Healthier Fast Food

Mapping the Fast Food Environment in Hackney
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Executive summary

This is the evaluation report of a pilot research project undertaken by Shift from June 2016 to April 2017. The project was funded by Hackney Council’s Healthy Ideas Fund with additional resources from Shift. This report sets out the key findings of our research mapping the changing fast food environment of two streets in Hackney: Morning Lane and Well Street.

We started this project with three research questions:

1. What does the availability of healthy, affordable fast food on Morning Lane and Well Street look like and how much variation is there between outlets?

2. Does generating and surfacing data about the healthiness of fast food outlets alter residents’ and outlet owners’ perspectives towards the availability of healthier takeaway food in their area?

3. Are there practical interventions to improve the healthiness of takeaways, based on data collected, that would be acceptable to outlets?

Early feedback from the research suggested another question should be considered. This question was:

4. What aspects of the fast food outlet’s business model have the potential to impact on outlet healthiness?

The research methods included mapping and categorising 21 fast food outlets on Morning Lane and Well Street, nutritional testing of meals purchased from these outlets, qualitative interviews with customers and outlet owners, and a rapid literature review of interventions used to improve the healthiness of food in the public and private sector catering environments.

We conclude that improving the healthiness of a food environment is likely to be possible only if outlet owners can see its benefit to their customers and their businesses. Where there is no direct benefit to the customer other than health improvement, it may be advisable implementing ‘stealthy’ interventions designed not to be noticed by customers. This is to avoid the risk of customer dissatisfaction and loss of regular custom, one of the biggest concerns that outlet owners have.

Our key findings from this research are:

Some fast food outlets are unhealthier than others, even when they sell the same meals

The average calories in a takeaway main meal sold on Morning Lane and Well Street is 896 kcal, while the average of a side is 530 kcal. However there is considerable variation in the healthiness of food sold by different outlets.

The pizza category has the highest number of calories per meal. A medium sized pizza has on average 1,267 calories, followed by fried chicken where a typical meal has on average 1,160 calories. Fried chicken is the cheapest source of calories available on the streets.
The difference in calories between the same meals sold by different outlets ranged between 200 to 300 calories. For example, a fairly standard meal of a chicken burger and fries was 746 calories at one fried chicken shop, but 1,091 calories at another shop.

On a per 100g basis, sides typically have more calories than main meals. A single portion of chips can contribute between 30% to 56% of an 11 year old girl’s daily energy requirement.

**Customers underestimate the number of calories in meals**

Customers routinely underestimated the number of calories in takeaway meals sold on the street. It was typically estimated that a fried chicken, pizza or kebab meal would have around 100 to 200 calories in total. The implication is that quantifying calories is meaningless for most customers unless it is compared to a ‘reference’, such as the recommended daily allowance for a child or adult.

When asked what if anything they might do differently as a result of seeing the variation in calories between food categories, the most common response was what they would eat less of that particular food.

**Outlet owners are less surprised by the difference in calories between shops**

In contrast to the customers, there was less surprise among the outlet owners as to how varied the calories between meals were. This is due to a deeper understanding around food preparation and the variation of practices between different outlets (many of the owners worked in multiple food establishments before becoming an outlet owner themselves and so have exposure to how practices can vary from outlet to outlet).

The owners were most interested in comparing themselves to outlets within the same food category, and when there were differences in calories this would often lead to the owner coming up with hypotheses as to why there was a difference.

However the owners were reluctant to compare themselves to outlets from different food categories, arguing that these were very different businesses and that it would therefore be unfair to make comparisons.

There was more acceptance among outlet owners that calorie intake could be problematic among customers who eat takeaway food everyday, suggesting that outlets may be more willing to consider making health improvements if framed as benefitting customers who regularly eat calorific foods.

The outlet owners’ interest in their own health often seemed to be a predictor for how motivating they found the nutritional results. This suggests that encouraging outlet owners to take a greater interest in their own health could indirectly increase their willingness to improve the healthiness of their business.

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**Market trends are impacting on fast food outlet business models**

We identified seven areas of fast food outlet business models that influence outlet healthiness: supply chains, competition, management structures and personnel, marketing, innovation, customer relationships and routes to market.

**Some outlet owners believe that health improvements need to be made higher up the supply chain**

The growth of pre-packaged meals purchased frozen from wholesalers means that the burden of cooking has largely been removed from some outlets. Manufacturers and wholesalers in particular have a greater influence on outlet healthiness than previously.

**Competition is not the only motivator for outlet owners**

While there is indeed a lot of competition for customers between the outlets, their relationships are actually more complex and interdependent than we expected. Relationships between outlets can be simultaneously collaborative and competitive.

**Regeneration is perceived as an opportunity for some outlets but not all**

The older outlet owners on Morning Lane and Well Street are highly aware that their streets are changing and that their businesses are at risk of appealing to a traditional customer base that is in decline. There seemed to be a perception among some outlet owners that health improvement is an issue connected to gentrification (in that customers interested in “healthy eating” are more likely to be middle class). This means that for these outlets, engaging them on health improvements can become entangled in their resentment over gentrification.

**Outlet owners’ top priority is keeping their regular customers happy**

Many of the outlets on Wells Street and Morning Lane appear to be embedded in the local community as spaces where customers come to socialise as well as eat. Regular customers generally account for around 70% to 80% of outlets’ total customer base. Keeping regular customers happy is therefore a top priority, which may make them more hesitant to make health improvements that are unacceptable to their regulars.

**The relationship of the outlet owner to their business and community influences their willingness to engage in health improvements**

We came across two types of owner/outlet relationships: the ‘community outlet’ (owned and managed by people who have a connection with the local geography and community) and ‘anonymous outlet’ (owned by people with fewer ties to the local community and often responsible for multiple businesses). Owners’ relationship to outlet and community appears to influence their motivation to make health improvements.
Outlets’ current marketing strategies often target children
There is a limited mix of marketing strategies deployed by the outlets. One of the most visible marketing strategies used is offering discounted Kids Meals, typically priced between £1 to £1.50. All the outlets we spoke to who offer Kids Meals noted that actually many adults buy the kids meals, mostly as a snack between meals.

Changing routes to market means ‘digital only’ health interventions may have greater reach than physical in-store interventions
One of the biggest developments in the fast food industry is the growth of online delivery platforms such as Just Eat, Deliveroo and Hungry House. These platforms have made it easier for customers to access fast food from a wide range of outlets. The scale of these online platforms means that there is an opportunity to partner with companies like Just Eat to trial whether implementing ‘digital only’ interventions can nudge customers towards healthier purchases.

Improving the healthiness of the food environment
From the review of interventions previously implemented in catering environments, we shortlisted seven that based on the evidence are likely to be effective and feasible to implement in fast food outlets.

These shortlisted interventions are
• Collaboration between outlets to multilaterally reduce their chip portions
• Reducing chip portion size through switching to ‘stealthily’ designed packaging that reduces portion in a way that is not noticed by customers
• Menu stickers that add explicit health information onto menus
• Menu stickers that use subtler social approval signifiers such as “thumbs up” visuals or phrases such as “Top Seller”), but do not explicitly reference health
• Promotion on grilled foods by changing the name of an existing grilled meal
• Introduction of a new healthier menu item
• Trialling airfried chips

The chip collaboration was the most unpopular idea with one outlet owner asking us if we wanted to start World War 3! It was considered unfeasible because it would be difficult to enforce and it could lead to bad relations between outlets if any one of them started ‘cheating’ and increasing their portion sizes.

However outlet owners could see the financial benefits of reducing portion size due to the amount of food wastage that currently exists, and so were more willing to consider the stealthy packaging idea.

The airfryer was the only idea that was rejected outright for being unfeasible due to the high equipment costs.

This project will continue in Hackney as we have been awarded funding to test the impact of the shortlisted interventions on outlets’ sales/costs, customer satisfaction and their nutritional benefits. Later this year we will also be using the same mapping methodology we used in Hackney to map and nutritionally test 120 fast food outlets in Birmingham.
Research has shown a clear relationship between the prevalence of unhealthy takeaway outlets and negative health outcomes, particularly in low income areas.
The number of takeaway outlets in London has grown in recent decades and Public Health England data shows Hackney now has the 10th highest number of fast food outlets per head out of all the London boroughs. This is problematic from a public health perspective as childhood obesity is a growing issue in the borough, with 42% of Year 6 (age 10-11) children in Hackney overweight or obese.1

Research has shown a clear relationship between the prevalence of unhealthy takeaway outlets and negative health outcomes, particularly in low income areas. However national and local government efforts to redesign these obesogenic environments are constrained by an insufficient understanding of fast food, which varies widely in terms of healthiness and affordability, from sushi and salads, for example, to fried chicken and pizza.

Shift has been developing a methodology to assess the health impact of takeaway food and map the availability of healthy, affordable fast food more accurately. Currently, measurement tools such as the Royal Society for Public Health’s ‘richter scale’ for assessing high street healthiness assumes that all fast food takeaways are unhealthy. However, there is a variety of takeaway outlets in most areas of London and, therefore, a wide range of potential health impacts on the local population.
The purpose of this project was to apply Shift’s methodology for assessing and mapping takeaway outlets to Hackney in order to create a more accurate picture of the fast food environment, and explore ways in which the healthiness of this environment could be improved. Morning Lane and Well Street were selected as the focus of the research in Hackney (the rationale for this is explained below).

The original research questions that this project aimed to answer were:

4. What does the availability of healthy, affordable fast food on Morning Lane and Well Street look like and how much variation is there between outlets?

5. Does generating and surfacing data about the healthiness of fast food outlets alter residents’ and outlet owners’ perspectives towards the availability of healthier takeaway food in their area?

6. Are there practical interventions to improve the healthiness of takeaways, based on data collected, that would be acceptable to outlets?

Early feedback from the research suggested another question should be considered. This question was:

5. What aspects of fast food outlets’ business model have the potential to impact on outlet healthiness?

The project consisted of three phases: 1) mapping, categorising and nutritionally testing fast food outlets on two streets to assess their healthiness; 2) identifying and shortlisting potential interventions to improve the healthiness of fast food based on evidence from the behavioural insights literature and studies of intervention effectiveness in the catering sector; and 3) series of interviews with customers and outlet owners to explore their reactions to the mapping and nutritional data and the acceptability of potential interventions.

