et al, 2005; Pearce et al, 2006). However differences in the design and quality of different studies make comparisons difficult suggesting that this counter-argument has yet to be proved.

More recently attention has turned to the increasing prevalence of 'unhealthy food', and in particular fast food, and the extent to which this is contributing to rising levels of obesity, particularly within poorer communities and amongst children. Numerous studies have sought to ascertain whether fast food is more readily available in deprived areas and may thus be contributing to the heightened levels of obesity found within deprived communities (Lewis et al., 2005; McDonald et al., 2007; Pearce et al., 2007). The results here are conflicting with several researchers finding a greater density of fast food outlets in more deprived areas (Reidpath et al. ,2002; Pearce et al., 2007; Smoyer-Tomic et al., 2008) and others suggesting that outlets are more likely to be concentrated in the more prosperous commercial and business districts and along arterial roads rather than in the poorer residential areas (McIntyre et al., 2005), or in the case of one US study, in both deprived and more affluent black neighbourhoods (Block et al., 2004). It has also been suggested that the greater level of demand for fast food in deprived areas might be due to the higher population densities generally found in these locations, and the greater number of outlets due to fast food businesses choosing to locate in areas with lower land prices and building rental costs (Pearce, 2009). Furthermore it is not clear whether *living* near fast-food restaurants actually results

in greater levels of obesity. In the US studies have shown that the close proximity of fast food outlets to schools leads to greater fast food consumption and higher levels of obesity amongst children (Currie et al., 2009; Davis and Carpenter, 2009), but research elsewhere has found little support for the concept that exposure to fast food outlets in the local neighbourhood increases risk of obesity (Crawford et al., 2008; Pearce, 2009). Others have suggested that the socio-economic characteristics of individuals and their households have a greater influence over purchasing behaviour than the nature of the takeaway food environment (Turrell and Giskes, 2008). One Australian study found that the *type* of fast food chosen was significantly different across different socioeconomic groups; whilst the better educated group had greater takeaway consumption the lowest educated group were more likely to have consumed "less-healthy" takeaway choices (Miura et al., 2009). Similarly in the UK the heaviest users of chicken and burger restaurants are less affluent consumers in socio economic groups C2 and D (Mintel, 2006). Given the conflicting nature of much of the evidence, and the complex mix of variables involved, it would appear that a more detailed understanding of the spatial and socio-economic characteristics of local areas and fast food consumers is necessary to fully appreciate the causal relationships operating in different localities. This was a key objective of this study of Tower Hamlets.

Research and policy to date has also been predominantly concerned with the physical and economic access to food, whilst more complex social and cultural influences which tend to influence choice, opinion or satisfaction, have been largely overlooked (Kirkup et al. 2004; Shaw, 2006; McEntee, 2009). Access to affordable healthy food that meets with cultural or religious dietary requirements may be a key issue in deprived urban areas with large ethnic minority populations. Independent outlets may feature more frequently in such neighbourhoods for a number of reasons. Urban neglect, high levels of crime, perceived or real poor market demand and poverty has often meant that major multiples have by-passed or deserted these areas. This has resulted in a dearth of enterprise in some areas and has led to a raft government initiatives (Enterprise Zones, Single Regeneration Budget, Phoenix Fund, and the Local Enterprise Growth Initiative) designed to stimulate business growth as well as campaigns to encourage business investment and retail-led regeneration to redress this imbalance (Business in the Community 2002). In some cases the tightening of planning restrictions in more attractive locations has forced major retailers to re-consider policies towards such areas. Lowe and Wrigley (2010) cite the example of Tesco's decision to locate in under-served markets as part of a deliberate strategy for gaining entry to the US market. In many inner city areas, however, these voids have often been filled by local independent ethnic minority firms, who attracted by low rents, and a plentiful supply of cheap, ethnic labour, are able to set up businesses catering to the specific needs of the local community. A weak retail climate and a surplus of low-wage labour, both make the proliferation of fast food outlets probable in such environments (Kwate,2008; Seex, 2007).

3. Tower Hamlets: Setting the Scene

The London Borough of Tower Hamlets lies on the northern banks of the river Thames adjacent to the City of London (see figure 4). With an area of just 21.5 sq km and an estimated population of 234,800 the borough is one of the smallest and the 5th most densely populated boroughs in the UK (ONS, 2009). It also has one of the youngest populations with 24% of the population under 20 years of age (ibid). Data from the last census suggested that 33.4% of the borough's population were of Bangladeshi origin (UK Census, 2001). This community accounts for over 25% of the entire UK Bangladeshi population and as such is the most concentrated ethnic minority community in the UK (Institute for Employment Studies, 2006).