The research was focused on Morning Lane and Well Street. These two streets were selected because they both have a relatively high concentration of independent fast food outlets. However this was not the only reason why these streets were selected; they are both on the frontline of regeneration and therefore have an increasingly diverse mix of outlets. The outlets on these streets range from the traditional outlets such as ‘greasy spoon caffs’ that have been on the streets for many years to newer entrants attracting younger, middle class customers. Morning Lane and Well Street are therefore representative of the changing demographics and business makeup of Hackney, and as such offered an ideal opportunity to map a changing food environment.
Methodology

How we mapped the food environment

Shift has developed a process for mapping a local fast food environment which aims to provide a better understanding of actual availability of healthy and unhealthy food in an area and that can help identify where the ‘hotspots’ are for particularly unhealthy food.

Within this project we implemented the mapping methodology in Hackney using the following steps:

**Step 1: Choosing a location**
To choose a location in Hackney in which to implement the methodology we started by using Google maps, viewing takeaways and restaurants in the area, and also using Zomato, an online reviewing platform for restaurants, that allows you to see food outlets on a map.

From this initial scoping we selected two areas where there were a dense cluster of outlets - one on Mare street towards Hackney central, and the other on Morning Lane and Well Street. We then visited these two areas and decided to select Morning Lane and Well Street as our sample area due to the high concentration of outlets, the fact that they were mainly independent rather than chain outlets and the varied mix of outlet types.

**Step 2: Identifying outlets and the type of food sold at each outlet**
Having chosen Morning Lane/Well Street as our sample area we then visited the streets and collected information on each food outlet (n=21). This information included the name and address of the outlet, as well as photos of the menus on display (e.g. boards behind the counter) and any paper menus.

After collecting this information for each outlet we then reviewed each outlet’s menu, and categorised each main item on the menu as belonging to a food ‘type’. For example, pizza would belong to the pizza category, and fried chicken wings would belong to the fried chicken category. If more than 30% of the main items an outlet sold belonged to a food type e.g. pizza, it would get a ‘tag’ of that food type. An outlet outlet could have up to three tags for three different food types.

**Step 3: Collecting ‘commonly occurring items’ for nutritional testing**
Once every outlet had one or more tags we then visited each outlet and bought two main items and one side. The items bought were chosen based on a pre-defined list of commonly occurring items for each food type. For example, an outlet tagged as fried chicken has a list of commonly occurring items found in fried chicken outlets starting with a chicken burger meal. Table 1 in the next chapter outlines the meals we sampled for each food category.

If an outlet sold two types of food we would choose one main from each type of food, and a side from one of the food types (often the side was the same for food types e.g. chips or rice).
The rationale for using the most occurring items as the criteria for what menu items we sampled for nutritional testing was that, in the absence of outlet sales data, these items were likely to be the best selling items, and therefore the meals that have greatest nutritional impact as they are most frequently purchased. If, for example, an item such a chicken burger occurs on every fried chicken shops’ menus then it is reasonable to assume that these are popular items that outlets feel they must provide.

A main meal was defined as “how the meal would usually be served”. This meant that for some types of food such as fried chicken, the main would be a meal (chicken and chips), for others such as Chinese, the meal would consist of a main dish, plus a shared side dish e.g half a rice bowl.

**Step 4: Collecting data on the commonly occurring items**

The cost and weight of each item bought from the outlets was recorded before it was labelled and sent off to an external company (Eurofins) for nutritional analysis. When the nutritional analysis was returned this data was compiled in a spreadsheet where additional analysis was conducted.

All but one outlet on Morning Lane are independent outlets. For chain outlets the method can still be used: Shift have drawn up a list of typical items for each chain and nutritional data has been collected from the chain’s website, removing the need for nutritional testing. The only chain on Morning Lane was Percy Ingle. However, they did not have any nutritional information on their sandwiches and so nutritional testing was still needed.

Having followed the steps above we collected the following data on the food from each outlet:

- The price of two mains and one side dish
- The weight of a portion for two mains and a side dish
- Nutritional values for two mains and a side dish. This included values per 100g of sugar, fat, calories, protein, carbs and dietary fibre.

The challenges we encountered mapping the food environment

When implementing a methodology in the field there are always surprises and things that do not fit neatly into the process. Below are a few of these challenges that emerged from the implementation of the methodology, and the systems we put in place to tackle them or work around them.

**Varying opening times**

Outlets have different opening times, with some getting most trade in the morning and lunch, and others opening in the evening. To work around this we built in time to make at least two, if not more, visits to the area at different times to ensure all outlets were visited at a time they were open.

**Changing menus**

One outlet in the Salad and Sandwich category had a menu that changed daily. We decided, therefore, that the selection of commonly occurring foods would be made on the day of the food collection visit, and that because the menus did not vary too greatly (salads and sandwiches were still served but with different filings) using the commonly occurring item list there would still be a sufficient degree of standardisation between the outlets in this category.

**The identification of new “types” of food**

In each new area we map, we come across outlets that sell food different to the “types” we have already identified and categorised. For example, in Morning Lane there was an outlet that sold food it described as African. For this new type of food we followed the process already established to identify food types. This includes reviewing menus of 20 to 40 outlets to identify the items that are distinctive to that type of food, and tallying items on this menu to identify those items that occur most frequently. This method can now be used to identify any new types of food in future application of the mapping methodology.

**Creating lists of commonly occurring items for Salad and Sandwich category**

The category of Salad and Sandwich was created during this project. We initially found it challenging to try to create a list of commonly occurring items for salads, as they contain can contain so many ingredients (grains, dairy, meat, vegetables, salad leaves) and vary so widely (e.g. a green salad compared to a caesar salad compared to a whole grain feta salad). To tackle this issue we broke salads down into categories starting with their base, and then additional toppings. Salads were listed by base, e.g. quinoa, root vegetables, leaves etc. A list of toppings were then provided to distinguish between two salads with the same base. This proved to be a usable approach to categorisation when tried in the field.
Capturing qualitative reactions to the mapping results

In order to explore whether the data generated through the mapping process can change people’s perspectives of their local food environment (and ultimately act as a catalyst for behaviour change), we undertook a series of qualitative interviews with customers and outlets during the period December 2016 to February 2017. This included 12 interviews with customers conducted at the point of purchase in six outlets, and nine interviews with outlet owners. Owners’ permission was sought before approaching customers. Interviews with customers lasted around 10 minutes, while interviews with outlet owners lasted between 30 minutes to an hour depending on their availability.

In these interviews we showed participants picture cards of either takeaway meals available on the street (shown to customers) or outlets (shown to owners) and asked them to rank them in order of how healthy they perceived them to be. Customers were also asked how frequently they bought these meals. The participants were then asked to turn the cards over to reveal calorie scores from the nutritional tests, and we explored their reactions to the results.

We found that it was sometimes challenging to arrange interviews with outlet owners, and learnt that some outlets are easier to engage than others. In most cases multiple trips (sometimes at least three or four trips) were required before the owner could be spoken to directly by the researcher. The outlets that were hardest to engage were those where the owner is infrequently in the shop (often because they own multiple businesses and therefore have less ‘hands on’ connection to the outlet than the owners who regularly work in the outlet themselves). Our observation, and it is only observation, is that the owners of fried chicken shops are hardest to engage as they are infrequently in the shop and when they are it is often at irregular hours.

However some caution should be applied to this observation as there may be other reasons why we found the fried chicken shops on Morning Lane in particular harder to engage. For example, we found out through conversations with other outlets neighbouring the fried chicken shops that a couple of years ago teachers from one of the local schools used to stand outside the fried chicken shops on Morning Lane and give detentions to school children trying to enter the shop. This may have made the fried chicken outlets suspicious of us when we tried to set up interviews with them and reluctant to engage.
Mapping the food environment

Hackney Council’s recently updated Joint Strategic Needs Assessment (JSNA) described the food environment as being ‘the factors that influence people’s behaviour when it comes to choices over what they eat’⁴. This points to how hood choice is not simply an individual behaviour, but a practice that is influenced by the social and physical environments. When we step out of our homes, there are a range of influences that shape our diets and what we eat - from the number and range of shops, takeaways and restaurants in a local area to the quality, attractiveness and price of the food they sell.

This chapter looks at the current food environment of Morning Lane and Well Street, focusing on fast food and takeaway options available to people on these streets. It intends to provide a snapshot of the healthiness of this food environment, using calories as the primary measure of health in order to aid comparison between outlets. The data presented in this chapter is taken from the results of the outlet mapping work and nutritional tests we conducted in the summer of 2016.

At the time of our mapping there were 21 fast food outlets on Morning Lane and Well Street (see Appendix 1 for a full list of these outlets). The map below shows the location of these outlets. An interactive digital version of this map showing the outlets’ categorisation and nutritional results can be access here⁵.
Each of the 21 outlets was assigned a food category based on an analysis of their menu and nutritionally sampled, with two meals and one side from each outlet sent to Eurofins laboratory for testing. The meals purchased for nutritional testing were selected because they were the most commonly occurring menu items, which we used as a proxy for best-selling meals in the absence of outlet sales data.

A total of 63 food items from the 21 outlets was sampled, enabling us to build a detailed picture of the food environment for these two streets. We found a surprisingly varied food environment: on just these two streets we identified ten categories of takeaway food sold, highlighting the culinary (and cultural) variety of the borough. Chinese, pizza, greasy spoons and bakery/sandwiches were the most commonly occurring categories.