The strong presence of the Bangladeshi community is particularly evident in the north of the borough. The area is home to Brick Lane, known as the 'curry capital of the UK', with around 50 Asian restaurants now serving a largely white clientele of city workers and tourists (Shaw et al., 2004). It is also the location of a growing night-time economy and a hub for the creative industries. Nearby on Whitechapel High Street a thriving street market sells cheap food and clothes to local residents, whilst the East London Mosque, the largest mosque in Europe, provides a focus for the

borough's 80,000 Muslims as well as a large number of non-local visitors from outside the area (figure 1).

Fig 1. East London Mosque on the Whitechapel High Road (source: photograph by author)

Tower Hamlets is also an area of stark contrasts. Its proximity to the City has attracted an increasing number of professionals who have brought and restored many of the old Georgian terraces in the borough or moved into new apartments in the re-developed docklands area. But these pockets of gentrification lie adjacent to some of the most deprived wards in the country. Over 50% of the borough's population live in areas which are amongst the 10% most deprived in the UK (Index of Multiple Deprivation, 2007). In November 2009 20.3% of residents of working age were in receipt of some sort of out of work benefit – over 4% more than the average for London (ONS, 2010). Poor levels of proficiency in English amongst the first generation, coupled with poor educational achievements, a limited network of contacts in different sectors, and discrimination, have impacted on the Bangladeshi community's employment prospects (Institute for Employment Studies, 2006; Salway, 2008). Although Bangladeshi children have seen rapid advancement in recent years the community as a whole still has one of the lowest levels of educational attainment and the highest rates of unemployment in the UK. In 2009 20.5% of 16-24 year olds had no qualifications (DCSF, 2009).

Unsurprisingly this high level of deprivation is coupled with equally high levels of poor health and nutrition. Tower Hamlets has one of the worst childhood obesity rates in England. Results from the National Child Measurement Programme, for 2008-9, show that 13.4% of 4-5 year olds, and 25.69% of 10-11 year old children, were obese (NHS Tower Hamlets, 2010a). The borough ranks 5th highest in London for prevalence in 4-5 year olds, and 2nd highest in London, (and England), for obesity prevalence in 10-11 year olds (ibid). Data for adult obesity is less readily available but public health records suggest that one in 5 adults are currently likely to be obese (NHS Tower Hamlets 2010a).

In 2008 Tower Hamlets launched its own local *Healthy Weight, Healthy Lives* strategy which set out plans for a multi-agency approach towards tackling the continuing rise in overweight and obesity (NHS Tower Hamlets, 2008). The subsequent award of *Healthy Towns* funding, later in 2008, provided an opportunity to supplement this work and trial some new approaches. This includes a *Healthy Food* strand which aims to "improve access to healthier food options in the local community and organisations, and where possible, reduce the availability of foods that are high in fat, sugar and salt."(NHS Tower Hamlets, 2010b). It incorporates the *Food4Health Award* scheme which is being led by the local authority's environmental health team in conjunction with the THPCT's public health dietician, and which is inviting local food businesses to apply for a Bronze, Silver or Gold award depending on the extent to which they can demonstrate that their menus include a healthy range of food options. Free nutrition and/or business advice is provided to applicants working towards the award. Businesses that achieve the award receive a certificate to display and free local publicity that it is hoped will encourage customers to opt for healthier food choices. In tandem with this initiative the THPCT staff are also working with the borough's planning department to explore how planning policy can be used to control the proliferation of fast food outlets.