Table 1 below outlines the food categories identified, the meals that were tested from each category, and the average calories (kcal) of mains and sides by category (both as calories per 100g and calories per item i.e. the whole meal). The calorie results highlighted in the table represent higher than average scores. The average calories in a main meal is 896 kcal per item (or 206 kcal per 100g), while the average in a side is 530 kcal per item (or 323 kcal per 100g).
<table>
<thead>
<tr>
<th>Food category</th>
<th>No. of outlets</th>
<th>Items sampled</th>
<th>Average cost of main meal</th>
<th>Calorie average (mains)</th>
<th>Calorie average (sides)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese</td>
<td>3</td>
<td>• Chicken chowmein • Sweet &amp; sour pork • Spring rolls (side)</td>
<td>£5.07</td>
<td>180 kcal per 100g • 969 kcal per item</td>
<td>279 kcal per 100g • 315 kcal per item</td>
</tr>
<tr>
<td>Pizza</td>
<td>3</td>
<td>• Pepperoni pizza • Margarita pizza • Garlic bread (side)</td>
<td>£8.98</td>
<td>269 kcal per 100g • 1265 kcal per item</td>
<td>338 kcal per 100g • 564 kcal per item</td>
</tr>
<tr>
<td>Greasy spoon</td>
<td>3</td>
<td>• Jacket potato &amp; beans • Bacon sandwich • Fries (side)</td>
<td>£2.63</td>
<td>183 kcal per 100g • 567 kcal per item</td>
<td>283 kcal per 100g • 612 kcal per item</td>
</tr>
<tr>
<td>Bakery/Sandwich</td>
<td>3</td>
<td>• Cheese sandwich • Chicken sandwich • Chocolate brownie (side)</td>
<td>£4</td>
<td>247 kcal per 100g • 513 kcal per item</td>
<td>465 kcal per 100g • 344 kcal per item</td>
</tr>
<tr>
<td>Salad and Sandwiches</td>
<td>2</td>
<td>• Cheese sandwich • Meat sandwich • Chocolate brownie (side)</td>
<td>£6</td>
<td>139 kcal per 100g • 376 kcal per item</td>
<td>470 kcal per item • 521 kcal per 100g</td>
</tr>
<tr>
<td>Fried chicken</td>
<td>2</td>
<td>• Chicken burger meal • Chicken wings meal • Fries (side)</td>
<td>£2.87</td>
<td>259 kcal per 100g • 1033 kcal per 100g</td>
<td>264 kcal per item • 594 kcal per 100g</td>
</tr>
<tr>
<td>Kebab</td>
<td>2</td>
<td>• Lamb doner mixed kebab • Lamb shish kebab • Fries (side)</td>
<td>£6.50</td>
<td>160 kcal per 100g • 1077 kcal per 100g</td>
<td>299 kcal per 100g • 744 kcal per item</td>
</tr>
<tr>
<td>Fish &amp; chips</td>
<td>2</td>
<td>• Haddock &amp; chips • Sausage &amp; chips • Chips (side)</td>
<td>£5.45</td>
<td>228 kcal per 100g • 1465 kcal per 100g</td>
<td>219 kcal per item • 946 kcal per 100g</td>
</tr>
<tr>
<td>African</td>
<td>1</td>
<td>• Jollof rice with chicken • Asaro with beef • Fried plantain (side)</td>
<td>£7</td>
<td>181 kcal per 100g • 1110 kcal per item</td>
<td>249 kcal per 100g • 697 kcal per item</td>
</tr>
<tr>
<td>Afro-Caribbean</td>
<td>1</td>
<td>• Oxtail w/ rice &amp; peas • Jerk chicken w/ rice &amp; peas • Dumpling (side)</td>
<td>£7.25</td>
<td>169 kcal per item • 1520 kcal per 100g</td>
<td>298 kcal per item • 259 kcal per 100g</td>
</tr>
</tbody>
</table>
Nicky’s Cafe, Mustafa

Mustafa has owned Nicky’s Cafe for over 30 years, and runs the cafe with his wife. Over that time he has seen a lot of change in the area and has noticed that people have become a bit more health conscious - now some of his customers ask for tuna without the mayo. Mustafa says there used to be a lot more traditional greasy spoon cafes in the area. Some of his friends tried to turn their places into ‘fancy coffee shops’ that sell coffee for £2.50 but Mustafa said their businesses never lasted more than two years. He says it is hard for businesses to change, everything costs a lot of money.
Not all fast food outlets are equally unhealthy

There can be an assumption that all fast food is equally unhealthy. However as Table 1 above shows, there is actually considerable variation in the healthiness of fast food sold by different outlets. We were surprised by the massive range of calories in takeaway meals sold on Morning Lane and Well Street. This suggests that blanket measures such as the previously discussed Royal Society for Public Health ‘richter score’ for assessing high street healthiness, whereby all fast food outlets are given the same score of -2, risks masking the considerable differences between individual outlets.

This is certainly not to say that there is no problem with fast food unhealthiness. As previously noted, the average number of calories in main meals sold in the outlets on Morning Lane and Well Street was 896 calories (representing 53% of an 11 year old girl’s daily energy requirement and 36% of an adult man’s daily energy requirement). This means that a child eating a takeaway meal on Well Street or Morning Lane is likely to be consuming just over half of their recommended calorie intake with one takeaway meal.

However if we just look at the average calories, we miss the significant variation between between individual meals. Of the 63 meals sampled, the meal with the most calories was a £9 mixed doner kebab from Kuzu Sis kebab shop on Well Street, with 1,614 calories in total (95% of an 11 year old girl’s daily energy requirement and 65% of an adult man’s daily energy requirement). At the other end of the scale, the meal with the lowest calories was a £5 tomato and parmesan salad from Legs on Morning Lane, which had only 139 calories (8% of an 11 year old girl’s daily energy requirement and 6% of an adult man’s daily energy requirement).

**Highest calories in a single main meal purchased:**
Kusu Shish Grill - Mixed kebab meal

**Average number of calories in a main meal**

**Lowest calories in a single main meal purchased:**
Legs - Tomato & parmesan salad
The average number of calories in main meals sold in the outlets on Morning Lane and Well Street was 896 calories⁷ (representing 53% of an 11 year old girl’s daily energy requirement)
Sides often have more calories than mains

Moving now to look at the calories in side dishes, one of the surprising findings is that sides typically have more calories than main meals per 100g. This suggests that reducing the calories in side dishes represents a significant opportunity to lower overall calorie intake, particularly given that sides such as fries are commonly found on menus across a range of outlet categories.

The table below shows the average number of calories per 100g of the main meals sampled in Hackney versus the sides. In all categories, with the exception of fish and chips, the sides have more calories than the mains.

The biggest range we found between was within kebabs: a £7.50 lamb shish kebab from Kuzu Sis had 800 more calories than a £5 lamb shish kebab from Nazar. During the interviews with outlets, this difference was explained as resulting from the fact that Kuzu Sis serve three skewers in their meal whereas Nazar serve two skewers, as well as differences in the oil marinades used on the meat and amount of sauces.

The difference between these two kebabs is fairly extreme compared to the differences we saw between meals sold by other outlets in the same category, although these are still significant. On average the difference in calories between the same meals sold by different outlets ranged between 200 to 300 calories. For example, a fairly standard meal of a chicken burger and fries was 746 calories at Pukka Fried Chicken, but 1,091 calories at Perfect Fried Chicken.

The fact that calories for the same meal varies by individual outlet demonstrates that it is indeed possible for outlets to reduce the calories in their meals by at least 200 to 300 calories, as in most categories there are outlets who are already producing lower calorie meals. This presents an opportunity for making the lower calorie meal the norm.

<table>
<thead>
<tr>
<th>Category</th>
<th>Average calories in mains</th>
<th>Average calories in sides</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fried chicken</td>
<td>259</td>
<td>264</td>
</tr>
<tr>
<td>Kebab</td>
<td>160</td>
<td>299</td>
</tr>
<tr>
<td>Pizza</td>
<td>269</td>
<td>338</td>
</tr>
<tr>
<td>Fish &amp; Chip</td>
<td>228</td>
<td>219</td>
</tr>
<tr>
<td>Chinese</td>
<td>180</td>
<td>279</td>
</tr>
<tr>
<td>Caribbean</td>
<td>169</td>
<td>298</td>
</tr>
<tr>
<td>African</td>
<td>181</td>
<td>249</td>
</tr>
<tr>
<td>Greasy spoon</td>
<td>183</td>
<td>283</td>
</tr>
<tr>
<td>Bakery/ Sandwich/ Coffee Independant</td>
<td>247</td>
<td>465</td>
</tr>
<tr>
<td>Salad/ Sandwich/ Cafe Independant</td>
<td>139</td>
<td>470</td>
</tr>
</tbody>
</table>

But perhaps what is even more surprising is the possible range of calories within categories i.e. between outlets selling the same type of food.
Just focusing on chips, which we sampled from greasy spoons, fried chicken, kebab and fish and chip shops, we found that a single portion of chips can contribute between 30% to 56% of an 11 year old girl’s daily energy requirement.

### Average calories in a portion of fries

- **Greasy spoon**
  - 509 Kcal
- **Chicken shop**
  - 594 Kcal
- **Kebab shop**
  - 744 Kcal
- **Fish & chip shop**
  - 946 Kcal
The key contributors to calorie variation: portion size, ingredients and cooking methods

Portion size, as measured by meal weight, vary considerably between food categories. The heaviest meals (and therefore what we would assume to be the biggest portion size) were sold by the Afro-Caribbean and fish and chip shops - with the heaviest meal of all weighing 906g, a jerk chicken and rice meal sold by Prodigal on Well Street. The lightest meals were salads and sandwiches - with the lightest weighing only 71g (the cheese sandwich from Percy Ingle).

While portion size differences certainly explain calorie variation to some degree, it is not the only factor. This becomes apparent when looking at the calories of meals per 100g, because if it was portion size alone contributing to the variation we see in calories then we would expect the calories per 100g to be the same across meals sold by different outlets.

However this is not always the case. For example, a pepperoni pizza from Pizza Go Go on Morning Lane has more calories per 100g than a pepperoni pizza from Well Street (278 kcal/100g versus 246 kcal/100g). Similarly a fried chicken wing meal with fries from Perfect Fried Chicken has more calories per 100g than the same meal at Pukka Chicken (285 kcal/100g versus 238 kcal/100g).

This is further evidenced by the differences shown in Table 1 at the beginning of this chapter between the food categories in relation to calories per 100g versus calories per total meal item. This table is interesting because it shows that for some food categories portion size is likely to be the key issue, whereas as for others it is the type of ingredients used or cooking methods that are the bigger issue.

Table 2 below segments the food categories by their performance against the main meal averages of calories per 100g and per total meal item to identify the categories where portion size is likely to be a contributing issue versus categories where it is the ingredients used or cooking method that is the issue (or in the case of pizza, fried chicken and fish & chips were all factors are an issue given these categories’ higher than average calories both per 100g and per total meal item).

Table 2: Food category calorie performance against average

<table>
<thead>
<tr>
<th>Categories with below average calories per 100g and per total item</th>
<th>Categories with above average calories per 100g but below average calories per total item</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Greasy Spoon</td>
<td>- Bakery/Sandwich</td>
</tr>
<tr>
<td>- Salad &amp; Sandwich</td>
<td>Ingredients and/or cooking method likely to be an issue</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Categories with below average calories per 100g but above average calories per total item</th>
<th>Categories with above average calories per 100g and per total item</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Chinese</td>
<td>- Pizza</td>
</tr>
<tr>
<td>- Kebab</td>
<td>- Fried Chicken</td>
</tr>
<tr>
<td>- African</td>
<td>- Fish &amp; Chips</td>
</tr>
<tr>
<td>- Afro-Caribbean</td>
<td>Portion size and ingredients and/or cooking method likely to be an issue</td>
</tr>
<tr>
<td><strong>Portion size likely to be an issue</strong></td>
<td></td>
</tr>
</tbody>
</table>
Changing people’s perspectives of their food environment

We wanted to test whether generating and surfacing data about the healthiness of takeaway food from fast food outlets could be used to alter residents’ and outlet owners’ perspectives towards the availability of healthier takeaway food and the quality of their local food environment.