4. Methods

The data for the case study was collected using a range of methods. The local authority's Environmental Health Department provided access to the Food Register which lists all premises offering food to the public and this enabled some quantitative data analysis of the fast food businesses by type to be undertaken, and for the location of business premises to be mapped using GIS mapping software. Face to face interviews were conducted with 30 fast food businesses and 51 of their customers. Resource constraints limited the number of interviews that could be undertaken, but the business sample was designed to be broadly representative of the range of independent fast food outlets by type of food sold and location across the borough. The interviews were conducted on the business premises during trading hours and were based on a semi-structured questionnaire. This sought to gather demographic data on the owners, their motivation for entering the fast food sector, the nature of food sold by the business, and attitudes and barriers towards the sale of healthier food. They were also asked to identify the principle demographic characteristics of their customers. Healthier food was defined here as including dishes incorporating items such as fruit, vegetables, salad, bread or rice instead of chips, and fresh fruit juices, as well as healthier cooking methods including the roasting or grilling of meat instead of deep fat frying. The customer survey was undertaken by approaching customers eating in or purchasing food for takeaway consumption from a sample of the outlets chosen for the business interviews. This research was conducted at lunchtime and during the early evening to allow for the range of customer types to be covered. It sought to provide a snapshot of the type of customers frequenting the outlets (by age, sex, and employment status), the nature and frequency of their fast food consumption, average spend, and attitudes towards healthier menus. In line with other research which has found fast food consumption to be greatest amongst young men (Mintel, 2006) our sample comprised of 74.5% males, 96% under 40 years of age, 67% under 25 years of age, and 43% school or college students. These interviews were supplemented by a number of field visits to strategically chosen locations around the borough, where the outlets were known to be concentrated, to observe the businesses, their customers and the local area. These visits were designed to develop a deeper understanding of the nature of the fast food environment and local consumption patterns. This field work was carried out over a two month period in the summer of 2009. In addition semi-structured interviews were held with key personnel from the local agencies working with the businesses. These included three key staff from the Tower Hamlets Primary Care Trust, the local authority environmental health officer, the borough planning officer responsible for developing local planning policy regarding the fast food sector, a business advisor from the local business advice agency, and the main supplier to the local fast food industry. The data collected during these interviews provided additional information on the nature of the food being sold, business support, regulation practice, and policy

developments. The case study approach clearly limits the transferability of the findings, but did allow for a more detailed qualitative analysis of local influences on business development and fast food consumption which is frequently absent from larger scale surveys.

5. Fast food businesses in Tower Hamlets: an important source of local ethnic minority employment

The Local Authority's Food Register lists a total of 296 businesses which are registered as takeaways, of which 10 were found to be branches of national chains. However inspection of the list of businesses registered as restaurants/cafes/canteens revealed that this contained at least 80 businesses whose sales were known to also include the sale of takeaway food. This included, for example all 5 of the McDonalds branches in the borough as well as the 3 Kentucky Fried Chicken outlets, where although substantial seating is provided, takeaway sales are also offered. Of these 80 businesses 29 were identified as chain businesses. Thus out of a total of 376 businesses known to be selling takeaway food 39 were part of chains and the remaining 337 (89%) were independent outlets (table 1). This would appear to be a much greater proportion of independent outlets than the national average of 46.8% reported by the Local Data Company (LDC, 2009). Thus national initiatives being undertaken by the Food Standards Agency with the major fast food chains are likely to have a limited impact on boroughs such as Tower Hamlets where independent outlets dominate the local offering.

Table 1: Take-Away Outlets in Tower Hamlets by Ownership Type

Ownership Type	Take-Aways	Restaurants/Cafes/Canteens known to be selling significant proportion of Take-Away food	Total
Chains	10 (3.4%)	29 (36.25%)	39 (11%)
Independents	286 (96.6%)	51 (63.75%)	337 (89%)
Total	**296 (100%)**	**80 (100%)**	**376 (100%)**

In common with the UK catering industry as a whole, the independent fast food sector in Tower Hamlets is an important source of employment for local ethnic minority communities, with the local Bangladeshi community in particular making up a large proportion of owners and staff. The last Census reported that 46.86% of self-employed Bangladeshis in the UK were operating in the hotel and restaurant sector (UK Census, 2001). The sample of 30 businesses interviewed for this study included businesses whose owners were Bangladeshi, Chinese, Cypriot, French, Iranian, Jamaican, Lebanese, Pakistani and Turkish. Their businesses included pizza outlets, fish and chip shops, Chinese takeaways, outlets selling Caribbean, Lebanese and Indian food, kebabs, and a large number (73%) offering primarily chicken and chips or burgers and chips, sometimes with a few curry dishes as well. Seventeen of the 30 owners interviewed were of Bangladeshi origin reflecting the high proportion of Bangladeshis both resident in the area and engaged in the catering trade.

The interviews with owner managers revealed that most (83%) had entered the fast food sector because they had previous experience of the industry. For those with limited educational qualifications, or contacts beyond their own community, working for catering establishments owned by family and friends was often the only available source of employment. Catering skills were usually acquired by working as employees in restaurants or other fast food outlets, until they and their family amassed enough capital to start their own business. Businesses other than catering had generally not been considered by the interview sample as they had little or no work experience of

other sectors. Basic fast food outlets require limited skills and a capital investment in equipment of only £15,000 to £20,000 (Cobweb Information, 2008) and thus entry thresholds are low. The cash based nature of the business is a further attraction allowing for declared turnover to be kept below the VAT threshold. In common with the ethnic minority catering sector in general there is a heavy reliance on informal immigrant labour willing to work flexible hours for minimal wages - a practice described by businesses in other studies of the ethnic minority catering trade as "an absolute necessity for competitive survival" (Jones et al., 2006) in what is an increasingly crowded and competitive marketplace. A typical outlet employed 3-4 staff including the owner manager, and on this basis it is estimated that fast food outlets in the borough are probably providing over 1,000 local jobs – not an insignificant source of local employment – albeit poorly paid.