We therefore conducted a number of interviews with customers and outlet owners to show them the results from the mapping work conducted on Well Street and Morning Lane and find out what their reactions were to the results. Twelve interviews were conducted with customers and nine interviews were conducted with outlet owners.

Customer reactions

In the interviews, customers were shown cards printed with pictures of takeaway meals that had been sampled in the nutritional tests. They ranked these meals first by purchase frequency (i.e. how often they bought these meals) and then by perceived healthiness (i.e. which meals they thought were the healthiest and unhealthiest). They were then asked to estimate the number of calories in the meal they identified as the unhealthiest.

After the ranking exercises had been completed, the customers turned over the cards to reveal the number of calories we found in these meals from the nutrition testing. They were asked how these results made them feel, what if anything they found surprising and what they might potentially do differently in terms of their purchasing behaviours as a result of seeing these results.
Perhaps the most striking finding from the customer interviews is that while people were generally able to identify the unhealthiest meals based on their understanding of what made a meal unhealthy (greasiness and amount of oil used in cooking were the two most commonly used metrics underpinning customers’ perceptions of healthiness), the number of calories in takeaway meals was routinely underestimated.

Customers typically estimated that if they ate a fried chicken, pizza or kebab meal they would be consuming between 100 to 200 calories in total. One customer estimated a kebab as having 10 calories. None of the customers overestimated the number of calories in any of the meals.

The discrepancy between their own estimates of calories and the actual calories of the meals meant that for the majority of customers interviewed, surprise was the most commonly expressed emotion.

“The most surprising thing is that I estimated a kebab as having 70 to 80 calories and actually it’s ten times higher than what I thought”
(Female customer, 24 years old).

“I’m really surprised that fish & chips has more calories than fried chicken.”
(Male customer, 27 years old)

The implication is that quantifying calories is meaningless for most customers unless it is compared to a ‘reference’, such as the recommended daily allowance for a child or adult.

When asked what if anything they might do differently as a result of seeing the variation in calories between food categories, the most common response was what they would eat less of that particular food.

“I think I will make lunch at home more and bring to work, rather than coming here.”
(Female customer, 46 years old)

A minority of customers said that they would be unlikely to do anything differently, either saying that they consider takeaway food to be a treat which they only occasionally indulge in and that they eat healthily at home, or that pleasure, not health, is a more significant purchasing driver for them.

“Today I don’t care about what I’m eating - I want to enjoy it.”
(Male, 27 years old)

We did not show customers the variation in same meals sold by different outlets as that would have been unacceptable to outlets (and we needed their permission to be able to interview their customers). However several interviewees mentioned unprompted that they would be curious to know whether there was any variation between outlets. This is unlikely to be true for all customers though, as some of the customers we spoke to were clearly quite loyal to a particular outlet (e.g. they mentioned they came to this particular outlet because they were friends with the staff or because it was just where they always went) and therefore calorie difference alone would be unlikely on its own to motivate them to go to a different outlet.
Outlet reactions

In the interviews with outlet owners, the owners were asked what their best selling meals were, how long they had owned the outlet, and how they had gotten into the industry. They were then shown cards with images of all the outlets included in the nutritional sampling and asked to rank them in order of perceived healthiness. As in the customer interviews, the owners then turned over the cards to reveal the calories and we had a conversation with them about what they found notable or surprising about the differences in calories across food categories, and their reactions to how they compared to the other outlets selling similar food to themselves.

In contrast to the customers, there was less surprise among the outlet owners as to how varied the calories between meals were. This is perhaps due to a deeper understanding around food preparation and the variation of practices between different outlets (many of the owners worked in multiple food establishments before becoming an outlet owner themselves and so have exposure to how practices can vary from outlet to outlet).

The owners were most interested in comparing themselves to outlets within the same food category, and when there were differences in calories this would often lead to the owner coming up with hypotheses as to why there was a difference.

However the owners were reluctant to compare themselves to outlets from different food categories, arguing that these were very different businesses and that it would therefore be unfair to make comparisons. For example, in one interview with a greasy spoon owner, when prompted to rank the outlets in terms of how healthy he perceived them to be, the owner point blank refused. This suggests that outlets are more likely to be motivated to make health improvements when shown how they compare to other outlets that sell similar foods to them.

“You’re asking me to compare a fish & chips shop with a caff but it’s unfair to compare different foods. We’re different businesses doing different things.”
(Owner, greasy spoon cafe on Morning Lane)

The issue of fairness was a recurring theme in owners’ reactions to their calorie scores. The biggest issue that the outlet owners had with the nutritional results - and to the idea of giving outlets a healthscore based on these results - centred on the fact that only two main meals were sampled from each outlet. This was considered to be unfair because it does not take into account their whole menu.

“There’s a lot of variety on menus - for example Nazar has soup and doner kebabs on their menu and the calories will vary tremendously between them. I don’t think your calorie mapping is reflective of the outlet if it is only based on two meals.”
(Owner, sandwich cafe on Well Street)

There was therefore concern expressed by outlets that meal sampling protocols risk skewing the healthscore of an outlet, giving an unfair - and potentially inaccurate - picture of the outlet’s overall healthiness. While this concern is understandable, the rationale for our protocol is that we sample what are likely to be best selling menu items, as these items will have a far higher impact on people’s diets than the less frequently purchased items.

In addition to the issue of fairness, there was also some scepticism around the usage of calories as the primary indicator of healthiness. Several owners said that they felt calories were not necessarily bad, pointing out that humans need calories in order to survive. There was more acceptance that calorie intake could be problematic among customers who eat takeaway food everyday, suggesting that outlets may be more willing to consider making health improvements if framed as benefitting customers who regularly eat calorific foods.

“The problem is not calories in and of themselves as we need calories to live, the problem is people eating too many calories and the wrong type.”
(Owner, sandwich cafe on Well Street)
There was also some scepticism that frequent consumption of their food would lead to obesity. For example, an owner of a pizza shop noted that they regularly eat their own food and do not consider themselves to be overweight or unhealthy.

“I eat pizza most days and I’m not fat. But that’s partly because as a Muslim my faith tells me to look after myself so I always try to go for a ten to fifteen minute walk after eating to aid digestion and I never go to bed straight after eating, even if I’ve worked a long shift.”

(Owner, fried chicken shop on Well Street)

This suggests that giving outlets a healthscore will be more motivating to the outlet owners who recognise health as being a problem, and furthermore a problem that they have responsibility for. For some of the outlets we interviewed, the perception that healthiness is not a priority for their customers meant that they did not see health improvement has a priority for them as a business - saying that it would only become a problem if customer demand changed.

The outlet owners’ own personal interest in healthiness often seemed to be a predictor for how motivating they found the nutritional results. The owner who expressed the most enthusiasm for finding out how their calories compared to other outlets said this was because he had become interested in health and nutrition when trying to lose weight - noting that his use of a fitness tracker, which he used to record his calorie consumption, made him more aware of how easy it was to consume too many calories.

This suggests that encouraging outlet owners to take a greater interest in their own health could indirectly increase their willingness to improve the healthiness of their business.

In addition to their own attitudes towards health acting as a motivating factor, there were also instances when outlet owners admitted to feeling embarrassed about their calorie scores. The most striking example of this was when the owner of a sandwich shop saw how his ‘crumbed chicken ciabatta’ had more calories than the chicken burger sold by the fried chicken shop next door to him.

“I never thought until now how my chicken ciabatta is basically the posh equivalent of a fried chicken burger. I’d worry about customer perceptions if they saw this data, the fried chicken shops aren’t who I would normally compare myself to.”

(Owner, sandwich cafe on Well Street)

As this quote highlights, making outlet health scores customer facing can potentially motivate outlets to make health improvements, particularly for outlets whose customers are more health conscious.

However, several outlets who noted that their customers are not typically very health conscious pointed out that for these customers, there is the risk that making the health score public could have the unintended consequence of driving customers to outlets with higher calories. This is because customers could potentially perceive higher calorie outlets as offering greater value for money.

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4 https://www.hackney.gov.uk/jsna 5 http://foodmapping.shiftdesign.org.uk/en/ 6 These averages refer to the average calories in main meals and sides from the nutritional testing done on the 21 outlets sampled on Morning Lane and Well Street. 7 An average number of calories is 867 calories. 8 Daily energy requirement of a 10-11 year old girl is 1,700 calories; for an adult male it is 2,500. (Source: FAO. 2001. Food and Nutrition Technical Support Series 1. Human energy requirements. Report of a Joint FAO/WHO/UNU Expert Consultation)
Changing fast food businesses

We became increasingly aware during this research that in order to understand how to improve the food environment, our ultimate goal, we needed a better understanding of fast food business models and how market trends are changing and putting pressure on existing business models.

To this end, this chapter provides a general overview of how independent fast food outlets operate and how aspects of their business models are changing as a result of wider market trends. From our interviews with outlet owners on Morning Lane and Wells Street, we identified seven areas of business operation that have the potential to influence outlets’ practices around health:

1. **Supply chains**
   where outlets get their food supplies from

2. **Competition**
   how outlets respond to competition and their relationships with other outlets

3. **Management & HR**
   the owner’s relationship to, and management of, their business and staff

4. **Marketing**
   promotional strategies for increasing sales and attracting customers

5. **Innovation**
   how outlets adapt to changing market needs

6. **Customer relationships**
   building relationships with customers and increasing customer loyalty

7. **Routes to market**
   how outlets reach customers and sell/distribute their meals

The remainder of this chapter explores each of these seven areas from the perspective of the outlet owners, with a summary of the facilitators and barriers of each area in relation to health improvement.

Through our interviews and conversations with outlet owners we realised that many of the outlets on Morning Lane and Well Street are being impacted by market trends, gentrification and demographic change, and that as a result outlet owners are trying to figure out how they can adapt to this changing environment. This offers an opportunity to work with these outlet owners to ensure that any changes they make are healthier changes.

Fast food outlets are first and foremost businesses, and in the absence of regulation, if they are to be influenced on the subject of health then it will need to be because it makes business sense to do so. Throughout our research we have explored the subject of healthiness from the point of view of the fast food outlets.

This is because we believe that the insight gained from doing so will enable better engagement with these businesses and deepen our understanding of where there are opportunities to make health improvements in ways that improve, rather than hinder, the financial sustainability of outlets.
Supply chains

The fast food outlets on Morning Lane and Wells Street may be independent businesses but they are all to a degree connected to, and dependent on, the wider food supply chain from which they get their supplies. This expansive chain of food producers, manufacturers, distributors, wholesalers and Cash & Carries extends beyond the geographical boundaries of Hackney, yet ultimately influences the number, and quality, of calories consumed in the borough.