6. Fast food outlets: Providing culturally acceptable food and a social meeting place

The independent fast food sector in Tower Hamlets, particularly those businesses clustered around the mosque and close to the more deprived and predominantly Bangladeshi residential areas, has clearly adapted its offering to suit the local community's tastes. Many outlets trade under the brand name Perfect Fried Chicken; we counted 23 outlets (14 restaurants and 8 Takeaways) on the food register with this name and a further 36 with similar names such as Halal Fried Chicken, Docklands Fried Chicken, Limehouse Fried Chicken and Spice, London Fried Chicken, Shah Jalal Fried Chicken, and Fab Fried Chicken. These businesses are not franchises, but their name has come to symbolise (locally at least) a particular type of fried chicken – similar to the familiar Kentucky Fried Chicken (KFC) variety, but with meat sourced from halal suppliers and cooked to a spicier recipe (figure 2).

In the wake of Islamic revivalism, halal (lawful or permitted) markets have been expanding on a global scale, and London has emerged as a centre for halal production, trade and consumption. (Fisher, 2005). In Tower Hamlets, with its high Muslim population, this is particularly evident. A large number of outlets clearly use their halal status as a key marketing tool, displaying their halal certification notices prominently on widows and menus (figure 3). This growth in demand for halal food has not gone unnoticed by the fast food chains, several of which have been piloting halal only menus in some of their premises. According to the McDonalds sponsored blog, *Make up your own mind*, McDonalds ran a short pilot scheme in September 2009 selling halal food at an outlet in Southall, west London, but then dropped the idea concluding that it lacked the necessary infrastructure in its supply chain to guarantee the requirements of halal (*Make up your own mind*, 2010). KFC and Subway *are* currently offering halal-only menus at a limited number of their restaurants and takeaways (KFC, 2010; Subway, 2010). However as the local independent fast food owners explained,

"Muslims have confidence that Muslim owned outlets can be trusted to serve halal meats that have been slaughtered according to religious laws" (interview B19, 2009).

This trust rarely extends to takeaways not owned by Muslims or businesses who attempt to sell both halal and non-halal food, even if not from the same premises. This powerful relationship of trust has been shown to influence the shopping practices of Muslim migrants elsewhere. (Ahmed, 2008; Campbell et al., 2010). Ahmed (2008), for example, noted that Muslims prefer to shop at small shops run by Muslims rather than at supermarkets and that this practice is changing the shape of many urban areas as a result as this specialist provision replaces other more mainstream retail outlets. In a similar fashion independent fast food outlets offering halal food now dominate a number of Tower Hamlet's high streets.

Fast food was also described by business owners and their customers as providing a welcome alternative to the type of food normally eaten at home.

"They mainly buy fried chicken because they can't cook it at home." (interview B26, 2009)

A fast food meal was therefore something a bit different - a bit of a treat - albeit a regular one for some customers.

In addition to providing an alternative to traditional home cooking it has been suggested that fast food may also be performing an additional function by providing young people with a medium

for expressing a youthful self and/or lifestyle image (Ionnaou, 2009). Notably Ram et al (2000) found that the younger generation of Asians were more likely to be found in fast food restaurants than curry houses. Thus by serving halal fast food the outlets allow Muslim young people to consume food that is culturally acceptable whilst also being able to express their identity as young westernised British Asians.

The fast food businesses in Tower Hamlets also perform an important social function within the community. The majority of outlets, whether they are registered as takeaways or restaurants/cafes, have a small seating area and thus provide a useful meeting place, particularly for young men and women. This role is particularly important in areas such as Whitechapel, Stepney and Mile End where the businesses are catering primarily for the local Muslim community who are expected to abstain from drinking alcohol and are therefore less likely to use pubs, clubs, or restaurants as a social meeting space. Almost 25% of the customers interviewed suggested that the main reason they had decided to buy fast food from the outlet they were in was, "because friends were going." Whilst from discussions with owners and observation of consumption patterns it was noted that after midday Friday prayers at the Mosque the outlets are particularly busy as worshippers stop to chat with family and friends over a lunch of fried chicken and chips or a more traditional biryani.

Figure 2. Typical Fast Food Outlets (source: photographs by author)

Figure 3. Promoting Halal Certified food and cheap deals in a Fast Food Outlet shop front (source: photograph by author)

7. Fast Food: Affordability and Access to Healthy Fast Food Alternatives

For those on low incomes the fast food outlets provide an opportunity for a quick and tasty hot meal on the go or an affordable venue for 'dining out'. A large plate of chicken and chips, or burger and chips, can be brought in most outlets in the more disadvantaged areas of the borough around Whitechapel, Stepney and Mile End, for just £2.49. Those interviewed spent an average of £2-3 on their meal. Even cheaper deals were targeted directly at children. £1 buys two chicken wings with a generous portion of chips and several were observed purchasing a 50p snack of two chicken wings. Price was also cited as the key factor influencing the purchasing decision of the customers interviewed. Thirty-four percent reported that the cheap price of the food was the main reason for buying fast food from the outlet they were in.

The impact of the economic recession on the UK's dining out habits has been widely reported (Keynote, 2008; Mintel, 2009), and was very evident here as the owner of one Indian takeaway, who had been trading for over 15 years, explained,

"Previously there was more income from Asian food but now there is more from fried chicken and chips. A year ago I changed to also offering fried chicken and chips. There is less profit from chicken and chips – approximately 30% compared with 50% on an Asian meal, but now people can't afford it. Customers who used to buy an Indian takeaway once a week have cut back on this treat to just once a month." (B[1]26, 2009)

Thus the sale of these unhealthy fried food items was seen as crucial for business survival. Owners were very conscious of the highly competitive and price sensitive nature of the market and felt unable to pass on recent price rises in food supplies to the customer.

"Profit margins are declining – the chicken comes from Holland and euro exchange rate is poor".(B15)

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[1] The businesses interviewed were coded B1, B2, B3 etc.

"The chicken price has gone up in the last couple of months but I can't pass it on to the customer" (B27)

Several businesses highlighted the competitive nature of the environment by commenting that,

"There is too much competition."

As a result most of the owners felt that the only viable business strategy was to keep prices low by using cheap ingredients including poor quality meat and the cheapest of vegetable oils, high in saturated fats. They were often well aware of the unhealthy nature of the food they were selling. Indeed one owner reported that,

"I buy vegetable oil for the business but I use rapeseed oil at home" (B9)

Lack of access to affordable healthier alternatives that met with religious and cultural dietary requirements was also clearly an issue for a number of customers. Two in particular commented that,

"Healthy food is not halal",

whilst fifty-six percent claimed that they would have brought healthier food if more were available, either from the outlet they were in or others in the area. Clearly some respondents may have responded in this way because they felt this was the more acceptable answer and further research is needed to ascertain to what extent this was a factor here. The fast food business owners had no objection to selling a healthier range of food, in principal, although many cited barriers including the need for equipment such as grills, juicing machines and salad cabinets, or lack of space or staff with the necessary skills.

"I have no space to grill chicken. It takes more time – most people don't want to wait" (B27)

"I would need more staff – can't do too may varieties" (B16)

The main barrier, however, was perceived to be cost. Healthier food – for example grilled chicken, cost considerably more, and many owners felt that customers would not be prepared to pay the higher prices involved. As one explained,

"We do roast chicken but it is not as popular because it's more expensive." (B25)

There was a notable absence of 'healthier' fast food operators in the poorer parts of the borough. GIS mapping of fried chicken outlets, those known to be selling 'healthier' alternatives, and levels of deprivation show that the 'healthier' outlets tend to be located close to the City of London and the newly developed commercial centres in Docklands, in particular Canary Warf, where wealthier working commuters are found (figure 4). Average spend at these 'healthier' outlets is closer to £5 – double the price of a chicken and chips meal. Notably in the more affluent commercial centre at Canary Warf, in the docklands area of the borough, fast food outlets were specifically prohibited from selling fried foods under the terms of their lease in an attempt to maintain a more prosperous image for the development and higher rental levels (interview with planning officer). The corporate companies controlling this type of large scale development contrast sharply with the myriad of individual landlords leasing to outlets in less affluent areas of the borough. The GIS mapping also illustrated how fast food outlets tended to be particularly clustered along the main arterial and commercial routes, and close to key venues such as the Mosque and local college (figure 4). A high concentration was also noted at the northern end of Brick Lane in Spitalfields – an area which has become an important cultural and tourist attraction.