The influence of the wider supply chain on the calories served in fast food meals has increased in recent decades, partly as a result of the decline of cooking going on in the outlets’ kitchens. The owner of a fish and chip shop on Wells Street described this change vividly through his own experiences of working in catering. He recounted how he first started working in catering in the 1980s on board trains preparing fresh food for passengers, but by the 1990s he was replaced by a trolley service selling pre-packaged sandwiches.

This trend towards greater convenience continues in fast food outlets, and is enabled by manufacturers’ expanding the range of chilled and frozen meals that require little in terms of further preparation from the outlet.

“Manufacturers are making it very easy and convenient for takeaways; everything can be bought pre-packaged and frozen and all you have to do is put it in the fryer.”

(Owner, fish and chip shop on Well Street)

As a result manufacturers have relieved fast food businesses of the burden of cooking - meaning that outlet owners can be more certain that they food they sell is of a consistent standard and more easily prepared by their staff. This frees the owners to do other things and run multiple business ventures, as they do not have to spend as much time in the outlet overseeing operations and staff. However, for some outlet owners, the deskilling at the value end of the foodservice industry has been accompanied by a loss of professional identity associated with the shift from ‘chef’ to ‘fryer’.

The dependence of fast food outlets on their suppliers means that from a health improvement point of view, owners often feel that responsibility for calorie reduction cannot fall solely on their shoulders. They argue there is only so much they can do in their kitchens and that manufacturers have greater scope to reduce calories through product reformulation.

Therefore identifying the areas where outlet owners feel like they have most agency to reduce calories is important, and these areas vary by food category. For example pizza shops owners see it is about the amount of cheese they use and the depth of the pizza base, whereas for kebab shops it is more about the oil they marinade the meat in and portion size, or if a greasy spoon cafe whether they fry or grill their bacon.

As well as manufacturers, wholesalers can also influence the healthiness of fast food outlets. This is not only through the monthly promotions offered by wholesalers such as JJs which influence which brands or products an outlet will buy, but also through subtler, less visible, means such as the personal relationships that some outlets have with their suppliers.
One outlet owner described how he now uses rapeseed oil instead of palm oil to cook his chips. He made this switch a couple of years ago on the recommendation of his chip supplier, a potato wholesaler called Masters & Co. This company has supplied him for many years and he regularly talks to a company representative on the phone when putting in his order. This representative sometimes gives him useful suggestions during these conversations, not all of which are health related, such as what format of tomato ketchup sachet to use in his shop.

“I trust this lady’s advice, she’s honest and I’ve used them [Masters & Co] for a long time.’

(Owner, fish and chip shop on Well Street)

This highlights the importance of working with the supply chain - particularly manufacturers and wholesale suppliers - as any health improvements they make will have a positive impact ‘downstream’ at the level of the individual outlet. It also suggests that there is a potential role for wholesalers to act as ‘change agents’ through their close relationships with fast food outlets.

**Supply chains**

<table>
<thead>
<tr>
<th>Barriers to health improvement</th>
<th>Facilitators to health improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Outlets’ ability to make health improvements is limited if they rely on pre-prepared catering supplies that have high calorie densities</td>
<td>• Potential for outlets to select healthier pre-prepared products if given guidance (assuming products are equivalent in price)</td>
</tr>
<tr>
<td>• Requires manufacturers of catering supplies to reformulate products</td>
<td>• Wholesalers such as JJs could promote healthier alternatives</td>
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<td>• Outlet purchasing behaviours influenced by which products/brands wholesalers promote through price discounts</td>
<td>• Wholesalers and suppliers could play a greater role in giving advice to outlets on how to make healthier switches (e.g. switching to rapeseed oil)</td>
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</table>
Jens used to be a journalist but decided to retrain as a chef. He opened up Well Street Kitchen three years ago. The shop used to be a greasy spoon cafe and he took inspiration from this history by focusing on breakfasts; their most popular menu item is smashed avocado toast with poached eggs. Jens wants everyone to feel welcome at his cafe and local charity Hackney Quest run a homework club for kids at the cafe on Tuesday afternoons.
The increasing gentrification of Morning Lane and Wells Street, and the emergence of what several outlets described as an ‘us vs. them’ mentality, is complicating the relationships between outlets. It appears to be catalysing a sense of shared identity among the ‘traditional’ outlets who have been operating on the street for a long time. This shared identity - that of a hardworking business owner battling to survive against newer entrants - to some extent transcends the competition between the individual outlets.

“We all put in the same hours, we do the same shifts, working hard to try to make a living”
(Owner, greasy spoon cafe on Morning Lane)

Therefore the acceptability to outlets of interventions that increase either competition or collaboration as a tactic for behaviour change among outlets is not clear cut. This will be examined in further depth in the chapter about interventions.

### Competition

Before we began the interviews with the outlet owners, we assumed that the high density of outlets would mean that their relationships would be fiercely competitive. While there is indeed a lot of competition for customers between the outlets, their relationships are actually more complex and interdependent than we expected.

Competition is most visible between outlets belonging to the same food category, and this will generally trump geographical proximity. A chicken shop might be located right next door to a pizza shop but the owners are likely to see their next door neighbour as running a different kind of business, and therefore not a direct competitor. Indeed, during the interviews, some of the owners gave recommendations for which meals were particularly good at the other outlets, noting that they were often customers themselves.

However even in instances where two outlets belonging to the same food category are located next door to each other, their relationships are not always purely competitive. For example, on Wells Street there are two kebab shops opposite each other. The owner of the newer shop, a family-owned business that opened five years ago, recounted how their relationship with the other kebab shop used to be competitive when they first opened but over the years became more friendly.

“They’re our friends now, we’ll go other there if we’ve run out of onions to use some of theirs and they’ll do the same if they run out. We help each other out.”
(Owner’s son, kebab shop on Well Street)

Yet even though the relationship between these two kebab shops is friendly, it was apparent that they kept tabs on each others’ businesses - for example they knew when the other had put their prices up, or how many chunks of chicken they used for their shish kebab.

This suggests that relationships between outlets can be simultaneously collaborative and competitive, a balance that can sometimes be tricky to get right as an owner - especially if they are a new business opening up. We did uncover examples of established outlets refusing to collaborate together, with one example described in the text box below.

In one such case the owner of a fish and chip shop on Wells Street described how the owner of the other, bigger, fish and chip shop had made several visits to ask him to increase the price of his chips. He refused to do so, saying that it would not be fair as he had fewer tables in his shop and was therefore more reliant on lower value takeaway purchases.

### Competition

<table>
<thead>
<tr>
<th>Barriers to health improvement</th>
<th>Facilitators to health improvement</th>
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<tbody>
<tr>
<td>• Friendly relationships between outlets (and where they act as support networks e.g. borrowing ingredients) means that encouraging competition between outlets as a means of catalysing health improvements may not be acceptable to outlets</td>
<td>• Collaborative relationships between outlets may mean that there are some circumstances where they would be willing to collaborate around health improvements</td>
</tr>
<tr>
<td>• Outlets are unwilling to be the first to try something new; more willing to make health improvements once there is evidence that other outlets have already made changes</td>
<td>• Appealing to outlet owners’ shared sense of identity as businessmen may help overcome differences between outlets when making interventions that require collaboration</td>
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<tr>
<td>• Outlet owners notice changes that other outlets make and so there is opportunity to encourage ‘copycat’ behaviours among owners by making changes more visible in engaged outlets</td>
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The relationship between the owner and the outlet not only has implications for how easy it is to engage with them, but also appears to influence their engagement with the subject of health improvement. While health improvement tends not to be a first-order priority for either type of outlet, the ‘anonymous outlets’ appear to be significantly less willing to engage. This is likely because their emotional investment in the local community is lower and the perception that making health improvements requires a change in business practices that the owner would need to invest time, as well as money, in overseeing.

“If I was going to start selling grilled chicken I would need to make big changes to the kitchen layout as the grill wouldn’t fit otherwise and then the staff would all need to be trained and I would have to be here more to supervise them. It would take up too much time.”
(Owner, fried chicken shop on Well Street)

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<th>Management and HR</th>
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<tr>
<td><strong>Management and HR</strong></td>
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<tr>
<td><strong>Running and working in a fast food outlet is hard work; the hours are long, the customers can be impatient and demanding, the fryers and grills make the kitchen unbearably hot, and it is often stressful during the busy periods and boring during the slow periods. As a result, outlet owners can sometimes struggle with recruiting and retaining staff. It is common to hear owners complaining that younger people do not want to work in these environments and that when they do, they are unreliable.</strong></td>
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“I go to sleep at 3am if I’ve had to do deliveries and get up early to open up the shop. It’s hard finding good people to work in the kitchens who can make the pizzas, it’s easier finding people to do the deliveries but they don’t take the job seriously so I often have to do them myself.”
(Owner, pizza shop on Morning Lane)

The owners of independent fast food businesses therefore spend much of their time ‘firefighting’; covering shifts for staff who have not turned up, running deliveries, dashing to the Cash & Carry, doing paperwork or on the phone trying to get malfunctioning kitchen equipment fixed.

This makes engagement with outlet owners hard, as they are not always in the outlet and when they are they are generally busy. This is especially true when the owner runs multiple businesses, and we have found it more difficult to engage with these owners.

However, in our experience, it is not only the fact that outlet owners who run multiple businesses are harder to engage because they are more time pressed. There is an additional factor at play and that is their relationship with their business, and the surrounding community, is often qualitatively different.

<table>
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<tr>
<th>Management and HR</th>
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</thead>
<tbody>
<tr>
<td><strong>Barriers to health improvement</strong></td>
</tr>
<tr>
<td>• Outlet owners feel like they lack the time and the ‘head space’ to make health improvements</td>
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<tr>
<td>• Outlet owners who own multiple outlets spend less time physically in the outlet and therefore it can take longer to engage these outlets and secure the owner’s agreement to making changes</td>
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<td>• ‘Community outlets’ where there are stronger ties between the owner and local community are easier to engage and decision-making happens more quickly</td>
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<tr>
<td>• Ensuring that changes are easy and not time consuming to implement, or make the lives easier for staff, will help increase outlet buy-in</td>
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<tr>
<td><strong>Facilitators to health improvement</strong></td>
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<tr>
<td>• Outlets owned by multiple business partners may also take longer to engage as the partners often need to all be consulted/give their agreement to making changes</td>
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<tr>
<td>• Even when owners have consented to making a change, actual implementation of the change may require action by staff - who could feel that they have less incentive to make the change unless change is enforced by owner</td>
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From our interviews with owners and our experiences of engaging with them, there appears to be two types of independent fast food owner. The first type is what we call the ‘community outlet’. These outlets are owned and managed by people who have a connection with the local geography and community. On Morning Lane and Wells Street these are often family-run businesses who have been operating on the street for a number of years, with connections to the local community that go beyond customer transactions.

The second type of outlet owner is what we call the ‘anonymous outlet’, owned by people with fewer ties to the local community who are often responsible for multiple businesses and therefore spend time less in the outlets. As a result, their connections with customers are typically more transactional and functional, as they do not have relationships with them outside of the context of the business.
Customer relationships

Many of the outlets on Wells Street and Morning Lane appear to be embedded in the local community as spaces where customers come to socialise as well as eat. This is particularly apparent in the more traditional outlets where the same customers have been coming for many years and staff know the customers by their first names.

"The bit of my job that I like the best is the banter with our regular customers, it feels like family."
(Owner, fish and chip shop on Well Street)

Not all customer relationships are friendly however and several outlet owners noted that they have wide range of customer types, which sometimes means dealing with anti-social and aggressive customer behaviour. Outlets that reported this as an issue generally distinguished between their regular customers and the more anonymous passer-by-s, saying that it was the passer-by-s who were more likely to be unpleasant or overly demanding.

Keeping regular customers happy is therefore one of the top priorities that all outlet owners share. On streets like Morning Lane and Well Street ensuring regular customers keep on returning is particularly important as there is less passing trade than on thoroughfares like Mare Street. The majority of the outlets we interviewed reported that their regular customers account for around 70% to 80% of their total customer base, meaning there is significant risk to the business if their regulars do not return.

"Once you lose one customer they stay away, you'll get the blame. Customers wouldn't necessarily complain, they just won't come back."
(Owner, greasy spoon cafe on Morning Lane)

This risk feels very real to the outlet owners and it explains their reluctance to make changes to their businesses, such as switching ingredients or reducing portion sizes, in order to reduce calories. Outlet owners fear that their regular customers, because of their familiarity with the outlets' menu, will notice the changes and become unsatisfied. If this means that the customer goes elsewhere, the owners claim that it can take a long time - years even - for them to re-establish their customer base. As a result, independent outlet owners can be risk averse, and if they make a change that customers do not like they will quickly revert back to the old practice.

Barriers to health improvement

- Outlet owners are risk averse as they are concerned that changes will lead to customer dissatisfaction, if noticed by customers
- If customers start complaining after a change has been made, outlets will tend to quickly revert back to the old practice to avoid further complaints/loss of business

Facilitators to health improvement

- The personal relationships between regular customers and outlet owners/staff means there is opportunity for outlets to explain why they have made a change if a customer notices the difference
- Outlets with higher proportion of passing trade where the relationships between passing customers and the outlet are more anonymous may be more willing to make changes as they feel that customers are less likely to notice changes (and they are less reliant on return custom)

We did however come across examples of outlets that had already made a healthier change and stuck to it, even when customers noticed. In the fish and chip shop on Morning Lane where the owner had switched to rapeseed oil following the recommendation of his chip supplier, the owner noted that he was questioned by his customers as to what it was that he was doing differently because they could taste the difference.

"The customers noticed at first and asked me if I'd changed the potatoes but I explained it to them [about the rapeseed oil] and they were fine with it."
(Owner, fish and chip shop on Well Street)

Therefore in order for health improvement changes to be sustained, changes should be implemented in a way that is not noticed by customers. If customers do notice the change the outlets must persevere with the changes in the face of comments or complaints by the customers. We have heard anecdotally that customer complaints will usually subside after around six weeks, after which point the change becomes normalised and accepted by customers. Supporting outlets to stick with the change during these weeks is therefore important to ensuring the longer-term sustainability of a change.
Marketing

There is a limited mix of marketing strategies deployed by the outlets we interviewed. While a couple of the newer outlets run by younger owners had found effective ways of using social media platforms such as Facebook to market themselves (e.g. by setting up Facebook profiles for their business and encouraging customers to ‘like’ them and post reviews and photos), many of the outlets on Morning Lane and Well Street’s marketing continues to rely on promotional posters stuck up on their windows and walls.

One of the most visible marketing strategies used is offering discounted Kids Meals, typically priced between £1 to £1.50. For example one fried chicken shop on Wells Street currently offers 4 fried chicken wings for £1, while another offers 3 fried wings and chips for £1. Kids Meals are not exclusive to fried chicken shops, we found them on offer in fish & chip shops, but are more commonly associated with the value end of the fast food market.

The success of Kids Meals as a marketing strategy is demonstrated by the fact that the outlets we spoke who have a kids meal offer all listed it among their best-selling items. From a cost point of view the outlets described kids meals as a loss leader (i.e. a product sold at a loss to attract customers), but something they felt they had to offer in order to remain competitive.

“There’s lots of competition and everyone does it [introduce kids meal promotions] so we have to do it too.”

(Owner, fried chicken shop on Well Street)

An outlet owner we interviewed who runs a chicken shop described how the Kids Meal is an important sales driver for other items. He explained that the intention behind the promotion is that it ‘gets kids into the door’ who will then sometimes buy something else while they are in the shop such as a drink or a side, or will bring their parents in on a later date who typically make higher value purchases.

Surprisingly, however, it is not just children buying Kids Meals. All the outlets we spoke to who offer Kids Meals noted that actually many adults buy the kids meals, mostly as a snack between meals. One of the owners described that sometimes he will joke with the adult customers buying kids meals and ask them how old they are, but it appears that in practice kids meals are not age limited despite their name. Kids meals therefore potentially represent a significant source of calories not just for children but adults too.

<table>
<thead>
<tr>
<th>Barriers to health improvement</th>
<th>Facilitators to health improvement</th>
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<tbody>
<tr>
<td>• Current promotional practices such as kids meals tend to promote and drive sales of unhealthier items</td>
<td>• Promoting Kids Meals which consist of reduced portion sizes are established practice in fried chicken shops and fish &amp; chip shops - however there is anecdotal evidence that these are consumed as snacks by adults. There could be an opportunity to target Kids Meals at adults in a way that positions them not as a snack but as a light meal in their own right</td>
</tr>
<tr>
<td>• ‘Race to the bottom’ promotional practices where outlets compete on promoting lowest value meal deals puts pressure on other outlets to offer similar deals/lower their prices</td>
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Routes to market

One of the biggest developments in the fast food industry is the growth of online delivery platforms such as Just Eat, Deliveroo and Hungry House. These platforms have made it easier for customers to access fast food from a wide range of outlets, expanding the variety of food that can be delivered from the traditional categories of Chinese, Indian and pizza to include foods previously only accessible by physically walking into an outlet such as fried chicken, kebabs and desserts.

By making fast food even more convenient through enabling it to be ordered from and delivered to any location, these platforms have catalysed an increase in sales with the British Hospitality Association reporting a 54% growth in all takeaway sales nationally in 2016.

On the ground in Hackney it is easy to identify the outlets signed up to a delivery platform when in the shops through the loud bleeping sound that alerts staff to a new order coming through the system; during busy periods the bleeping is constant. The decision to join a delivery platform was sometimes one that had caused tensions between outlet owners and their partners. For example the son of a kebab shop owner on Well Street, who over the years has been playing a greater role in helping his father run the business, recounted the year long struggle he had with his father in persuading him to sign up to Just Eat.

We discovered that the outlets who had made the decision to sign up have a love/hate relationship with the online delivery platforms. On the one hand, outlets reported an increase in sales which was viewed positively. For example, a pizza shop on Morning Lane said that around 60% to 70% of their total sales now came from Just Eat and Hungry House, and that these platforms had expanded their customer base. The pizza shop owner recounted how previously it had been hard to reach new customers due to the shops’ limited marketing capacity and that the online platforms had reduced their need for paid-for advertising and leaflets/flyers.

However on the other hand, outlets resent the 12% to 15% cut that the online platforms take from each sale and feel that they are forced to choose between signing up to one of the platforms or going out of business. As a result, some of the outlets are considering setting up their own delivery website in an attempt to bypass the online platforms. In addition, running a smooth takeaway operation can be logistically difficult and customers unforgiving when orders are mixed up or delivered late, and can struggle to meet the increase in takeaway orders associated with signing up to an online platform.

The introduction of online customer reviews that platforms like Just Eat have made central to the online purchase decision-making appears to be impacting on outlets’ owners willingness to make changes to their business. Outlet owners described their online customer reviews as a valuable asset which they had worked hard to achieve. As a result they said they would be concerned if asked to introduce changes that could potentially have a negative impact on their online reviews.

“I’ve got really good reviews online and have worked really hard to get these, it would damage my business if my average review score dropped.”

(Owner, pizza shop on Morning Lane)
The permanency of online customer reviews, and the fact that new customers will make a judgement about an outlet based on its previous reviews, means that outlets may be more risk averse than previously if the changes are perceived as likely to be noticed by customers, which can make it harder to engage them in health improvements.

The changed nature of the relationships between outlets and online customers may also be contributing to owners’ risk aversion. As already discussed, the relationship between outlets on Morning Lane and Well Street and their regular walk-in customers are generally quite personal and familiar, with the owner and customer often greeting each other by their first names. However, online customers do not have the same level of personal interaction with the outlets and interactions seem to be limited to customers ringing up the outlet to find out where their order is or leaving reviews.

The changed nature of the online customer relationships and the reduced level of direct interaction between staff and customer means that the outlet has less scope to explain and justify the changes to the customer. This increases the need for health interventions to be ‘stealthy’ and unnoticed by customers.

### Routes to market

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<thead>
<tr>
<th>Barriers to health improvement</th>
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<tbody>
<tr>
<td>• Outlet owners view online customer reviews as a valuable asset to their business and are reluctant to make changes that could negatively affect their ratings.</td>
<td>• Introducing digital interventions on online delivery platforms such as Just Eat (e.g. positioning and order of menu items to nudge customers or the introduction of menu icons to draw attention towards healthier options) could potentially be easier to scale than in-store interventions and have greater impact if embedded into the architecture of online platforms</td>
</tr>
<tr>
<td>• The permanency and visibility of negative online customer reviews means that outlet owners are more concerned about complaints made online than they are about complaints made in-store</td>
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<tr>
<td>• Less personal and direct relationships between online customers and outlets makes it harder for outlets to explain rationale for changes to customers</td>
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Innovation

The outlet owners on Morning Lane and Well Street are highly aware that their streets are changing and that as the area becomes more gentrified, their businesses are at risk of appealing to a traditional customer base that is in decline. Innovation, which we broadly define as changing practices and adopting new ideas, is therefore an issue that has become more salient for the outlets as they decide how to respond to gentrification.