Most of the customers interviewed were well aware that the food they were eating was not particularly healthy. Seventy percent claimed to be concerned about the health implications of eating a lot of fried food or food with high sugar or salt content, yet 45% of these were eating fried chicken and chips or a burger and chips when interviewed. The interviews suggested that eating habits were not necessarily due to lack of information regarding healthy diets, but were governed by affordability and choice. This supports other research that has shown that viewing unhealthy food as a treat places the choice of such food in a positive light, thereby justifying consumption (McVittie et al., 2004). Thus purchasing decisions are dependent not only on factors such as the relative accessibility of fast food but a more complex mix of factors including cultural and religious influences, price, taste, and personal choice.
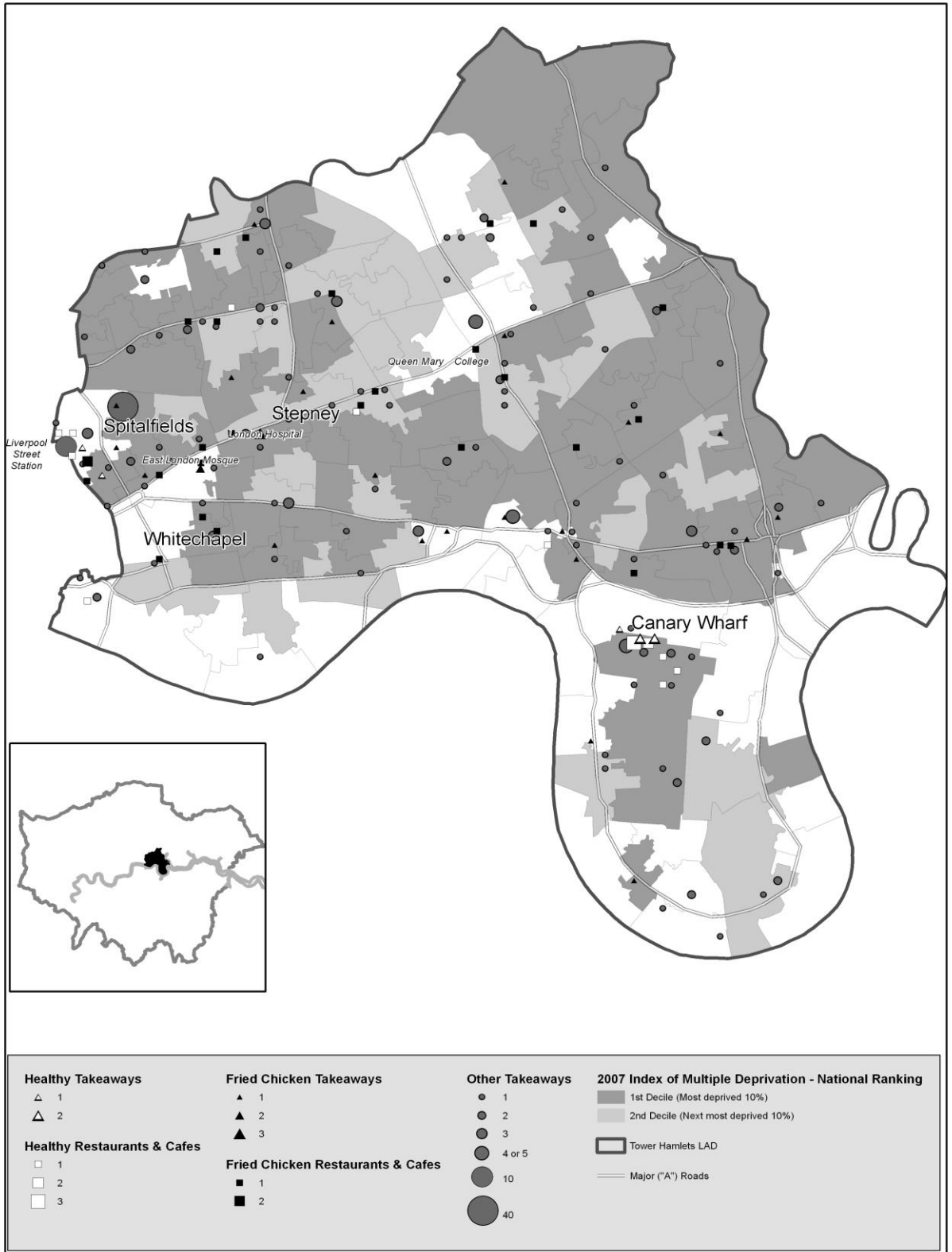
Liverpool Street Station