Interestingly, there seems to be a perception among some outlet owners that health is an issue connected to gentrification (in that customers interested in “healthy eating” are more likely to be middle class). This means that for these outlets, engaging them on health improvements can become entangled in their resentment over gentrification. This was most apparent when one of the outlet owners during an interview described the researcher as ‘being one of those fancy people coming in trying to change what we do’.

Outlet owners are therefore sometimes torn between their loyalty to their existing customer base and the need to change what they do in order to remain competitive over the longer term. This decision is made more complex by the fact that the outlet owners generally have a greater shared sense of identity with their regular customers than with the younger, more middle class ‘hipsters’ that represent Hackney’s most visibly growing demographic.

“I feel like I’m stuck between two generations - my regulars are dying (literally in some cases as they are old) and younger customers don’t come to traditional caffs like this...I feel like I’m at a borderline where I have to make a decision between staying the same or changing what I do to appeal to the younger people.”

(Owner, greasy spoon cafe on Morning Lane)

Among independent fast food outlets, innovation is generally perceived as referring to the introduction of new menu items (such as grilled chicken), trialing new cooking and preparation techniques, adapting business models, updating branding, and finding new ways of reducing costs and reaching new customers.

Our observation of the independent outlets on Morning Lane and Well Street is that innovation in this sector is relatively slow. While there have been notable recent examples of new independent outlets opening up that could be described as innovative (for example the vegan fried chicken shop Temple of Hackney that opened earlier this year), these outlets are all new entrants, replacing traditional greasy spoon cafes that have closed down.

There are fewer examples of existing outlets that have adapted their menus or branding to attract a new type of customer. There is therefore a growing gap between the new outlets that have opened up recently and run by new owners and the existing traditional outlets - which may be contributing to the sense of ‘us versus them’ that outlets reported during the interviews.

The owners of these more traditional outlets highlighted several barriers to making changes to their business. The first barrier is a reluctance to move away from the ‘tried and tested’ practices that the owners are familiar with, as this requires learning new skills and capital investment. Second is the perception that planning and implementing changes successfully requires time and ‘head-space’, something that outlet owners feel is in short supply. Third, and perhaps most important, is a fear of failure. Making any kind of change can feel risky, and as previously discussed, concern that changes will lead to customer dissatisfaction leads to outlet owners acting in risk averse ways. Traditional outlets don’t know the new / potential customers in the same was as they know their existing customer base, making changes more risky.

A number of the outlet owners we interviewed justified their fear of failure by recounting anecdotes and stories of other businesses that had failed after making a change - using these anecdotes as parables for what happens if a business takes a risk. For example, the owner of a greasy spoon cafe on Well Street recounted how a friend of his in Lewisham thought there would be a market opportunity for healthier fried chicken and spent £20,000 on a commercial airfryer that he used to airfrying the chicken. He noted that the business failed within two years and that his friend has reverted back to doing things ‘the proper way’ (i.e. deep frying chicken).

“It’s safer to stick with what you know.”

(Owner, greasy spoon cafe on Well Street)

### Barriers to health improvement

- Owners are reluctant to depart from their ‘tried and tested’ practices as this increases their exposure to risk
- Outlet owners do not want to be the first to make an innovative change and would rather wait until it has been proven successful by other outlets
- Owners that perceive health improvement and gentrification to be connected may be reluctant to make changes as it is perceived as potentially ‘disloyal’ to existing customer base

### Facilitators to health improvement

- Owners recognise that customer demands are changing and that to be successful in the long term they need to adapt what they do - but can feel ‘stuck’ between generations
- Health improvements could be a way of reducing the ‘us versus them’ gap between the traditional outlets and the newer entrants

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Market Fish Bar, Ulus

Ulus has owned Market Fish Bar since 2000. It is a family-run fish and chip shop. Ulus’ wife, brother, cousin and nephew all work in the shop. Ulus has spent many years working in the catering and restaurant business. He used to manage an Italian restaurant and wanted to open up his own restaurant but it was too expensive so he bought the fish and chip shop instead. Ulus knows most of his customers and enjoys the banter with them. Sometimes he will give extra chips to customers that he knows have fallen on hard times.
Improving the food environment

So far in this report we have examined what the current fast food environment looks like on Morning Lane and Well Street, and how fast food businesses are changing as they try to adapt to new market trends. This last chapter looks at how to take advantage of the opportunities that these wider changes are creating for improving the healthiness of outlets by examining the possible interventions that could be implemented in outlets to make this happen.

Literature review of interventions

What can we learn from behavioural insight approaches adopted in the catering context to improve the healthiness of fast food in existing outlets? To answer this question, we conducted a literature review to identify interventions based on tested behavioural insights that are feasible for fast food outlets to implement, given the constraints of customer preferences, local competition, price points and production processes.

Both UK and international studies were included in the review, and the inclusion criteria was deliberately kept broad to cover a range of catering contexts (both in the public and commercial sector). Studies were identified through a search of Google Scholar and only studies published after 2012 were included.

The interventions identified from the review were organised using the Behavioural Insights Team’s EAST framework for behavioural change. The EAST framework is based on the principle that if you want to encourage a change in behaviour, the desired behaviours need to be made Easy, Attractive, Social and Timely.

From the review we identified a wide range of interventions based on behavioural insights. These interventions ranged from changing customers’ choice architecture by making healthier choices easier for customers to make (such as reconfiguring outlets’ physical layouts and making healthier items more prominent), changing packaging and promoting healthier items to make them more attractive, using social cues to make healthier choices appear more ‘normal’ (i.e. what other people are doing) and targeting interventions directly at the point of sale to make them more timely.

The table below presents the interventions that we identified from the literature review and summarises the evidence as to their effectiveness. For a list of references for the studies cited, see Appendix 2.
<table>
<thead>
<tr>
<th>Behavioural insight</th>
<th>Intervention</th>
<th>Evidence</th>
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<tbody>
<tr>
<td><strong>Customer facing</strong></td>
<td></td>
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</tr>
<tr>
<td><strong>Easy</strong></td>
<td>Altering physical layout of outlet, including placing healthier drinks, snacks and sides in easier to reach or easier to see locations</td>
<td>Snack shops at Dutch train stations found more healthy foods (but not fewer unhealthy foods) were sold when they were placed at the cash register (Krose et al, 2015). US School canteen studies found placing healthier foods in more accessible location in food counters or having separate queue for them led to greater take up (Cohen et al, 2015; Hanks et al, 2012). Hiding unhealthy options e.g. salt cellar behind the counter, no chips on the menu led to less demand for them (Bagwell, 2014)</td>
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<tr>
<td><strong>Easy</strong></td>
<td>Introduction of a wider variety of portion sizes</td>
<td>Introduction of smaller portion sizes of hot meals (in a Dutch workplace cafeteria) in addition to existing size stimulated some consumers to replace a large meal with a small one (Poelman et al, 2014)</td>
</tr>
<tr>
<td><strong>Easy</strong></td>
<td>Make it easy to test new menu items by conducting free taste test events</td>
<td>Canadian study at a swimming pool found that sales of healthy items increased by 30% when signage and taste testing implemented (Olstad et al, 2014). East Midlands Eat Out Eat In Healthy scheme conducted tasting sessions for curries made with less oil and found consumers preferred them (Bagwell, 2014)</td>
</tr>
<tr>
<td><strong>Attractive</strong></td>
<td>Promote acceptance of smaller portions using smaller, differently shaped packaging</td>
<td>Several US studies in college canteens, Chinese buffet restaurants etc. have shown that plate size influences amount consumed (Anderson et al, 2015; Wansink and van Ittersum, 2013). E.g. Diners with large plates served 52% more and ate 45% more (Wansink and van Ittersum, 2013)</td>
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<tr>
<td><strong>Attractive</strong></td>
<td>Encourage take-up of healthier options through marketing</td>
<td>Study in US found table signs listing healthier changes encouraged take-up (Northwehr et al, 2013)</td>
</tr>
<tr>
<td><strong>Attractive</strong></td>
<td>Encourage take-up of healthier options through price promotions</td>
<td>Charging extra for unhealthy options in meal deals (e.g. fizzy drinks or chips) acts as a disincentive to their purchase, but 2 for 1 deals, bonus serving etc. can encourage sale of healthier options (Bagwell, 2014)</td>
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<tr>
<td><strong>Attractive</strong></td>
<td>Encourage take-up of healthier options through reformulation of menu items to improve taste</td>
<td>US study found introduction of Chef to improve taste of school meals led to more children choosing healthier options (Cohen et al, 2015)</td>
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<td><strong>Customer facing Cont.</strong></td>
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<tr>
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</tr>
<tr>
<td><strong>Social</strong></td>
<td>Provision of relatively more healthy choices (eg diet drink vs regular drink) creates the perception that this is the normal choice</td>
<td>Dutch study in lab and hospital canteen found that sales of healthier snacks were greater when they made up 75% of shelf display than when they comprised just 25% of display. Sales of unhealthy and total snacks were not impacted by the manipulations (Van Kleef et al, 2012)</td>
</tr>
<tr>
<td><strong>Timely</strong></td>
<td>Make healthier options more salient to customer by prompting at the point of purchase: eg &quot;Which (healthy) side would you like?&quot;</td>
<td>Cashiers at till in a Dutch self-service restaurant provided prompts to customers to suggest they order a side dish (orange juice, fruit salad, pancakes). Led to significant increase in sales of these healthier options (Van Kleef et al, 2015). TastyBuds outlet in Haringey asks customers which salad they would like not if they would like them (Bagwell, 2014)</td>
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<tr>
<td><strong>Non-customer facing</strong></td>
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<tr>
<td>Reducing portion and packaging size</td>
<td>Mobile burger vans by the Arsenal ground sell chips (166gm) piled high in v small trays providing the illusion of a much larger portion than is the case (Bagwell, 2014)</td>
<td></td>
</tr>
<tr>
<td>Changing cooking methods, and ingredients to increase the healthiness of standard menu items</td>
<td>East Midlands Eat Out Eat In Healthy initiative encouraged Indian restaurants to swap to using a stockpot made with dry spice mix (i.e no oil)</td>
<td></td>
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<tr>
<td>Introduce new healthier menu items</td>
<td>Research for toolkit (Bagwell, 2014) found addition of free side salad increased sales for kebab shop and mobile burger van. Steamed fish brought in more customers to fish and chip shops in Stoke</td>
<td></td>
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<tr>
<td>Benchmarking / providing feedback on how nutritional content compares with competitors</td>
<td>Research for toolkit (Bagwell, 2014) found businesses did not want to appear less healthy than their competitors</td>
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Shortlist of proposed interventions

Following the literature review, we shortlisted seven interventions that the evidence suggested would be effective and that we judged to be feasible to implement in independent fast food outlets. This shortlisting was done in consultation with Sue Bagwell, an academic at London Metropolitan University who was involved in the production of a Public Health England toolkit for local councils to encourage healthier out of home provision, published in April 2017\textsuperscript{10}.

During the interviews with outlets, we showed them illustrations of these shortlisted interventions and asked them for their feedback on which interventions would be easiest for them to implement and which they would be most concerned about. The feedback from the outlets is summarised in boxes underneath the descriptions of what the shortlisted interventions would involve.

1. Collaboration on chip portion sizes

Given the significant contribution that chips make to calorie intake that we identified through the nutritional tests, reducing portion sizes of chips is an obvious intervention area. While the literature review identified a number of interventions that involved redesigning packaging to reduce portion size, Sue Bagwell highlighted that unless all outlets in an area reduce their chip portions then there is risk that customers will simply go to other outlets, thereby reducing the outlet’s sales. This would hinder the long term sustainability of reducing portion sizes.

We therefore decided that an intervention to encourage collaboration between outlets (e.g. seeking a multilateral agreement from all outlets to reduce their chips portion sizes) should be considered as it could enable longer-term portion size change by removing competition between outlets.

Chip collaboration: Feedback from outlets

This was the most unpopular idea among the outlets; one outlet owner on having the intervention described to him jokingly asked ‘do you want to start World War 3?’ which captures the general sentiment of outlets to this idea.

Their concern with this intervention centred on the difficulties of ensuring all outlets sign up to the collaboration and the difficulties of enforcing the collaboration once in place, noting that there was a high risk that it would only take one outlet to ‘cheat’ and increase their portion sizes for the collaboration to quickly break down.

“I can’t imagine this would ever be acceptable to businesses, they’d be scared to do it because customers would just go round the corner to another street.”

(Owner, greasy spoon cafe on Well Street)
Nazar, Naayim

Naayim is the son of the owner of Nazar, a family-run kebab shop that opened up four years ago. Naayim is increasingly helping his father run the business, and played a role in encouraging his father to sign up to Just Eat. He thinks the changes happening on the street have been good for their business, and has noticed new customers coming into their shop as a result of the new Well Street Market. Last year Naayim became interested in health and fitness as he wanted to lose weight, and started using a fitness tracker to monitor his calorie intake. He was proud to see that the lamb shish kebab sold by Nazar had fewer calories than the other kebab shops.
2. Packaging to reduce chip portion sizes

A number of studies identified the usage of ‘stealthily’ designed packaging as an effective way of reducing portion sizes in a way that customers do not notice. Examples of this included burger vans using small trays piled high with chips to create the illusion of a larger portion, the same principle that McDonald’s uses with its wedge shaped chip packaging.

3. Menu information on healthier options (explicit)

The studies identified in the literature review focused on changing physical layouts of outlets, but we were advised that in independent fast food outlets this can be difficult to achieve due to the small size of many of these outlets. We decided therefore to apply the same principle of making healthier options easier to see to the design of menu layouts, as this would be more feasible to implement. In the first instance this would involve marking healthier items on menus through the use of an icon or sticker that explicitly identified these items as healthier.

4. Menu information on healthier options (social)

This intervention uses the same mechanic, but rather than giving health information the menu icons/stickers would use subtler social approval signifiers to existing healthier menu items. Stickers will indicate general social approval (e.g. through “thumbs up” visuals or phrases such as “Top Seller” or “Meal of the month, by popular demand”), but will not explicitly reference health.

Alternative chip packaging: Feedback from outlets

Outlet owners were often quite conflicted around portion size reduction; on the one hand they could see how it would be beneficial to their business as it would reduce wastage and reduce costs but on the other hand they were skeptical as to how ‘stealthy’ changing the chip packaging could ever be – noting that their regular customers would be likely to notice any change. In addition, some outlets - particularly those more embedded in the community - were concerned that the ‘stealthy’ nature of intervention meant it would feel like they were tricking their customers.

“If word got out that I was tricking my customers, my reputation would be affected.”
(Owner, greasy spoon cafe on Well Street)

However, the idea was more favourable to outlets than the chip collaboration and some outlets expressed a willingness to trial the intervention.

Menu stickers (explicit): Feedback from outlets

This intervention was acceptable to outlets, who could see that it would be easy to implement and were familiar with such tactics already. The only issue was that they would be unwilling to promote healthier items through menu stickers if this resulted in lower revenue (i.e. if the marked items had lower profit margins and cannibalised sales of higher margin items).

Menu stickers (social): Feedback from outlets

Outlets did not generally distinguish between the social and explicit health stickers, with both forms being acceptable.
5. Promotion on grilled foods

Many of the interventions identified in the literature review involved increasing the attractiveness of healthier items by promoting them through marketing or price discounts, in much the same way that fried chicken and fish & chip outlets promote Kids Meals as a loss leader. This intervention would use the same mechanics of how marketing is currently done in fast food outlets (e.g. through posters), but introduce the additional mechanic of changing the name of the meal to make it more eye-catching. For example, renaming an existing grilled chicken meal as ‘Boss Meal’ to speak to the vernacular language used in chicken shops (where the owner is known as the boss man) and the relationships between these outlets and their customers.

Grilled food promotion: Feedback from outlets

Out of all the shortlisted interventions shown to the outlets, this was the idea that the outlets preferred. This was because it was clear that the intervention was trying to help the outlet increase their sales. In addition, outlets liked the idea of renaming meals to give them more exciting, fun or appetising names - although they pointed out that the name would need to vary by outlet type as ‘Boss Meal’ would not necessarily be appropriate outside of fried chicken outlets.

However although the outlets were in favour of the intervention, they foresaw difficulties if the intervention was tied to grilled food. While the fried chicken outlets we spoke to were aware of the ‘Nando effect’ and the growing customer demand for grilled chicken, and noted that they would love to be able to offer grilled chicken, they pointed out that it would be logistically difficult for them to introduce grilled food onto their menus. These difficulties centred on the capital investment required for grills, the lack of space in their kitchens and the fact that grilled chicken takes longer to cook than fried chicken so it needs to be par-cooked or boiled first and will go dry quickly so is harder to prepare in advance.

“The issue with grilled chicken is that it takes longer to cook than fried chicken, and customer’s aren’t prepared to wait.”
(Owner, fried chicken shop on Well Street)

6. Introduction of a new healthier menu item

This intervention would involve introducing a new menu item that is significantly healthier than the outlets’ standard offering, but that does not represent an explicitly healthy choice such as salad, such as a grilled chicken burger.

New menu item: Feedback from outlets

Outlets did not tend to express strong attitudes towards this intervention idea, as introducing new items onto their menus is something that they already occasionally do throughout the year.

It emerged that there could be some conflict in terms of the new menu items that the outlets are already considering to introduce which they believe to be healthier, and what nutritionists might consider to be healthier items. For example smoothies are attractive to outlets as they require little preparation (ready prepared smoothie mixes can be bought frozen) and are popular with customers. Owners also believe them to be healthy due to the fruit content. However the high levels of sugar found in smoothies means that they introduce new health problems.
Carolina Pizza, Shiva

Shiva has worked at Carolina Pizza for over 10 years. His friend is the owner and wanted Shiva to become a business partner, but he declined as this could lead to arguments with his friend. He works 8 to 10 hour shifts and makes sure he looks after his health. He would like to put grilled chicken on the menu as he has noticed that the 'Nando’s effect' has increased its popularity but they currently do not have the space for a grill. However Shiva has found a way of making it for himself by putting chicken in the pizza oven.
7. Airfried chips

One of the non-customer facing interventions identified in the literature review was changing cooking methods to make existing menu items healthier. Over the last few years there has been technological innovation around the technique of ‘air frying’ as an alternative to deep fat frying. Air frying involves circulating superheated air so that chips become crunchy but with significantly less oil. This intervention could be tested either through installing a commercial airfryer in an outlet or running a blind taste test with customers to see whether they notice a difference.

What is happening next?
In September 2017 we will be testing these shortlisted interventions in a sample of outlets on Morning Lane and Well Street to see what impact they have on outlets’ sales, customer satisfaction levels and nutritional profile. We hope that these tests will prove that health improvements can be cost neutral, or even cost beneficial, to fast food businesses.

Feedback from outlets
Several outlet owners were familiar with air fryers, and one actually has a domestic airfryer at home which his family uses to cook healthier chips. Another outlet owner knew about airfryers through a friend of his trying to use a commercial airfryer to cook fried chicken, a business venture which was not successful due to the high costs of the airfryer (the owner said he thought his friend has spent £20,000 on the equipment).

These two owners were not convinced that air frying was a feasible option for fast food outlets as the high equipment costs would mean that the price of fries would have to increase, which they doubted customers would be willing to accept. They were also sceptical that airfrying produces an equivalent product to deep frying – saying that while it airfried chicken tastes similar to fried chicken when it is hot, once it starts cooling the taste changes. Also they mentioned that airfryer does not produce the same golden colour that customers expect from fried foods.

“My wife has an airfryer at home and does chips in it - we both like it but our children notice the difference. I haven’t considered using it in my business - it’s not quick enough, too expensive, and regulars would notice.”
(Owner, greasy spoon cafe on Well Street)

New menu item:

Appendix 1:
Outlets included in mapping

The 21 outlets mapped on Morning Lane and Well Street:

Dilara’s, 8 Morning Lane
E9 Cafe, 267 Well Street
Kuzu Sis Grill, 269 Well Street
Legs, 150 Morning Lane
Mariana, 228 Morning Lane
Nazar, 228 Well Street
New Noodle Bar, 9 Morning Lane
Percy Ingle, 215 Well Street
Perfect Fried Chicken, 196 Well Street
Pizza Go Go, 18 Morning Lane
Prodigal, 259 Well Street

Pukka Chicken, 236 Morning Lane
Quality Cafe, 244 Morning Lane
Sang Kee, 169 Morning Lane
Sun On Chinese, 222 Well Street
The Grand Howl, 214 Well Street
The Workers Cafe, 177 Morning Lane
Tomi’s Kitchen, 6 Morning Lane
Well Street Kitchen, 203 Well Street
Well Street Fish & Chips, 218 Well Street
Well Street Pizza, 184 Well Street

Appendix 2:
References from literature review

The 21 outlets mapped on Morning Lane and Well Street:


Van Kleef E., Otten K., Van Trijp H.C.M. (2012), ‘Healthy snacks at the checkout counter: A lab and field study on the impact of shelf arrangement and assortment structure on consumer choices’, BMC Public Health, 12 (1), art. no. 1072,