Spitalfields

East London Mosque

London Hospital

Whitechapel

Stepney

Queen Mary College

Canary Wharf

Healthy Takeaways		Fried Chicken Takeaways		Other Takeaways		2007 Index of Multiple Deprivation - National Ranking	
△	1	▲	1	•	1		1st Decile (Most deprived 10%)
△	2	▲	2	●	2		2nd Decile (Next most deprived 10%)
		▲	3	●	3		Tower Hamlets LAD
Healthy Restaurants & Cafes		**Fried Chicken Restaurants & Cafes**		●	4 or 5		Major ("A") Roads
☐	1	■	1	⬤	10		
☐	2	■	2				
☐	3			⬤	40		

Contains Ordnance Survey data
© Crown copyright and database right 2011

0   0.25 0.5   1 Kilometers

N

LONDON metropolitan university   cities institute

8. Influencing and 'Controlling' the fast food environment: Viable Interventions

Given the range of potential influences on fast food provision and consumption attempting to 'control' fast food outlets within the obesogenic environment in areas such as Tower Hamlets presents a particular challenge. UK government policy advocating the use of the planning system to control the increasing proliferation of outlets, particularly around schools, is attracting a significant amount of interest. The scope for doing this was made possible by an amendment in 2005 to the Town and Country Planning Use Classes Order which created a new class – A 5 for Hot Food Takeaway shops. The distinction between this and the A3 class: Restaurants and Cafes is based on the proportion of space designated for food preparation and the number of tables or chairs. The change was introduced largely in response to concerns regarding environmental rather than health issues, with the planning guidance explaining that, "Takeaways are differentiated from restaurants because they raise different environmental issues such as litter, longer opening house, extra traffic and pedestrian activity, from those generally raised by A3 Restaurants and cafe uses"(ODPM,2005). The change does however provide local authorities with the power to limit the growth in the number of outlets as both new outlets and restaurants converting to fast food outlets need planning permission. The London Borough of Waltham Forest has been the first London borough to introduce supplementary planning guidance on hot food takeaways. This seeks to restrict the number of new units that would be allowed in certain key areas, including banning new units within 400m of the boundary of an existing school, youth centre or park. Other boroughs are beginning to follow suit with similar bans and some such as the London Borough of Barking and Dagenham are proposing to charge a levy (in this case £1,000) if planning approval is granted for takeaway use; the fee to be used to fund measures designed to target childhood obesity (London Borough of Barking and Dagenham, 2009). In a recent landmark legal ruling, planning permission granted for a takeaway in Tower Hamlets was overturned by the High Court. The judge ruled that the outlet was too close to a secondary school and that the local authority had failed to take account of the health and well being of the local community – particularly school children, in considering the planning application (*The Independent,* 2010). Such measures may be effective in restricting the opening of new outlets, but do little to limit the sale of fast food from existing outlets or indeed the many restaurants who also sell unhealthy fast food. In Tower Hamlets the small geographical size of the borough coupled with its high population density and large number of existing fast food outlets means that every resident is no more than a 10 minute walk away from an outlet (Lloyd et al., 2008; Madelin, 2009). In these circumstances most children will pass at least one on their journey to and from school. Furthermore, as a member of the planning department pointed out, it is very difficult to monitor the sale of fast food by restaurants; as long as they have a table and chair it is almost impossible to enforce exclusive A3 use (interview planning officer, 2010). Monitoring also requires resources which are not available and it is only if complaints are received from the public that action may be taken (ibid).

National campaigns to encourage healthier menus are also much harder to promote in areas such as Tower Hamlets where independent outlets dominate the fast food landscape. Current proposals for food labelling, designed to provide customers with information on the food content and calorific value of menu items, are much easier for major chains offering standardised menus and with in-house nutritionists, to comply with. Introducing and monitoring such initiatives in the independent sector where menus may look very similar but in practice are unique to each outlet is a much greater challenge. As a result these national initiatives are largely bypassing the areas that most need them. The UK Food Standards Agency has recognised this problem and is introducing guidance sheets targeted at specific types of smaller catering businesses which are designed to encourage salt and saturated fat reduction. However effective promotion requires, as the FSA itself

has found, a significant amount of face to face work with businesses (Food Standards Agency, 2010).

In the short-term initiatives designed to encourage fast food outlets in more deprived areas to sell a healthier range of food need to identify strategies for encouraging outlet managers to modify their menus in ways that will not impact on costs and result in higher prices for the customer. In Tower Hamlets this has meant workshops and outreach work to persuade fast food owners to fry food in healthier oil at higher temperatures, sell fatter chips which absorb less fat, shake the fat off chips coming from the fryer, grill rather than frying food where possible, and introduce a wider range of salads and fresh juices. These are relatively small-scale changes, but changes that will, if widely adopted, have a significant impact on local health. For example it has been suggested that the use of fatter cut chips and better frying practices such as the triple shake' technique – encouraging three shakes of chips coming from the fryer – could result in up to a 20% reduction in the fat content of the chips (Morley-John et al., 2002).

9. Conclusions

This paper has identified key local influences within one deprived inner city area which are contributing to the proliferation of fast food outlets and encouraging fast food consumption. The research findings suggest that a wide range of variables are at play leading to a more complex pattern of causal relationships than many previous studies have suggested. Like other studies it has highlighted the potential link between deprivation, the spatial concentration of fast food outlets and the price of food sold. However it has also shown that in areas such as Tower Hamlets local economic disadvantage can fuel not just a demand for cheap fast food. It also contributes to business start-up in the sector as those with limited qualifications or contacts have few alternative employment options. The spatial distribution of outlets and the type of food sold is also influenced by the nature of local or passing trade as well as the availability of suitable premises, the ownership structure of the businesses and the characteristics of the local property market. Thus in a mixed inner city area such as Tower Hamlets healthier and often more expensive fast food options are found in more affluent residential or commercial areas or along commuting routes, whilst cheaper less healthy fast food tends to be concentrated in more deprived areas. The study has also shown that cultural, social and religious norms, as well as notions of identity, also play a key role in influencing business start-up and consumption patterns. For some communities these norms may serve to define or restrict choice. Valentine (2010) notes for example, how the Muslim community's culture of abstention shapes its members access to and use of space with many leisure facilities being off limits to the community because they serve alcohol. The findings from this study suggest that in Tower Hamlets the independent halal fast food outlets have stepped in to fill this gap in provision and are providing the local community with an affordable and culturally acceptable meeting space and opportunity for dining out, accounting for much of the growth in the provision and popularity of fast food outlets in areas where the Muslim community is concentrated.

These issues are all likely to influence the viability of intervention strategies designed to combat obesity. In Tower Hamlets the increasingly popular policy approach, advised by central government, of restricting the opening of new outlets in certain areas may be of limited effect. It may help to reinforce the public health message that fast food is bad for you, but in many deprived urban areas such as Tower Hamlets this type of intervention is inappropriate, the area is already saturated with existing outlets and the small geographical size of the borough means that these are accessible to all. Thus whilst not for one moment suggesting that such a policy should not be considered, it also needs to be recognised that its impact on obesity reduction is likely to be limited. Furthermore it is not necessarily hot food takeaways (class A5 businesses), which are the main culprits here, as many restaurants and cafes registered as A3 are serving equally unhealthy fried food. Such policies also ignore the fact that not all fast food outlets sell unhealthy food. It is not fast food per se that is the problem, but the type of food sold. There is no planning use class order for 'healthy' as opposed to 'unhealthy' food establishments. Current lifestyle patterns suggest that

demand for takeaway food is likely to go on rising. Thus rather than focusing primarily on banning outlets more emphasis needs to be placed on promoting a healthier variety of takeaway foods that meets different dietary requirements.   At the same time it needs to be recognised that whilst such measures may have some impact on local communities, along with the host of other initiatives now on offer in many deprived areas, such as encouraging local communities to grow their own food, learn to cook healthy menus, and buy more fruit and vegetables, these fail to tackle the structural inequalities that are the underlying cause of deprivation. There is a tendency, as Herrick noted in her study of Austin, Texas (Herrick, 2008), for intervention designed to tackle obesity to result in the continued neglect of the basic underlying causes and structural inequalities which lead to obesity in the first place. Only by addressing the structural disadvantages, and increasing educational and employment opportunities which offer alternatives to catering, will this vicious cycle be broken in areas such as Tower Hamlets. Banning fast food outlets is not likely to impact significantly on health inequalities, and without ensuring that alternative business or employment opportunities are available for their owners and employees, it may actually contribute to increasing levels of deprivation.

The case of Tower Hamlets may not be typical, and more extensive research across different communities throughout the capital and other areas is needed. However this unique case study does serve to illustrate the complex mix of variables involved in understanding the way in which fast food outlets contribute to the 'obesogenic environment'. In this case culture and religious values were found to play a particular role in mediating wider socio-economic factors affecting the growth and popularity of fast food in the area. Elsewhere other influences may be of greater importance in the overall mix. Thus the study particularly demonstrates the importance of local micro-level analysis as a means of understanding the nature of local fast food provision and consumption. Only though such detailed analysis can a more comprehensive appreciation of these different contributory factors be developed and a hopefully more viable and holistic approach to intervention be considered.

Acknowledgements

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